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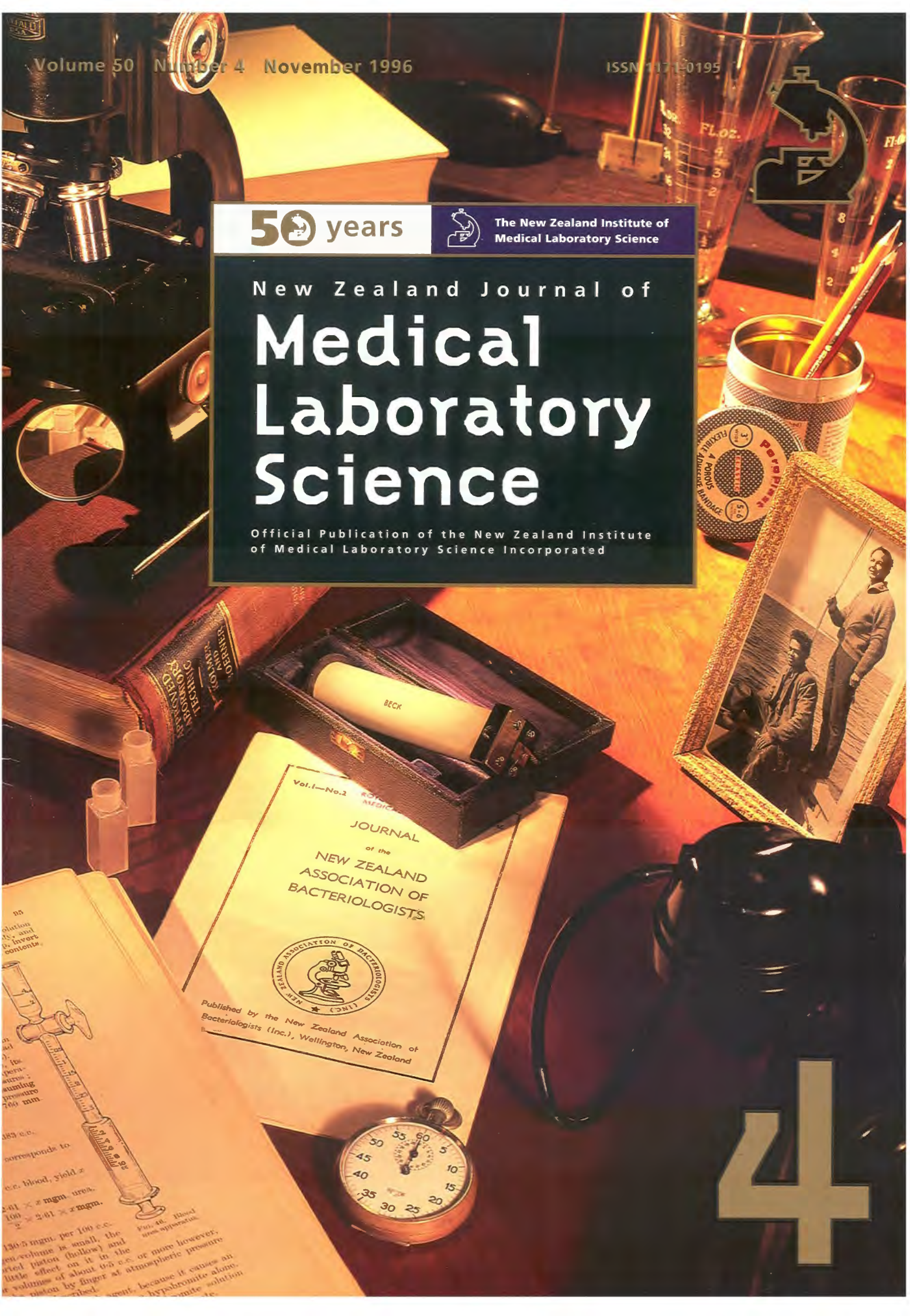
50 years

The New Zealand Institute of Medical Laboratory Science

New Zealand Journal of Medical Laboratory Science

Official Publication of the New Zealand Institute of Medical Laboratory Science Incorporated



BOEHRINGER MANNHEIM N.Z. LIMITED

CONGRATULATE

THE NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE

on its 50th Anniversary

BOEHRINGER MANNHEIM N.Z. LIMITED

is committed to the continuing support of the Institute

and its members in New Zealand

BOEHRINGER MANNHEIM NEW ZEALAND

mannheim boehringer

This Journal issue is dedicated to all members, Past, Present & Future, of the New Zealand Institute of Medical Laboratory Science on the occasion of its 50th Anniversary.

New Zealand Institute of Medical Laboratory Science 1945- 1995

Guest Editor: Anne Paterson

Anne Paterson, Colvin Campbell, Syd Shepherd

please note:

* This history has been compiled from the minute books, official correspondence and publications of the Institute. It has been supplemented with personal recollections and correspondence, verified wherever possible. All authors and contributors have aimed for historical accuracy and interest.
  Additional information and historical artefacts should be forwarded to: The Executive Office
  PO Box 3270
  Christchurch
* Key authors have been acknowledged in the above articles. However many other people have contributed crucial information, historical documents, photos and their time towards this historical record.
* The Guest Editor wishes to record her special appreciation of those who supported her in this endeavour. In particular her family, John, Sam & Robbie and Colvin Campbell & Des Philip.
* Special thanks must go to Fran van Til & Virginia Cairns who did all the typing.

The N.Z. Institute of Medical Laboratory Science wishes to acknowledge and thank the **New Zealand Lottery Grants Board** for it's financial support towards the costs of this publication.

Formation of the New Zealand Association of Bacteriologists 1923-1945

The formation of an Association of Bacteriologists was discussed in the early 1920's. Tom Ross from Christchurch and Andrew Logan from Dunedin were proponents of this, however the idea gained little support from senior Pathologists in those areas. In 1923 a number of staff from the Wellington area met to discuss the formation of an association. This initiative was strongly supported by Dr Hector, the Pathologist at Wellington Hospital. Laurie Buxton, who had recently qualified, was apparently involved in these discussions, as evidenced by correspondence in our possession. This meeting led to the drawing up and printing of the *Constitution and Rules of the Bacteriological and Pathological Association of New Zealand (1925).*

Incorporated Societies Act, 1908 [Form No. 6.

Certificate of Incorporation

I certify that THE NEW ZEALAND ASSOCIATION OF BACTERIOLOGISTS INCORPORATED is incorporated under the Incorporated Societies Act, 1908.

Dated at WELLINGTON, this NINTH day of APRIL, 1946.

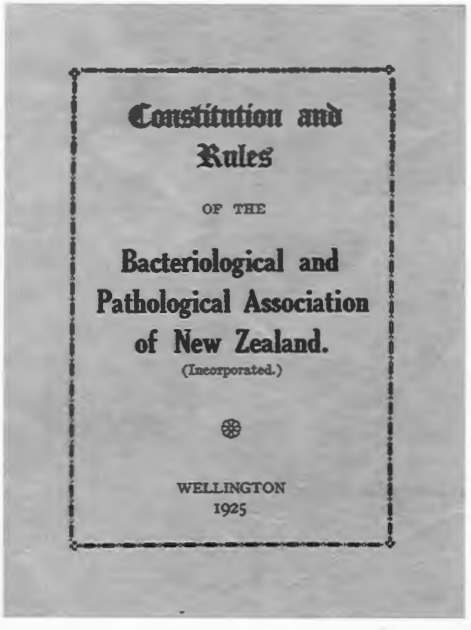
SEAL.

6873—431

Assistant Registrar of Incorporated Societies.

The severe depression of the late 1920's and early 1930's may have hindered further developments. Certainly the 10% salary reduction for public servants would not have left anything spare for attending meetings or correspondence. Vince Hawke from Nelson circularised staff in 1937 to try and organise a meeting of interested people with a view to forming an association. Again nothing happened.

The outbreak of World War II in 1939 probably hampered any further developments in forming an association. Through this time correspondence by letters did take place, however limitations on rapid travel and other forms of communication, coupled with the relatively small number of qualified Bacteriological Assistants (as they were then called) saw nothing formally develop in regard to an organisation being set up.



On the 11th of May 1945 a meeting of senior Bacteriologists was held in Wellington. This meeting, which was convened by Laurie Buxton of Wanganui Hospital, discussed the desirability of forming an association. As a result the formation of the New Zealand Association of Bacteriologists occurred at the conference held in Wellington on the 7th and 8th of August 1945. This marks the official founding of our present Institute.

This first conference was attended by twenty people representing laboratories from Auckland to Christchurch. At the meeting the aims and objectives were adopted, the status of members within the organisation was decided and a draft constitution, that had been drawn up by Norm Ellison from Wellington, was submitted and approved. This enabled the Association to proceed with registration as an incorporated society that was achieved before the next conference.

The New Zealand Association of Bacteriologists was incorporated by the Registrar of Societies on **9 April 1946**.

The first office bearers were:

President	:	E L F Buxton
Vice Presidents	:	J G Peddie & N J Ellison
Secretary/Treasurer	:	Miss E Winstone
Committee	:	V J Hawke; G W McKinley; D Whillans

Membership was available in the following categories:

a) **Senior Members** - holding the Health Department's 'Certificate of Proficiency in Bacteriology and Clinical Pathology'

b) **Junior Members** - staff engaged in Pathological and Bacteriological work but not qualified with the Department of Health's Certificate

c) Any other person deemed fit to be a member by the Council of the Association and designated as senior or junior by the Council

d) Honorary Members – determined by Council

This first meeting also determined that a prize fund be established to be awarded annually to a junior member for the best essay on Bacteriology or allied subjects.

Names and Logos

In the late 1600's, Antoni van Leeuwenhoek designed and built over 400 microscopes - only a glorified magnifying glass by today's standards. He was the first to see and describe a large number of bacteria and protozoa. From his teeth, Leeuwenhoek saw 'little animals more numerous than all the people in the Netherlands and moving..... in the most delightful manner'.

Registered Seal of N.Z.A.B.
(and N.Z.I.M.L.T./N.Z.I.M.L.S.)

The microscope remained a 'curious toy' until around 1860, when it began to be recognised as a professional tool. The breakthrough that enabled Carl Zeiss to produce microscopes of a consistent standard came through his combining the work of Ernest Abbe, Professor of Mathematics and Otto Shott glassmaker. Abbe provided the optical formula which is the basis of modern microcopy and Shott lenses of defined quality. (About 1870). It was about this time the traditional brass microscope was replaced with black microscopes.

By 1945, the simple lens had become a sophisticated tool in the laboratory - worthy of being adopted as the emblem for the New Zealand Association of Bacteriologists. The first council of the NZAB decided an emblem and seal were necessary. Doug Whillans, the editor, was empowered to design the emblem under the directive that it be a microscope in a double circle containing the words 'New Zealand Association of Bacteriologists' The seal was delivered to the secretary on the 30 November 1946 and decreed 'only to be fixed in the presence of three members of Council'. The emblem was used immediately on the first journal (April 1946) and Rule Book (1946).

In 1959, the Annual General Meeting considered alternative names for the Association. 'Bacteriologists' had been recognised as a misnomer for the diversity within the Pathology laboratory even in the 1940's, but it was the accepted term of the day via the qualification to become a 'Hospital Bacteriologist'. However, it was time to choose a more representative name. Among those considered were:

- Medical Laboratory Technologists
- Medical Analysts
- Pathology Technologist
- Medical Laboratory Practitioners
- Institute of Medical Laboratory Technology
- Clinical Laboratory
- Medical Laboratory Sciences

The AGM settled on holding a postal ballot asking:

- Is a change of name desirable?
- If so, which of the following do you prefer:
- Medical Laboratory Technology
- Clinical Laboratory Technology

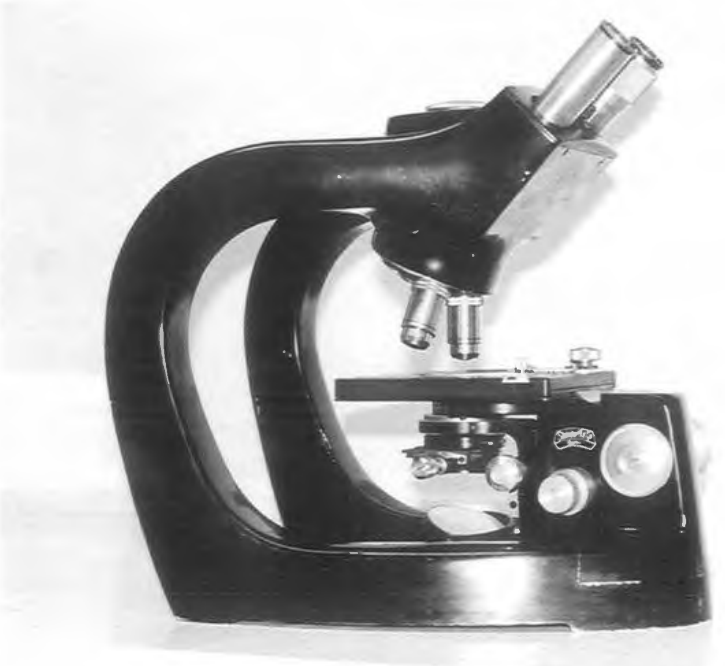
The name change to New Zealand Institute of Medical Laboratory Technology was favoured by the majority and was adopted by the AGM in 1960. A competition was held to redesign a new common seal, in line with the change of name. However, the following year the membership resolved the seal would not change except for the appropriate change of wording. All competition entrants were thanked. No winner is recorded. The 1961 President, Mr Hugh Olive, entitled his Presidential address 'Changes', and reviewed the progress of the association. He is reported thus -

"With a change of name came a milestone year in the progress of the incorporated body. First there was the formation and building for which, Mr Olive said, we must be extremely grateful to the founders. Then there was the stage of unionism, tied up with conditions of work which, when

Leitz Microscope 1945 - Inspiration for Seal of NZAB

circumvented, began a time of solidifying and polishing. Next came the era of change. With it came the change in name, a broader concept of work and a search for wider application of ability in all concerned. There has been an awakening interest with the formation of branches and it is hoped that the interest so attained will progress, now Hospital Bacteriologists are known as Medical Laboratory Technologists".

In 1957, the logo on the front of the journal and on the letterhead changed to reflect the more rounded shape and standard features such as built in light sources. It is a silhouette of a Steindorf microscope as sketched by Tom Tanner. With slight adjustments and sometimes facing right, then left, it has been used ever since. A new seal was commissioned in 1967, but the decision rescinded in 1969. The original seal with the appropriate changes in wording has remained in use on the rule books, and on certificates for the past 50 years.



Steindorf Microscope 1960 - Used as inspiration for NZIMLT logo

Black microscopes were replaced by 'dirty grey' microscopes in the 1970's and onto shiny grey for the 1980's. Profiles had become much more angular. Infinity corrected optics were available.

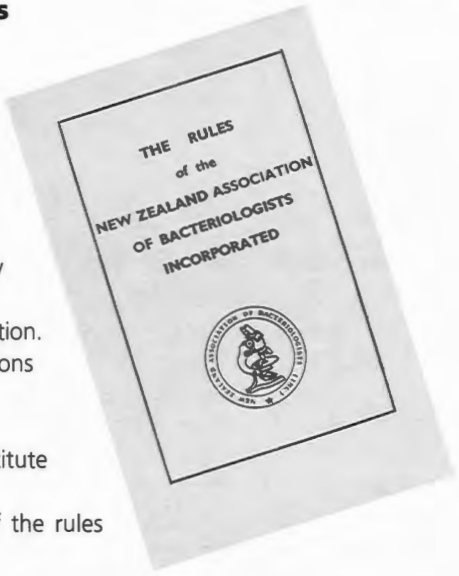
For the 1990's, microscopes are white or cream. Digitally controlled microscopes are available although the Medical Laboratory Scientists of the 1990's usually still drive the viewing themselves. The third change of name to the current title, New Zealand Institute of Medical Laboratory Science, occurred in 1990 at the Annual General Meeting in Invercargill. But a name change had been discussed since the late 1970's. In 1979, the term Sciences (or Scientists) was proposed to the AGM, but was rejected after much discussion. In 1981, a group from Middlemore Hospital (Auckland) took the initiative and formed the New Zealand Institute of Clinical Laboratory Sciences. Their purpose was to firstly protect the name for 'our use' and secondly to ultimately take over the scientific side of the NZIMLT. Subscriptions were set at $1.00 per year. It was three years later that Council directed Paul McLeod to investigate a name change for the Institute, but his recommendation to Council of 'New Zealand Institute of Medical Laboratory Science' was lost 6:3, and consequently not forwarded to the AGM. Probably the legislative changes in the Industrial Relations arena prompted more thoughts of change. The Labour Relations Act 1987 deemed the NZIMLT a Union. Council and membership were forced to consider whether the NZIMLT should retain both professional and industrial responsibilities or split the industrial and professional affairs into two. The vote at the Rotorua AGM (1988) was for the latter and the New Zealand Medical Laboratory Workers Union formed. Two years later, the NZIMLT became the NZIMLS, New Zealand Institute of Medical Laboratory Science.

Logo used from 1960 for journals & letterhead

Born the NZAB
Celebrating 25 years as the NZIMLT
and our golden anniversary as the NZIMLS.
The names may have changed - our profession continues to endure and evolve.

Objectives

1945 NZAB - New Zealand Association of Bacteriologists



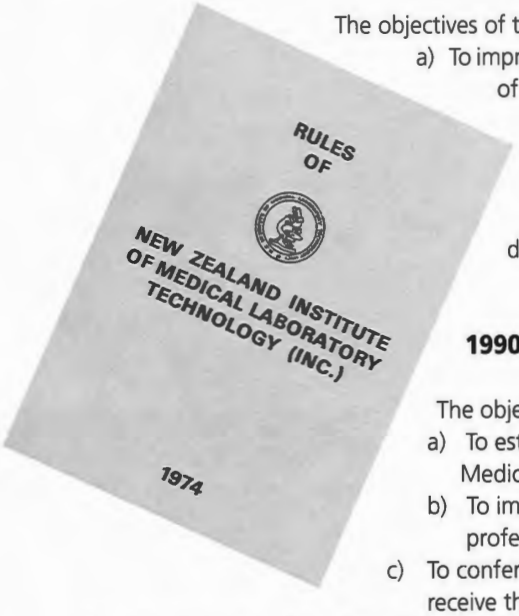
Rule 4 - The objectives of the Association are:

a) To improve the standard of the profession of Bacteriologists.
b) To consider the status of Bacteriologists and the conditions of employment.
c) To confer Certificates of membership of the Association on those qualified to receive them.
d) To encourage the publication of research work by members and any useful information concerning laboratory practise.
e) To invest, control and dispose of the funds and property of the Association.
f) To hold an Annual Conference and any other meetings and discussions whenever possible.

These did not change for nearly 30 years, apart from the name of the Institute and title Bacteriologists to Medical Laboratory Technologists in 1960.

In 1974 the Rule Book dropped objective (e) above and the section of the rules concerning the purchase of land on behalf of the Institute.

1960 NZIMLT - New Zealand Institute of Medical Laboratory Technology



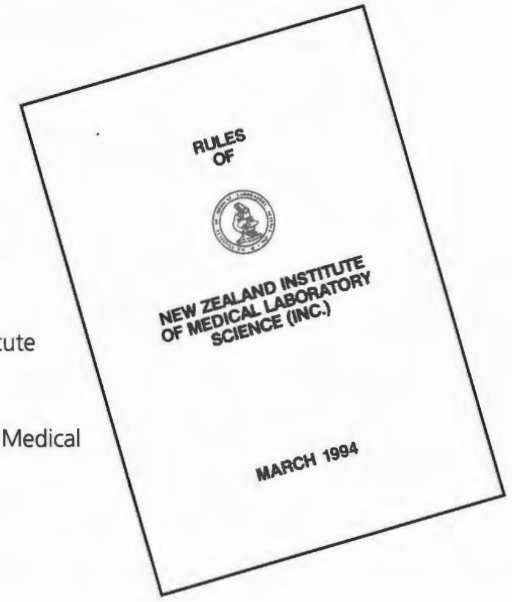
The objectives of the Institute are: (From 1974)

a) To improve the standards, status, education, training and conditions of employment of members of the profession.
b) To confer appropriate categories of membership on those entitled to receive them.
c) To encourage the publication of material relating to, or associated with Medical Laboratory Technology.
d) To do all things considered necessary for, or beneficial to the Institute or its members.

1990 NZIMLS - New Zealand Institute of Medical Laboratory Science

The objectives of the Institute are:

a) To establish and promote standards appropriate to the profession of Medical Laboratory Science.
b) To improve the standards, status, education and training of members of the profession.
c) To confer appropriate categories of membership on those entitled to receive them.
d) To encourage the publication of material relating to, or associated with Medical Laboratory Science.
e) To promote, conduct and organise professional examinations as may be required by the membership.
f) To provide counsel, advice and representation on matters pertaining to Medical Laboratory Science.
g) To award prizes, certificates, medallions or other recognition to members who by way of examination, peer nomination, or public honour, have excelled and/or achieved in the practice of Medical Laboratory Science.
h) To do all things, considered necessary for, or beneficial to the Institute or its members.



These are the objectives as the Institute celebrates 50 years of the of Medical Laboratory Science in New Zealand - however named.

In 1991 a Mission Statement and Code of Ethics were adopted.

NZIMLS
New Zealand Institute of Medical Laboratory Science

Council
Elected by members.

Membership
Voluntary - open to all laboratory workers.

Purpose
To promote professional excellence in medical laboratory science.

Main Functions
1. To promote the development and sharing of expertise in all disciplines of medical laboratory science primarily through the Special Interest Groups.
2. To convene the Annual Scientific Meeting and every four years the South Pacific Congress.
3. To publish the NZ Journal of Medical Laboratory Science.
4. To maintain professional input and representation on the Medical Laboratory Science degree courses.
5. Conduct examinations at Fellowship, Specialist and QTA levels.
6. To develop and maintain contact with affiliated societies nationally and overseas.
7. To officially represent and act in the interests of the profession and its members.

Responsible to
The members of the Institute via the Annual General Meeting.

Mission Statement

The New Zealand Institute of Medical Laboratory Science is the professional organisation that represents medical laboratory technologists.

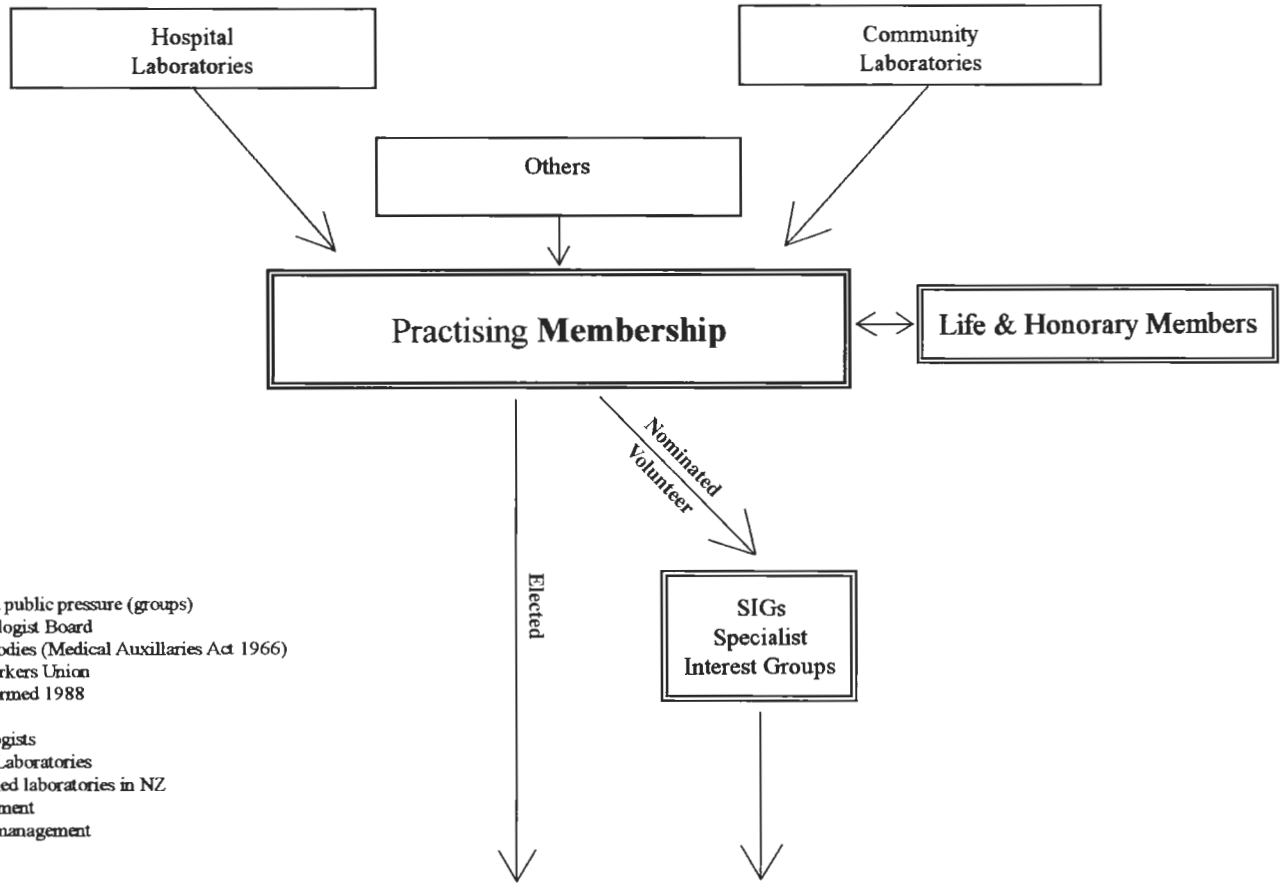
It has an ongoing commitment to promote professional excellence through communication, education and a code of ethics to achieve the best possible laboratory service for the ultimate benefit of the patient.

Code of Ethics

Every person who is registered to practise as a Medical Laboratory Technologist under the Medical Auxiliaries Act 1966 shall observe the Code of Ethics and shall comply with any special rulings of the New Zealand Institute of Medical Laboratory Science to protect the professional standards and reputation of the practice of medical laboratory science.

General Obligations:
1. It is the duty of any Medical Laboratory Technologist to uphold the dignity and honour of the profession, to accept its ethical principles and not engage in any activity which will bring discredit to the profession.
2. Medical Laboratory Technologists shall practise in accordance with the Law and with the New Zealand Code of Laboratory Management Practice as is currently defined by the National Authority for Quality Assurance Laboratory Testing and Industrial Design (TELARC).
3. Medical laboratory science shall be practised by registered Medical Laboratory Technologists or persons acting under their direct supervision.
4. At all times the primary aim shall be to provide valued and precise clinical information.
5. Every Medical Laboratory Technologist shall maintain currency of competence in the knowledge and practice of medical laboratory science and shall share their knowledge with colleagues and promote learning.
6. Medical laboratory science, shall be practised without bias to a patient's or colleague's race, religion, political belief or medical condition, provided it is within the expertise and competency of the Medical Laboratory Technologist.
7. Every Medical Laboratory Technologist shall respect the confidential and personal nature of professional records and, except where the best interest of the patient requires, or the law demands, shall not disclose such information to anyone without proper patient's authorisation.

NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE 1995

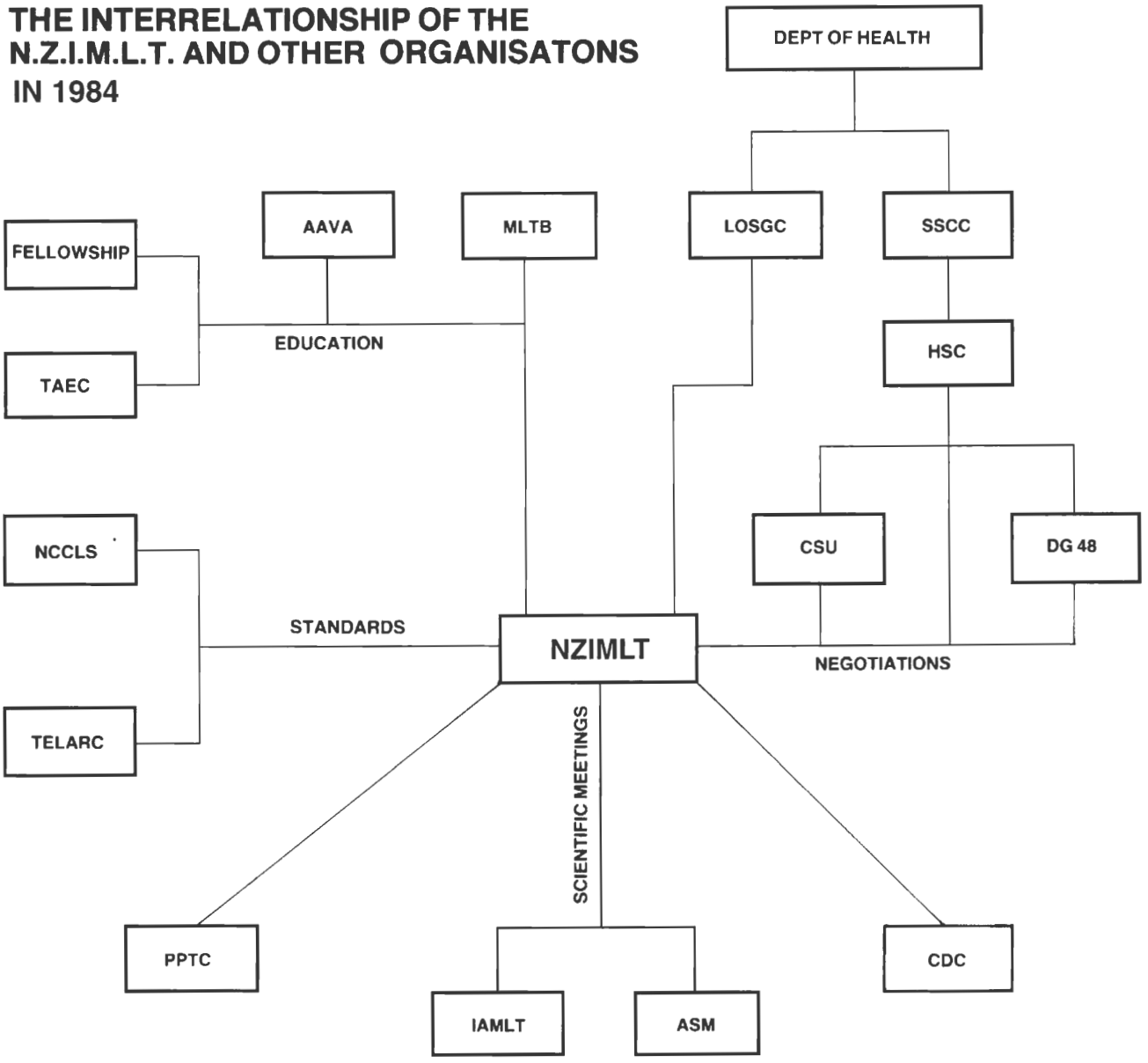


*** No Voting Rights

Influencing Bodies

Government	=	Public opinion - policies and public pressure (groups)
MLTB	=	Medical Laboratory Technologist Board Registration and licencing bodies (Medical Auxillaries Act 1966)
NZMLWU	=	NZ Medical Laboratory Workers Union Industrial representation - formed 1988
SOP	=	Society of Pathologists Professional body of pathologists
ACL	=	Association of Community Laboratories Represents 22 privately owned laboratories in NZ
CHE Mtgn	=	Hospital laboratory management
RHA Mtgn	=	Regional Health Authority management

THE INTERRELATIONSHIP OF THE N.Z.I.M.L.T. AND OTHER ORGANISATONS IN 1984



SSCC	State Services Co-ordinating Committee
HSC	Hospital Services Committee
CSU	Combined State Unions
DG 48	Committee to negotiate standard conditions (DG 48)
MLTB	Medical Laboratory Technologists Board
AAVA	Authority for Advanced Vocational Award
Fellowship	NZIMLT Fellowship Committee
TAEC	Technical Assistants Examination Committee
NCCLS	National Committee on Clinical Laboratory Standards (USA)
TELARC	Testing Laboratory Registration Council of NZ
PPTC	Pacific Paramedical Training Centre
IAMLT	International Association of Medical Laboratory Technologists
ASM	NZIMLT Annual Scientific Meeting Committee
CDC	Centre of Disease Control (NZ)
LOSGC	Laboratory Officers Salary Grading Committee

50 Years of Service

Office-bearers of the NZIMLS 1945 - 1995

DATE	PRESIDENT	VICE-PRESIDENT	SECRETARY	TREASURER	COUNCIL
1945/46	E L F Buxton	N J Ellison J G Peddie	E Winstone	E Winstone	V J Hawke G W McKinley D Whillans
1946/47	E L F Buxton	N J Ellison J G Peddie	S O Jarratt	S O Jarratt	D H Adamson G W McKinley D Whillans
1947/48	E L F Buxton	G W McKinley D Whillans	D H Adamson	D H Adamson	N J Ellison S O Jarratt J H A Ward
1948/49	N J Ellison	E L F Buxton D Whillans	S O Jarratt	D J Adamson	M O Ekdahl G W McKinley H T C Olive J A Samuel
1949/50	N J Ellison	E L F Buxton D Whillans	G W McKinley	D H Adamson	H T G Olive J Byres M O Ekdahl J A Samuel
1950/51	N J Ellison	E L F Buxton D Whillans	G W McKinley	H T G Olive	D H Adamson J Byres S O Jarratt J A Samuel
1951/52	D Whillans	E L F Buxton I Saunders	G W McKinley	H T G Olive	D H Adamson S O Jarratt J T Murray J A Samuel
1952/53	D Whillans	D H Adamson E L F Buxton	G W McKinley	H T G Olive	L Reynolds F Rush-Munro J A Samuel P Scott
1953/54	D Whillans	D H Adamson E L F Buxton	G W McKinley	R J Patterson	L Reynolds F Rush-Munro J A Samuel P Scott
1954/55	G W McKinley	D H Adamson J A Samuel	M McL Donnell	R J Patterson	H G Bloore P Scott L Reynolds F Rush-Munro
1955/56	G W McKinley	D H Adamson N J Ellison	M McL Donnell	J P Walsh	H G Bloore A M Murphy L Reynolds P Scott
1956/57	G W McKinley	H T G Olive L Reynolds	M McL Donnell	J P Walsh	H G Bloore J J Cannon F L N Corey A M Murphy
1957/58	L Reynolds	A M Murphy H T G Olive	M McL Donnell	J P Walsh	H G Bloore F L N Corey L Evans T E Tanner
1958/59	L Reynolds	H G Bloore H T G Olive	M McL Donnell	J P Walsh	G Cameron L Evans M Lynch H E Hutchings
1959/60	L Reynolds	H G Bloore H T G Olive	H E Hutchings	D J Philip	G Cameron L Evans M McL Donnell M Lynch
1960/61	H T G Olive	H G Bloore M McL Donnell	H E Hutchings	D J Philip	G Cameron J Mattingley P Scarf J Walker
1961/62	H T G Olive	H G Bloore M McL Donnell	H E Hutchings	D J Philip	G Cameron J Mattingley J O'Grady J Walker
1962/63	H T G Olive	M McL Donnell H G Bloore	J D R Morgan	D J Philip	H E Hutchings G R George J Mattingley J O'Grady
1963/64	H G Bloore	M McL Donnell G R George	J D R Morgan	D J Philip	D Bond H E Hutchings R T Kennedy J Mattingley
1964/65	H G Bloore	M McL Donnell J Mattingley	J D R Morgan	D J Philip	C W Cameron E K Fletcher H E Hutchings R T Kennedy
1965/66	H G Bloore	M McL Donnell J Mattingley	J D R Morgan	D J Philip	C W Cameron F M Hilder H E Hutchings R T Kennedy
1966/67	M McL Donnell	D J Philip H E Hutchings	J D R Morgan	E K Fletcher	R T Kennedy D Hitchcock G F Lowry C W Cameron
1967/68	M McL Donnell	D J Philip H E Hutchings	J D R Morgan	E K Fletcher	R T Kennedy L R Reynolds G F Lowry B W Main

DATE	PRESIDENT	VICE-PRESIDENT	SECRETARY	TREASURER	COUNCIL
1968/69	M McL Donnell	D J Philip H E Hutchings	J D R Morgan	E K Fletcher	R T Kennedy A L Schwass G F Lowry C S Shepherd B W Main
1969/70	H E Hutchings	J D R Morgan D J Philip	R T Kennedy	E K Fletcher	M M Eales M J Lynch B W Main A D Nixon C S Shepherd
1970/71	H E Hutchings	J D R Morgan D J Philip	R T Kennedy	E K Fletcher	M M Eales M J Lynch B W Main A D Nixon C S Shepherd
1971/72	H E Hutchings	J D R Morgan D J Philip	R T Kennedy	E K Fletcher	A Harper G F Lowry B W Main A D Nixon C S Shepherd
1972/73	D J Philip	J D R Morgan C S Shepherd	R T Kennedy	D S Ford	B Edwards M Flack A Harper A D Nixon D Tingle
1973/74	D J Philip	J D R Morgan C S Shepherd	R T Kennedy	D S Ford	B Edwards M Flack A Harper B W Main A D Nixon
1974/75	D J Philip	J D R Morgan C S Shepherd	R T Kennedy	D S Ford	B Edwards M Flack A Harper B W Main J Powell
1975/76	B W Main	C S Shepherd A F Harper	B T Edwards	D S Ford	G G Broad C H Campbell N D Johnston K McLoughlin R W Smail
1976/77	B W Main	C S Shepherd A F Harper	B T Edwards	D S Ford	G G Broad C H Campbell N D Johnston K McLoughlin R W Smail
1977/78	B W Main	C S Shepherd A F Harper	B T Edwards	W J Wilson	G G Broad R Bluck C H Campbell K McLoughlin R W Smail
1978/79	C S Shepherd	A F Harper C H Campbell	B T Edwards	W J Wilson	R Bluck C S Curtis J Elliot J E Lucas K McLoughlin
1979/80	C S Shepherd	A F Harper C H Campbell	B T Edwards	W J Wilson	R Bluck C S Curtis J Elliot J E Lucas K McLoughlin
1980/81	C S Shepherd	A F Harper C H Campbell	B T Edwards	W J Wilson	R Bluck C S Curtis J Elliot J E Lucas K McLoughlin
1981/82	A F Harper	C H Campbell K McLoughlin	B T Edwards	W J Wilson	G McLeay C S Curtis J Elliot J E Lucas P McLeod
1982/83	A F Harper	C H Campbell K McLoughlin	B T Edwards	W J Wilson	M Young D Reilly J Elliot J E Lucas P McLeod
1983/84	A F Harper	C H Campbell K McLoughlin	B T Edwards	W J Wilson	M Young D Reilly J Elliot J Parker P McLeod
1984/85	C H Campbell	K McLoughlin W J Wilson	B T Edwards	D Reilly	M Young D Pees J Elliot J Parker P McLeod
1985/86	C H Campbell	K McLoughlin W J Wilson	B T Edwards	D Reilly	D Pees M Young J Elliot P McLeod J Parker
1986/87	C H Campbell	W J Wilson D Dixon-McIver	B T Edwards	D Reilly	D Pees M Young P McLeod J Elliot J Parker
1987/88	W J Wilson	D Dixon-McIver P McLeod	B T Edwards	D Reilly	D Pees E Norman S Gainsford J Le Grice J Parker

DATE	PRESIDENT	VICE-PRESIDENT	SECRETARY	TREASURER	COUNCIL
1988/89	W J Wilson	D Dixon-McIvor P McLeod	B T Edwards	D Reilly	G Rimmer S Gainsford E Norman J Le Grice J Parker
1989/90	W J Wilson	D Dixon-McIvor P McLeod	B T Edwards	D Reilly	G Rimmer E Norman S Gainsford J Le Grice A Paterson
1990/91	P McLeod	D Dixon-McIvor	D Reilly	D Reilly	G Rimmer E Norman S Gainsford J Le Grice A Paterson
1991/92	P McLeod	D Reilly	S Gainsford	S Gainsford	G Rimmer E Norman C Kendrick J Le Grice A Paterson
1992/93	P McLeod	D Reilly	S Gainsford	S Gainsford	G Rimmer E Norman C Kendrick J Le Grice A Paterson
1993/94	D Reilly	S Gainsford	P McLeod	P McLeod	L Mayhew A Paterson C Kendrick J Le Grice L Milligan
1994/95	D Reilly	S Gainsford	P McLeod	P McLeod	L Mayhew C Kendrick L Milligan E Norman T Rollinson
1995/96	D Reilly	S Gainsford	P McLeod	P McLeod	L Mayhew C Kendrick L Milligan A Paterson T Rollinson

NZIMLT PRESIDENTS WITH LONG SERVICE IN COUNCIL

Mr D J Philip	1959/60 - 1974/75	16 years
Mr M McL Donnell	1954/55 - 1968/69	15 years
Mr H E Hutchings	1958/59 - 1971/72	14 years
Mr A F Harper	1971/72 - 1983/84	13 years
Mr C S Shepherd	1968/69 - 1980/81	13 years
Mr W J Wilson	1977/78 - 1989/90	13 years
Mr H Olive	1948/49 - 1962/63 (Had a break of three years in service)	12 years
Mr C H Campbell	1975/76 - 1986/87	12 years
Mr G McKinley	1945/46 - 1956/57	12 years
Mr P McLeod	1981/82 - 1995/96	15 years
Mr D Reilly	1982/83 - 1995/96	14 years
Mr H Bloore	1954/55 - 1965/66	12 years
Mr B Main	1967/68 - 1977/78	10 years
Mr D Whillans	1945/46 - 1953/54	9 years
Mr E Buxton	1945/46 - 1953/54	9 years
Mr L Reynolds	1952/53 - 1959/60	8 years
Mr N Ellison	1945/46 - 1950/51	6 years

OTHER COUNCIL MEMBERS WITH LONG SERVICE

Mr B T Edwards	(15 years as Secretary)	18 years
Mr J D Morgan	(6 years as Secretary)	13 years
Mr R T Kennedy	(6 years as Secretary)	12 years
Mr K McLoughlin	(5 years as Vice-President)	11 years
Mr J Elliot		9 years

NZIMLT Presidents
Some Interesting Facts

1. Our first President, Mr E Buxton, served three years, then a further six as Vice-President.

2. Only two Presidents since then have served on Council after their term as President. Five years after his term Mr N Ellison returned as a Vice President for one year. Mr P McLeod returned as Secretary/Treasurer on completion of his term as President.

3. Only one President has had a break in Council service before serving as President. Mr H Olive served for five years as a Council member and Treasurer, retired for four years, then returned as Vice President, then President.

4. Since Mr Buxton, only one President, Mr B Main, has not previously served as Vice President.

5. Since Mr Buxton, two Presidents have not previously served as an ordinary Council members, Mr D Philip and Mr W Wilson both served as Treasurer then Vice President before becoming President.

6. Only one President, Mr C S Shepherd, has served his term of three years without change to Council officers.

7. There has not yet been a woman President, but Miss J Mattingley served two years as a Vice President in 1964/65, 1965/66, and Miss S Gainsford as Vice President 1993/94 -1995/96.

8. No President has as yet served for more than 3 years in that office.

9. Only two Presidents, Paul McLeod and Dennis Reilly have served on every position on Council.

10. The first woman President is Shirley Gainsford in the 50th year of the Institute. (1995/96) She has served in every position on Council.

NZIMLT Council
Some Interesting Facts

1. The office of Secretary/Treasurer was one office for the first three years of Councils existence and returned to that state in 1991/92.

2. Ordinary Council membership was three for the first three years, four for the next nineteen and five since 1968/69.

3. Eighty three members, including thirteen women, have served at some time on the Council.

4. Only two women, Miss J Mattingley and then Miss S Gainford who both served as Vice President have served as other than ordinary Council Members.

5. 1983/84 was the first occasion in which there was more than one woman Council member.

6. The 1975/76 election was the most interesting -
   a. Mr B Main was elected President, the first ever to have not previously served as Vice President.

   b. There was a total new Council of five ordinary members.

7. The longest service in any one office is Mr B T Edwards, 15 years as Secretary.

8. The longest serving officer is Mr B T Edwards, a total of 18 years unbroken service.

PAST PRESIDENTS

E. L. F. BUXTON
1945 - 1947

N. J. ELLISON
1948 - 1950

D. WHILLANS
1951 - 1953

G. W. McKINLEY
1954 - 1956

L. R. REYNOLDS
1957 - 1959

H. T. G. OLIVE
1960 - 1962

H. G. BLOORE
1963 - 1965

M. McL. DONNELL
1966 - 1968

H. E. HUTCHINGS
1969 - 1971

D.J. PHILIP
1972-1974

B.W. MAIN
1975 - 1977

C.S. SHEPHERD
1978 - 1980

A.F. HARPER
1981 - 1983

C.H. CAMPBELL
1984 - 1986

W.J. WILSON
1987 - 1989

P. McLEOD
1990 - 1992

D. REILLY
1993 - 1995

S.A GAINSFORD
1996 -

N.Z.A.B. EXECUTIVE COUNCIL 1954

BACK ROW - D.H. ADAMSON (VICE-PRESIDENT), E.L.F. BUXTON (VICE-PRESIDENT), R.J. PATTERSON (TREASURER)

FRONT ROW - G.W. MCKINLEY (SECRETARY), D. WHILLANS (PRESIDENT), MISS P.B. SCOTT, J.A. SAMUEL

ABSENT - F.M. RUSH-MUNRO & L REYNOLDS

N.Z.I.M.L.S. COUNCIL 1993/94

BACK LEFT: LEANNE MAYHEW (REGION I), MAREE GILLIES (EDITOR), LES MILLIGAN (V), CHRIS KENDRICK (III), ANNE PATERSON (II)

FRONT LEFT: FRAN VAN TIL (EXECUTIVE OFFICER), PAUL McLEOD (SEC/TREASURER), DENNIS REILLY (PRESIDENT), SHIRLEY GAINSFORD (VICE-PRESIDENT)

Membership

'NEW ZEALAND ASSOCIATION OF BACTERIOLOGISTS (INC)'

		Subscriptions
1945	At the first meeting (7/8/45) there was some discussion over the (in)appropriateness of the term **'BACTERIOLOGISTS'** given the increasing importance and recognition of Haematology and Biochemistry in particular. However it was agreed to be the recognised title of the day. *Foundation Membership* = 73 (Senior = 29 and Junior = 44) Senior Bacteriologists - qualified via Department of Health 'Certificate of Proficiency in Bacteriology and Clinical Pathology'	£1.1s
	Junior members - unqualified i.e. trainees, technical assistants	10s.6d
	Others - eligible in the opinion of Council and designated senior or junior by Council Honorary - friendly pathologists	
1948	*Membership* = 131 (Senior = 52 and Junior = 79)	
1950	Senior membership could now also be achieved by the newer 'Certificate of Proficiency in Hospital Laboratory Practice'	
1952	Funds were urgently needed following the expense of the 1951 legal battle in Court. (The NZAB was £50 in overdraft). Subscriptions were increased: Senior Junior Graded Bacteriologists Staff Bacteriologists Junior *Membership* = 236 (Life=2, Senior=96, Junior=121 and Honorary = 17)	£1.10s. 15s. £1 10s 5s
1960	Bacteriologists became **'MEDICAL LABORATORY TECHNOLOGISTS'** and the Association	

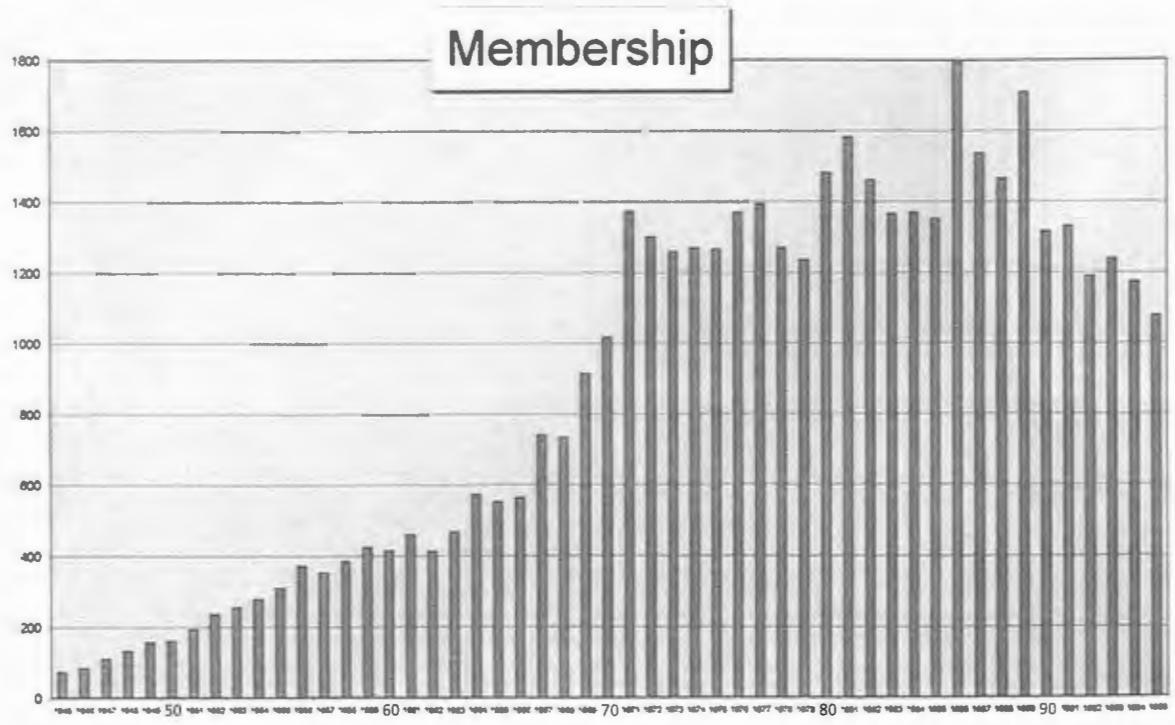
'NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY TECHNOLOGY (INC)'

	The rules of the NZAB were deemed to apply by Council order 30/7/60 to the NZIMLT until an update was possible. *Membership* = 414 (Life=4, Senior=170, Junior=224 and Honorary=16)	
1961	Senior Junior	£2.2s. £1.1s.

1962	AGM An Auckland Branch remit was passed that all senior members be granted 'Association' of the NZIMLT. There is no recorded discussion or dissention regarding the use of 'Associates' rather than 'Members' for the qualified peers of the profession. This was not corrected until 1991. The new rules were finally agreed, proofed, printed and circulated early in 1964. (1000 copies printed). Major purge of unfinancial members (46) occurred. *Membership* = 433 (Life=4, Senior=169, Junior=243 and Honorary=17)	
1963	It was noted that nineteen technologists were working in Sole Charge posts in the Dominion. Over 200 technologists were employed in complex services with specialisation in larger centres.	
1967	Decimal currency replaced Sterling in the monetary system. Membership drives alternated with purges of unfinancial members. The system of 'discounts' for subscription fees paid by 30 June annually was utilised until 1986. (Discounted subscription fee included in bracket). Fellows: - by examination or Council exemption, e.g. Life Members automatically elected Fellows Associates: - qualified COP in Medical Laboratory Practice or COP in Hospital Laboratory Practice - Hospital Scientific Officers (university graduates) with three years minimum experience in Medical Laboratory Technology. (In 1970 this was altered to certificated member status). - Others deemed 'fit and proper' to be elected in the opinion of Council Certified Members: - qualified Intermediate exam trainee - qualified QTO laboratory assistant - qualified QTA plus 3 years work experience Other Members: - unqualified trainees and laboratory assistants - others (by Council order) By 1970 there was only one category of 'Members' defined as those **not** eligible to be Fellows or Associates. Honorary members could fall into any category. Life Members were automatically elected 'Fellows'.	$12 (10) $ 7 (6) $ 5 (4) $ 3 (2)
1968	Fellows Associates Certificated and ordinary members *Membership* = 732 (Life=4, Honorary=16)	$18 (16) $12 (10) Unchanged
1971	Fellows Associates Certificated members (now included graduates also) Non Practising and Ordinary members	$20 (18) $14 (12) $ 8 (7) $ 5 (4)
1973	Fellows Associates Members (previously certificated members) Student members (previously ordinary members) Non Practising members	$20 (18) $18 (16) $13 (11) $ 9 (7) $ 7 (5)

1974	*Membership* = 1264 Life = 6 Fellows = 51 Associates = 456 Certificated Members = 46 Graduated Technologists = 10 Part II Trainees = 97 Part I Trainees = 86 Trainees (pre BTC) = 203 QTO = 10 QTA = 114 Laboratory Assistants = 145 Non Practising = 40	
1976	*Membership* = 1304 (6) Life Members - members who have given outstanding service to the Institute AND profession of Medical Laboratory Technology in the opinion of Council (47) Fellows - by examination or assessment of a mechanism approved by Council (472) Associates - qualified with the MLTB 'Certificate of Proficiency in Medical Laboratory Technology'. (Note science graduates need 3 not 2 years work experience as required for a Medical Laboratory Technology apprentice.) (332) Members - hold the MLTB Basic Training Certificate (previously Intermediate) - hold QTO or QTA plus 3 years experience - Science graduates employed in a Medical Laboratory (377) Student Members - person working in Medical Laboratory Technology not eligible for the above (usually trainees and unqualified laboratory assistants) (54) Non Practising - previously a member and no longer employed in Medical Laboratory Technology (16) Honorary Members - person not engaged in the profession of Medical Laboratory Technology considered to have given outstanding service to the Institute OR profession	Nil $22 (20) $20 (18) $15 (13) $10 (8) $ 8 (6) Nil
1979	Fellows Associates Members Student Members Non Practising Members	$37 (32) $35 (30) $26 (21) $21 (16) $13 (8)
1981	Membership = 1583 (45) Fellows (761) Associates (650) Members (members and student members combined) (105) Non Practising Members Life = 8, Honorary = 14 3000 copies of the Rule Book were printed in 1982 at a cost of $1150	 $40 (35) $40 (35) $30 (25) $20 (15)
1983	The facility for automatic deduction of subscriptions from pay packets was adopted if members desired.	
1984	Fellows and Associates Other categories unchanged	$45 (40)

1986	*Membership* = 1792 (774) Fellows and Associates (956) Members (32) Non Practising Members Peak membership because of industrial action People wanted the Institute to give strike notice rather than be identified as individuals Life=15, Honorary=15	 $55 (50) $45 (40) $30 (25)
1987	*Membership* = 1536 (824) Fellows and Associates (625) Members (55) Non practising Members Life=14, Honorary=18	 $104 $ 52 $ 33
1988	The decision to split off the Industrial function from the Institute was taken at the AGM.	
1989	*Membership* = 1315 Subscriptions were REDUCED (526) Fellows and Associates (688) Members (53) Non Practising Members Life=17, Honorary=31	 $88.40 $33.80 $33.00
1991	Medical Laboratory Technologists became **'MEDICAL LABORATORY SCIENTISTS' and the Institute**	
	'THE NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE (INC)'	
1995	*Membership* = 1180 Life = 19 Fellows = 21 Members = 684 Associates = 373 Non Practising = 56 Honorary = 27	



Honoraria

In the first few years of the NZAB, a few Hospital Boards would contribute towards the travelling expenses of Council members. However, largely Council members paid their own way to attend Council meetings and conferences. Both were held predominantly over weekends in the early years. The young association had many expenses, eg:

- 1946 'Incorporation of the Society' cost £13 14s.
  D Whillans printing press £45
- 1948 Typewriter for Secretary/Treasurer £35 10s.
  By 1948, Council delegates travelling to Wellington for salary negotiations did not enjoy monetary support from Hospital Boards. It was accepted and carried that the NZAB should be responsible for 'reasonable expenses'.
- 1949 The first honorarium was approved for payment
  - Editor £20
  - Secretary £2 2s
  - Treasurer £2 2s

This was in recognition of the expenses and personal time commitment carried by these officers, not being met by the NZAB. In 1967, consideration was given to changing Council meetings to weekdays to take less time from Council members families and work as weekend work was part and parcel of the job.

	1951	1953	1955	1964	1966	1967	1970	1971	1974	1978
Secretary	£3 3s	£5 5s	£5 5s	£10 10s	£10 10s	$30	$50	$75	$100	$150
Treasurer	£3 3s	£3 3s	£3 3s	£7 7s	£7 7s	$20	$50	$75	$100	$150
Editor	£2 2s	£3 3s	£3 3s	£10 10s	£10 10s	$30	$50	$75	$100	$150
Auditor		£3 3s	£5 5s	£5 5s	£5 5s	$20				
Scrutineer				£2 2s	£2 2s					
Returning Officer					£4 4s	$10				
Membership Convenor									$100	$150

In 1981, it was proposed by Council that Honoraria NOT be paid. Inland Revenue implications meant that Honoraria were quite meaningless compared with the voluntary hours council members put into their various tasks. No honoraria has been paid since 1980. All council members or delegates acting on Institute Sub-committees presenting an account of an expense and receipt are reimbursed. The accounts, receipts and payments are audited annually.

Registered Office of Secretariat

The Registered Office of the NZAB (Inc) was initially in Wellington where the inaugural meeting had been held: 'Pathological Dept', Public Hospital, Wellington. The rules allowed it to be changed and by the following year, correspondence on NZAB letterhead show it as being 'where the President was' in Palmerston North Hospital. Two years later in 1948, rule books and journals show the office as being the home of the Editor: 139 Kohimarama Road, Kohimarama, Auckland. From 1974 the Rule Book only states the Registered Office as being wherever Council determines. In the same year the rules also dropped the objective and section of the rule book concerned with the purchase of property. Until that time, various Councils had been directed by the membership to explore the possibility of purchasing land to house a permanent office.

In July 1968, the membership at the AGM directed that a Permanent Secretariat be investigated, along with Indemnity Insurance. At the AGM 1969, the membership was told that Indemnity Insurance was too expensive for the Institute and people were referred to the NZ Medical Assurance Co. Meanwhile the concept of a Permanent Secretariat was still being investigated. Council investigated the setting up of Permanent Secretariat in conjunction with other Para-medical organisations. Their duties to consist of the present administrative work of the Secretary & Treasurer (1968). The topic was revisited in 1971, 1973 and 1974 without resolution.

It was not until August 1990 that an Executive Assistant was appointed as a employee of the Institute predominantly to act as secretarial support to the Secretary and other members of Council. With the resignation of Barrie Edwards from his position of Secretary in November 1990, the Executive Assistant became the Executive Officer.

Fran van Til was appointed at the rate of $15 per hour at 10 hours per week, plus rent of $50 per week, travel at $0.30 per kilometre and electricity at $5.75 per week, the latter to cover her expenses in providing an office. The Institute was responsible for the provision of office equipment and its insurance. The Executive Officer's hours increased to 15 hours per week and in 1993 became 24 hours per week at $15 (plus overtime). Travel increased to $0.40 per kilometre. By the end of 1991 the clerical work of the Secretary and Treasurer had been shifted to the Institute office. Administration of membership files following in 1992. The old membership computer over which the previous Membership Convenor Geoff Rimmer had laboured for many an hour went to the Editor.

In 1993 Fran's job description was defined, accepted by the membership at the 1993 AGM and incorporated into the 1994 Rule Book:

26 (a) The Executive Officer shall attend all formal meetings of the Institute and all meetings of Council and shall record all proceedings.

(b) The Executive Officer shall undertake any other duties as may be determined by Council. These duties may be altered by mutual agreement.

Currently (1995) the Executive Office costs approximately $25-$27,000 per annum, funded from membership fees, to assist council and members, to carry out their voluntary duties.

For further information on the New Zealand Institute of Medical Laboratory Science please contact

The Executive Officer
NZIMLS
PO Box 3270
CHRISTCHURCH

Telephone/Fax (03) 313-4761

Branches

Initially in the NZAB, feedback of Association and Council news relied on the Journal and personal communications. As membership increased, larger centres began to organise into groups. In 1955, Andor Fischman suggested to Council, via the Auckland Council Representative, Rush-Munro, that local Branches should be formed. Council's response is minuted (21/5/55) as ".... not the time for official formation of such Branches but that they could be organised locally and unofficially". Auckland held its inaugural meeting 11 June 1956. Later that year Gordon McKinley, President NZAB acknowledged the two active Association groups in his Annual Report, (Auckland and Christchurch). He sent Council's best wishes and hopes that this enthusiasm would spread. The rules were changed at the 1957 AGM to cover the official formation and activities of Branches as local Associations.

The specimen rules for Branches in the Association Rule Book are almost identical to those of the parent body. Branch members immediately looked for a rebate on subscriptions if they belonged to both, but this was never granted. Branch subscriptions were set at 5 shillings in Auckland and Dunedin. Thirty years later the Dunedin Branch subscription was still 50¢.

Council recognised the affiliation of Branches to the Association as they applied for it. Auckland (1/7/59) Dunedin 24/4/61). However, it took considerably longer for official recognition with the Registrar of Incorporated Societies. Only the parent body could apply for incorporation and had to forward the appropriate documentation and correct number of signatures from a majority of 'members' in the proposed society (Branch). With all the other business of the day, formal registration of Branches was delayed. In fact Auckland Branch was not incorporated until 1966, ten years after its formation.

Local Branches were organised in the main centres and drew voluntary membership from that and their surrounding geographical area. Invercargill considered forming its own Branch, but decided to stay with Dunedin Branch in spite of the travel time. Meetings were shifted to Invercargill periodically. While the frequency of meetings varied between Branches, and from year to year within Branches, an average of 6 - 8 meetings were held per year in the 1960's which had decreased to an average of 4 per year in the 1970's/80's. Meetings were held either on Saturdays, or later in the evenings after work, to enable "out of towners" to travel to it, (Dunedin Branch minutes).

Apart from regular meetings, one day or evening seminars were organised. The Auckland Branch produced a worthy newsletter, 4 - 6 times a year from 1965 - 68, when it was recognised that too few people were regular contributors and the effort was better directed to the Journal.

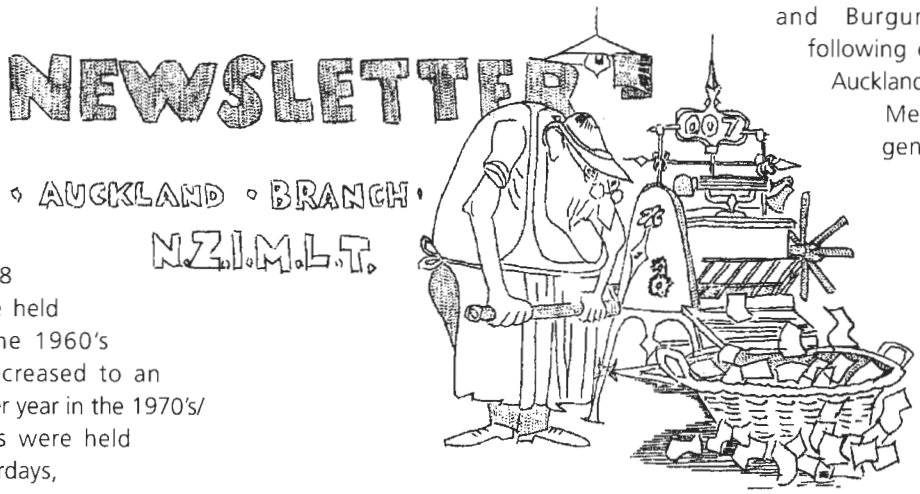
Seminars and a large portion of each meeting were devoted to education. Those attending conference were required to give full accounts of papers presented in their discipline. Overseas speakers were toured around the country to speak at as many Branch meetings as their itinerary would allow. This produced maximum opportunity for continuing education of all members. While senior staff had the role of leading by example, trainees were particularly encouraged to participate, with prizes for the best presentations. Films, displays and demonstrations were arranged. Safety and safe practice was addressed by branches long before Acts of Parliament such as the Health & Safety Act (1992).

The local Branch was an excellent Forum for discussing the profession's political issues of the day. Education, Negotiations, Grading, Safety, etc and their progress, or lack of progress, consumed many hours and pages of the minute books. Many remits were fully discussed locally before being forwarded to Council for inclusion on the agenda of the AGM. Remits on the AGM agenda were also discussed at branch meetings, and delegates to conference asked to vote accordingly, together with proxy votes from members.

Social activities followed most if not all meetings, and were also arranged as stand-alone events. They may have been as simple as supper at a member's home, although apparently many of these turned into pretty good parties. Barbeques, dinners, a formal Ball or two were interspersed with visits to Breweries, an annual ice skating trip (Dunedin), ten pin bowling, golf, rugby, fireworks, quiz evenings .....

Following the custom and practice of the times, the ladies (particularly of the 1960's/1970's) took pride in making and serving the supper. This could involve significant numbers as with the 100 plus guests for the 'Beef and Burgundy' evening following one seminar in Auckland.

Meanwhile the gentlemen of the day always ensured that the appropriate vote of thanks was recorded in the minutes.



New Zealand Institute of Medical Laboratory Technology

DUNEDIN BRANCH (INC) - 1967 PROGRAMME

Date	Subject	Place	Time
March 17	Barbeque	Evansdale Glen	8.00pm
April 14	Films and discussion	Medical School	7.00pm
May 6	South Island Seminar	Timaru	
May 9	'The Work of the Virus Diagnostic Unit' by Dr P Middleton	Medical School	7.45pm
June 16	Slide quiz. Short papers, formulation of remits	Gore	8.00pm
July	Discussion of Conference Remits. (Date to be announced later)	Medical School	5.30pm
July 22	Branch Party 'The Cellars'	Dunedin	
August 17-18	NZIMLT Conference	Christchurch	
August 29	Conference Reports. Visit to Electron Microscope Unit	Medical School	7.30pm
September 26	Dunedin Branch AGM 'Clinco-pathological' lecture by Dr J F Gwynne	Medical School	7.45pm
October 19	Student demonstration evening	Medical School	7.45pm

D S Ford - Hon. Secretary

Extracted from letter from Dorothy (Hitchcock) to a Council Member.

Saturday 24th June 1967 - Wellington Branch of NZIMLT - All Day Seminar

.....I believe we have 100% membership with our ordinary trainees and trained staff and we are finding that attendances at our Branch meetings have improved correspondingly. We had a most successful seminar last month finishing up with a cocktail session (10s each) in the hospital cafeteria. This social activity came to rather an abrupt end upon the arrival of 5 fire engines plus the usual accompaniment of sirens and alarms!!! The problem being NO FIRE!!! The Wellington Branch NZIMLT was blamed! Fortunately the £17 fine did not have to come out of branch funds!.....

EXTRACT FROM FEBRUARY 1967 JOURNAL - NZIMLT AUCKLAND BRANCH NEWSLETTER

Finger Tips:

Do you always use the correct pipette for the job, or do you resort to using the one which will simplify the procedure?

Do you think like this ?

"5 lots of 2 mls each - ah! 5 x 2 = 10. Answer - a 10 ml pipette! Saves all the sucking and blowing."

If you do, remember this. Any pipette is calibrated only to its full volume - so any graduation marks up to this are only fractions of the length of the pipette, therefore, the tolerances given for any pipette only apply to the full volume. Better to use that 2.0ml pipette after all don't you think? If accuracy means anything, that is! While on the subject of pipetting, ask yourself these questions - when was the last time you :-

a. Blew out a pipette calibrated to deliver?
b. Failed to rinse out that micro pipette calibrated to contain?
c. Failed to wipe the tip?
d. Used a pipette with a broken tip?
e. Then failed to discard it when you saw it was broken after you had finished.
f. Used a protein encrusted micro pipette?
g. Chanced the pipetting of toxic substances by mouth?
h. Changed the order of the reagents of a test for convenience?

Anyone who did all of these things within the last week .... step up for a slap on the wrist?

Technique - or 'It ain't what you do, it's the way that you do it'.

"A good method is one which provides maximum simplicity, specification, reproducibility, sensitivity and stability, at minimum cost and time, consistent with the degree of information required."

Special Interest Groups

Over the 1980's it became evident that Branches were only catering for a minority of the membership, predominantly in the main centres. Even in main centres Branch committees were experiencing increasing difficulty in attracting members to any function held outside of 'work hours'. In 1989 the Council of the NZIMLT voted to set up advisory groups in each discipline of Medical Laboratory Technology - such groups to be named Specialist Interest Groups or SIGs. An inaugural meeting of Specialist Interest Group (SIG) convenors was held in Auckland in 1990. Rennie Dix (Haematology), David Wilson (Transfusion Science), Alison Buchanan (Clinical Biochemistry), Gillian McLeay (Immunology) and Shirley Gainsford (Microbiology) were present and agreed to the following objectives for the SIGs:

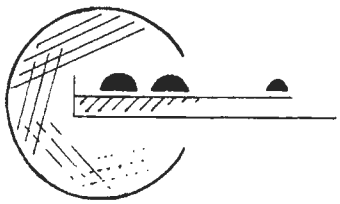
- to advise Council on all matters pertaining to their discipline
- to nominate examiners and revise examination syllabi
- to organise continuing education programmes
- to liaise with the Annual Scientific Meeting committee in the organisation of the programme
- to approach people to publish in the Institute Journal

A Cytology SIG and Histology SIG were subsequently formed with Carol Green and Maree Jackson as convenors. Ross Anderson (Haematology), Ian Wilkinson (Immunology), Sheryl Khull (Transfusion Science) and Jan Deroles-Main (Microbiology) have replaced the original convenors in their respective disciplines. Each SIG has been responsible for forming and maintaining its own committee. Different groups have taken different approaches. Some have national committees and in others the responsibility shifts between centres periodically. The SIGs are responsible to the convenor of the Education committee of the NZIMLS. Convenors meet with the Council annually. SIGs endeavour to produce a continuing education programme and budget for each forthcoming year, for approval at the November Council meeting.

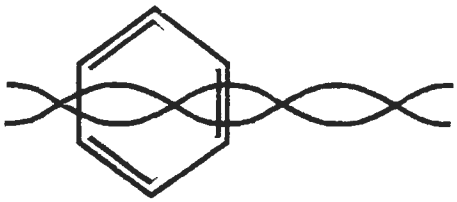
Activities were initially funded by Council using membership fees but are now funded from registrations, although they are underwritten by the Institute (ie membership fees). Non-members attending have to pay an extra levy. All SIG accounts are audited annually with other NZIMLS financial activities. Each SIG decides how best to present continuing education to suit the needs of their discipline. This ensures flexibility to utilise appropriate events to suit topical needs. Annual seminars have been held in Auckland by Biochemistry and Haematology and in Central North Island venues by Microbiology and Immunology. In 1995 Histology held their first seminar in New Plymouth.

The SIGs play a major role to help the Scientific Convenors of the Annual Scientific Meeting organise relevant guest speakers and workshops for their discipline. Other activities include Journal Clubs (Microbiology and Biochemistry) and the Audiotape library service of Transfusion Science. SIGs contribute to the Journal's 'SIGs Continuing Education Section' with articles that cover both domestic and scientific affairs. As the Institute celebrates 50 years, the Specialist Interest Groups are playing a major role in the organisation of NZIMLS Continuing Education Programmes.

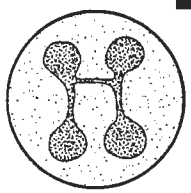
Microbiology



Biochemistry

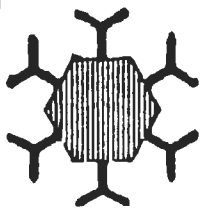


Haematology



Transfusion Science

Immunology



Histology

Cytology

Laboratory Animal Tests

'Animal houses' tended to be either on the rooftops or in the basements of hospital buildings. Staff had to house, feed, breed, inoculate, operate on and ultimately kill their charges. Different combinations of goats, guinea pigs, frogs, toads, mice, pigs, rats and rabbits made up the menagerie according to the needs of the hospital. 'Clinical Laboratories Ltd' in Palmerston North specialised in frog pregnancy testing while Napier Hospital had a large population of guinea pigs to service the TB sanatorium. Animal tests emerged in the 1930's/40's, were in their heyday in the 1950's and were gradually superseded in the following decades. Although used more for research work than diagnostic testing in later years, the animal house at Auckland Hospital was not finally closed down until 1990.

PREGNANCY TESTING

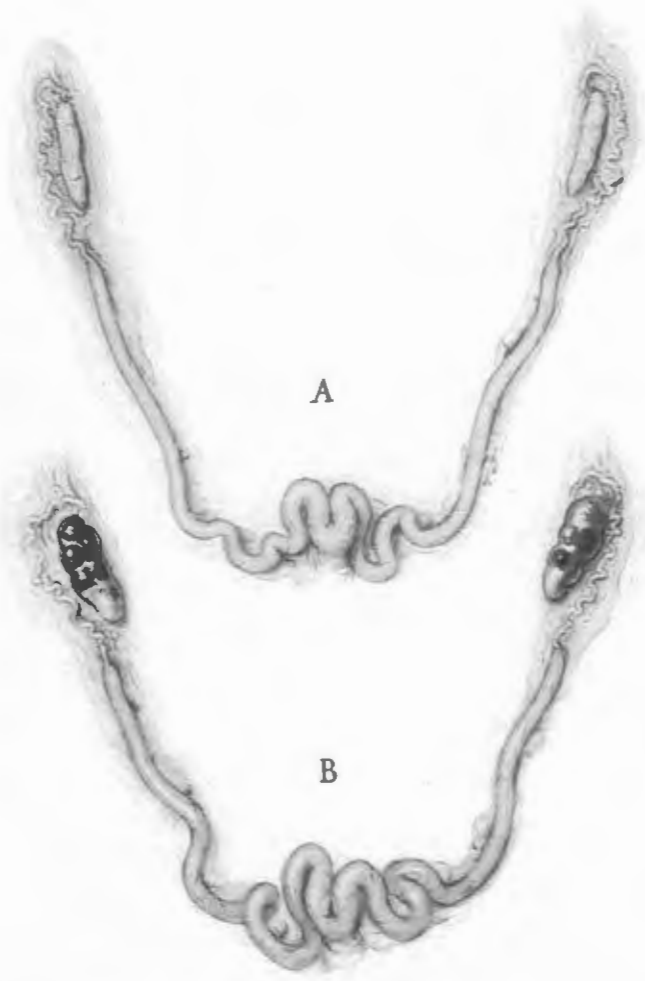
Mice and Rabbits were used initially. 5-10mL of centrifuged urine supernatant (otherwise untreated) was injected about four hourly, for three doses, into either immature female mice (Aschheim-Zondek Test) or young non-pregnant female rabbits (Friedman Test). (Some methodology specified virgin female rabbits which must have been even more challenging). 24 - 48 hours later, the animal was either sacrificed (mice) or anaesthetised for a laparotomy to examine the ovaries. As mice ovaries are so small, reading the result was quite difficult, so rabbits were increasingly preferred. If positive, the ovaries were enlarged with haemorrhagic follicles and yellow bodies (see photo). Some animal workers had 100% mortality following their rabbit operations while others tell of rough surgery, poor needlework stitches and rabbits that were hopping around and eating almost as soon as they came out of anaesthetic. The Friedman test disappeared in favour of the frog test.

Frogs: This method was based on the stimulation of spermatozoa production, induced in the frog by the presence of H.C.G. (Human Chorionic Gonadotrophin) which is excreted in the urine during pregnancy. Production of spermatozoa is demonstrated by microscopic examination of fluid from the cloacal cavity, a common genito-urinary passage in the frog. This is aspirated by inserting the blunt tip of a pasteur pipette about 1cm into the cloaca. Frog spermatozoa are easily identified under a medium power dry objective lens, being motile, comma-shaped and with flagellum.

Method:

1. Concentrate test urine by mixing with kaolin suspension under acid conditions. Any HCG is adsorbed onto kaolin.
2. Centrifuge, discard supernatant, resuspend kaolin in alkaline buffer, HCG will elute from kaolin.
3. Centrifuge, harvest the supernatant and adjust to neutral pH.
4. Inoculate 1mL into dorsal lymph sac of each of 2 frogs, having first ensured the absence of spermatozoa.
5. Examine frog's urine at 1, 2 and 3 hours.
6. If negative, frog's potency is checked by inoculation of known positive material.

Maintaining the supply of frogs was a challenge. Fenced in frogs being bred in semi-captivity could be wiped out quickly if rats got in. Local school children could be paid as much as half a crown (2 shillings and 6 pence) for a



Friedman Pregmancy Test in Rabbits ovaries - A = Negative
B = Positive

male frog, which they had to identify by the thick rough thumb used to hold down the female during mating. Frog catching expeditions were held after work. A farm near Lake Rotoiti (Rotorua) sent Auckland a regular supply of male frogs (about 100/month), which were transported by Road Services bus. A telegram announced their arrival. They were sent in double deck, wooden boxes which were quite tricky to open without allowing a frog stampede to occur! Tanks housing, fresh unused, and frogs being rested at least 2 weeks, had to be kept clean - frequent changes of water and scrubbing out.

Various methods of feeding frogs were utilised. The NZ frog is quite fussy, requiring his food to be live, preferably on the wing. Partial success was achieved with maggots on fly-blown meat and by attracting nocturnal flying insects with a light source near the mesh lidded tanks. Force feeding was another solution. The frog had to be caught, held to force open the mouth, a half teaspoon of mince spooned in and the throat stroked until it swallowed.

Toads were trialed or used in an emergency - on one occasion some were imported from Fiji, but were even more unpleasant to work with than frogs.

TB TESTING

Guinea Pigs were easier to breed. In many patients, TB was easily diagnosed by microscopic examination of sputum. If acid fast bacilli were not seen, suitably treated specimens of sputum, pleural fluid or tissue were injected into a guinea pig and an autopsy performed on the animal six weeks later.

With the introduction of the Wasserman test for syphilis, guinea pig blood became an important source of complement needed for the test and so the animal was bled out prior to the autopsy.

OTHER TESTS

Rabbits were kept as a source of red cells after the Friedman test was discontinued, and were also used to distinguish human and bovine TB on occasions.

Goats were used for antibody production. Most had mixed feelings when the titre was high enough to bleed the animal out. The smell of an old billy goat seemed to cling for an inordinate time.

Rats were delivered to the animal house, captured from ships in port by health inspectors, to be checked for plague. Catching their tails with tweezers and pulling it out through the cage so the tip could be cut off to get a drop of blood was no fun for the rat or operator.

Pigs and Dogs. As animal testing was superseded by culture media, the animal house became home to pigs and dogs used in various experimental operations. Over the years the anti-vivisection lobby groups were vocal, and although there were occasional threats, no actual trouble is recollected by our oral historians.

Immunology

1945 - 1955 SEROLOGY AN OFFSHOOT OF BACTERIOLOGY

This period emphasised the identification of antibodies to a limited number of infectious diseases eg. Syphilis, Salmonella, Streptococci and Brucella. Most assays used at the time were restricted to tube agglutination, flocculation or complement fixation where as much as 0.5 - 1.0 mL of serum per assay was needed!

Founder member of NZAB and first journal editor, Doug Whillans, in 1950 reported on "An improved photometric method for use in the Wassermann reaction". The principal of CH50 for complement analysis described by Whillans is still in use today. So serious was Syphilis diagnosis in those days, the Pathologist or occasionally the Principal Technologist were the sole persons allowed to perform Wassermann and Kahn tests. One also remembers the need to use 10mLs of freshly drawn rabbit red blood cells for macro-anti streptococcal antibody testing that were performed weekly.

1956 - 1965 IMMUNOFLUORESCENCE, NEW TESTS AND AUTOIMMUNE DISEASE

This era was a time where more sensitive and rapid assays were explored. Toxoplasmosis and serodiagnosis by a dye exclusion test was reported by Dr J D Manning of NZ National Health Institute in 1956. This remained the 'gold standard' for serodiagnosis for the next 25 years.

Latex and haemagglutination assays were developed and their usefulness reported on by Andor Fischmann and Henry Shott for the improved diagnosis of Hydatids. The arrival of Ken Couchman from Roitt's Middlesex laboratory to Palmerston North, saw the introduction of immunofluorescence and gel precipitation technique for identification of autoantibodies in Pernicious Anaemia, Thyroid Disease and Systemic Lupus Erythemematosis. One vividly recollects cannibalising a Reichert microscope to maximise the UV light output!! Duncan Adams group from Dunedin described a novel bioassay for the identification of thyroid stimulating antibody and its role in thyroid disease. The British firm Burroughs Wellcome played a major part during this time, in supplying bacterial, parasitic and viral antigens, plus quality fluorescein labelled products for immunological assays.

1966 - 1975 IMMUNOLOGY - A NEW DISCIPLINE

The knowledge that at least 3 antibody classes existed and that they reacted accordingly to the stage and/or type of disease provided further impetus and sophistication to what was rapidly developing into a brand new field in laboratory medicine.

A clinical immunology laboratory was set up in June 1967 at Hamilton Med Lab, where for the first time all existing immunological assays from Haematology, Histology, Microbiology and Biochemistry were drawn together under the umbrella of 'Immunology'. Additional immunological tests in the future were to be developed and performed in the new department. The introduction of 'Takatsy' style microplates and accompanying microdiluters in 1967 to develop micro immunoassays revolutionised existing methodology.

Microtitre trays - specimen processing (1970's/80's)

In terms of economy, a larger number of serum samples could be tested simultaneously; there was a marked reduction in technical time and it provided a way in which to cope with the ever increasing Immunology workload. Syphilis diagnosis reached new heights with the development of the FTA.ABS and TPHA.

Immunoprecipitation had reached a sophisticated level, enabling quantitative results to be obtained in a matter of hours. Plasma protein analysis by immunoprecipitation, particularly Immunoglobulins and Complement proteins provided valuable data in a clinical setting.

Refinements in immunofluorescence, and availability of many conjugated antibodies, allowed one to identify specific protein deposits in diseased tissue and proved particularly valuable in the differential diagnosis of renal, liver and skin diseases.

Two companies, Hoeschst and Dakopatts, played a critical role during this period, providing valuable clinical support material as well as providing quality immunological reagents.

1976 - 1985 THE ACCEPTANCE OF IMMUNOLOGY AS A SPECIALITY DISCIPLINE

By this time Immunology was recognised as a separate individual laboratory discipline. Several hospitals and private pathology services throughout NZ had by now established distinct Immunology laboratories to varying levels of sophistication. *The first formal Immunology examination for NZ Medical Laboratory Scientists was held late in 1977.*

Reading titre reactions 1980's

Allergy and laboratory testing of allergic individuals became more refined with the introduction of specific IgE (RAST) and skin 'PRICK' tests to a wide variety of allergens.

The delineation of many forms of Immune Deficiency at a molecular level forced the development of cell culture techniques involving both non specific (PHA, pokeweed, Con.A) and specific (MLR, antigen driven cell cytotoxicity) cell mediated immune response assays. Specific assays already available for Myeloma identification were added to recognise immunoglobulin and complement deficiencies.

The potential of immunoenzyme (ELISA, EMIT) assays to cope with the increasing workload were quickly realised, culminating in a dearth of specific immunoassays being produced. Commercial companies realising the impact of Immunology on Medical Laboratory Science, moved quickly to develop and introduce an impressive array of automated instruments for the washing of, and optical density (OD) reading of, microplate assays. Sophisticated instruments were also developed for the automation of complement fixation, particle agglutination as well as immunoprecipitation assays.

1985 - 1995 CONSOLIDATION, SOPHISTICATION and FURTHER DEVELOPMENT THROUGH MOLECULAR BIOLOGY

Education in Immunology as with other Medical Laboratory disciplines, underwent dramatic changes during this period which has resulted in a series of 4 year Bachelor Degree courses being established at the Auckland Institute of Technology, Massey and Otago Universities.

Amplification of selected DNA/RNA sequences by cyclic polymerase chain reaction (PCR) has revolutionised laboratory diagnosis. DNA probe technology is now probably the most sensitive method in establishing the clonality of Lymphoma, Myeloma and Lymphocytic Leukaemia.

The impact of the Human Immunodeficiency Viruses (HIV) and AIDS worldwide has led to the rapid development of specific pro-viral DNA sequences by PCR and defined antibody assays (ELISA and Western Blot) against a battery of HIV specific antigens. Recombinant DNA technology has also found increased application in Immunology. A good example is the availability of highly specific protein antigens to identify antibodies observed in certain Rheumatic Diseases eg. Sjogrens disease.

Sophisticated instrumentation ie. fully automated, random access, discrete analysers no longer remain the domain of Biochemistry and have found their way into Immunology particularly to cope with the large numbers of complex Hepatitis antibody/antigen assays.

Flowcytometry, with the availability of ever increasing numbers of monoclonal antibodies and sophistication during this period, has become a potent tool for monitoring HIV infection, transplant patients and more recently the rapid identification of specific MHC loci.

The future of Immunology remains exciting with a continuum of innovative approaches to Immunological problems being made particularly at the cellular and molecular levels.

Automated Immunology (1990's), E.I.A (Abbott IMX), Incubator, Spectrophotometer (Quantum II) and Quickwash Unit.

Cytology

Dr J.J. Sullivan and his team examining some of the 18,000 cytology slides forwarded annually to the laboratory, National Women's Hospital, as part of investigation of female genital and also gastro-intestinal cancer. 1960

Cytology came to New Zealand in the mid 1950's.

In 1954 Rani Parker was working as a 'bacteriologist' at Wellington Hospital when she read an article in a medical journal about the diagnosis of cancer cells in body cavity fluids. Intrigued by this, Rani arranged with the Pathologist, Dr Mercer, and the cardiothoracic surgeon, to get fluid specimens taken during surgery from patients with known cancers. From there, Wellington Hospital's Cytology Department was born.

Initially most cytology screeners were ex nurses but in 1965 Wellington Hospital set up a formal course in Cytology and Histology. This was a 2 year course, with the final exams being run by the Otago Medical School and comprising practical, theoretical and oral examinations.

While all this activity was happening in Wellington, Auckland was also discovering Cytology and in 1969 National Womens' Hospital, with Michael Churchouse as head of the Cytology Department, set up its own course. The National Womens' course is a 2 year correspondence course, which is still going today. The first year 7 candidates participated. Over the last 27 years more than 500 people have taken the course. These include people from Oman, South East Asia, the Pacific Islands, Australia as well as numerous Kiwis. The National Womens' course is the only course of its kind in any discipline of Medical Technology in New Zealand.

Having completed the course, most people go on to do their QTA examination, the Registry examination for the International Academy of Cytology (IAC), and the Australian Society Cytology examination - The IAC qualification requires revalidation every 4 years or the exam is to be resat.

In April 1968 the first meeting of the New Zealand Society of Cytology was held in Auckland. Among the 15 people present (5 Pathologists, the rest technical people) were Michael Churchouse and Rani Parker, both of whom gave much to the discipline until their retirement. Rani Parker went on to become the first technologist and the first woman President of the NZ Cytology Society, and the present President, Carol Green, is the 2nd - on both counts. The Cytology Society is a mixture of technologists, technicians and pathologists and has met annually since 1968. Many members are also members of the NZIMLS and are exploring ways to become more involved with the Institute through the Cytology SIG.

Cytopathology is the study of particular cells from virtually any site in the body. The aim is to detect changes characteristic of malignant disease. For example cervical smears, sputum, fine needle aspirates and body cavity fluids.

The technology has changed very little since the late 1940's when George Papanicoloau first identified epithelial cells in his own sputum sample.

The 'Pap' stain is still the most basic and important stain in the cytology laboratory. Other stains have been introduced, eg. May-Grunwald Giemsa which is preferred in some laboratories for non-gynaecological specimens, especially where the pathologist's major discipline is Haematology. Many laboratories use various immunocytochemical stains for identifying specific tumours, eg. to be able to distinguish between small cell carcinomas and lymphomas.

Some laboratories still do their staining by hand but most now have staining machines ranging from linistain machines (basically a bicycle chain run by a small motor) to sophisticated computerised staining systems. Various machines for coverslipping are also in use in some laboratories which cuts down the exposure to xylol.

There are instruments for making monolayered preparations and the latest technology can actually read slides. These are mainly used for QC (quality control), however the best QC is for every slide to be screened by two different people in the laboratory. The skilled operator's eye and human knowledge and interpretation has not yet been mechanised.

Cytology is a labour intensive and time consuming technology that combines a certain amount of art with science.

Cytology smear examination 1990's

CELL TALK

I am an epithelial cell
in a cervical smear
there are a few important things
that I'd like you all to hear.
Even though I am very small
I'm full of information,
so handle me with utmost care
before my demonstration !

When I am on the spatula
it is up to you to see
that you must put me on the slide
as flat as flat can be !
But if you fiddle me about
with spatula all atwirl
I promise you my edges
will crease and blur and curl !

And if I'm badly handled
and do become air dried
I can't reveal my secrets
as I won't get properly dyed.
And so I have to ask you
please let me have my way,
spread me smooth and fix me quick
and I will last for days !

Now with these useful explanations
of how to smear me right,
my examination can become
a screener's true delight.
But let's not talk of easy work
'cos that's so far away,
but it should be remembered
that patients have to pay !*

*eventually

Histology

Histology in 1946 was very different to what it currently involves and by today's standards must have been somewhat crude. Automation was a thing of the future, and everything was done manually.

Formal saline was the routine fixative and the histologist assisted the pathologist in the 'meat cut' but that is where the likeness to modern departments ends.

Processing was a 3-day procedure. Dehydration and clearing was done by changing the reagent at certain times over the day, (no night service then) so the two stages took a whole 24 hours each. The standard clearing agent was chloroform because it prevented over-hardening of the tissues. Specimens were impregnated with wax in the oven on the third day and embedded that afternoon, with sectioning being left until the following morning, unless something was 'urgent'. The whole processing schedule could be expedited by doing it in the wax oven but this caused great shrinkage, the occasional flash fire and was only resorted to in extreme cases. Embedding was carried out using enamel basins or baking tins into which wax was poured and then hardened by floating in ice water - often causing a few burnt fingers at the end of the day.

microtome 1970's

Sectioning was routinely performed on 'Cambridge "Rocker" Microtomes', so called because of the rocking type action of the arm onto which the paraffin block was melted. These were quite efficient, but could only take a small block, and because the arm travelled in an arc, the block ended up slightly convex, making the cutting of tiny biopsy specimens difficult. The knives used for this microtome were the hollow ground type with two concave sides and were sharpened on a grinding stone - by hand!! This always revealed the true skills of a histo-technologist.

Sections were stained on staining racks (sometimes just two glass rods and rubber tubing) over the sink. The grossly discoloured sink just went with the overpowering smell of solvents. The routine staining was, and still is, Haematoxylin & Eosin (H+E). Very few special stains were requested.

Frozen sections were rarely attempted. The specimen was frozen onto a stage using carbon dioxide and then attempts made to cut it. It was difficult if not impossible to section some tissues, so in order to overcome this, the specimen would receive a 'quick fix' by dropping it into hot formalin. Trying to maintain a constant ambient temperature was a trial on a hot summers day, and sections of 8 - 10 microns was often about as thin as could be cut. Mounting frozen sections was equally frustrating. The aim was to make the section 'jump' off the knife into the bowl of cold water from which they would be fished onto a slide and stained (some workers preferred to stain them free floating, then mount them). If the specimen wouldn't 'jump', a wet finger was needed to aid the process.

Many histologists were relieved and grateful in the 1960's when the modern cryostat became standard equipment.

Almost overnight, in the late 1950's, automation arrived. The introduction of the famous Histokinette tissue processor/stainer and Shandon knife sharpening machine made histo-technologists work somewhat less laborious if slightly less skilful. Days of work were reduced to hours of work. Few laboratories still use the Shandon Sharpening machine today, most have abandoned it in favour of disposable knives.

The plastic age came in the late 1960's with plastic tissue cassettes saving time when embedding tissues, and also

microtome 1990's

reducing the rate of transcribing errors. The uniformly sized cassettes made permanent storage much easier than melting wax blocks onto cardboard.

In the 1990's automatic staining machines and cover slipping machines are common in larger laboratories. Negative pressure tissue processing machines (1980's) have further reduced turnaround times. The cryostat opened the way for a much wider range of stains in immunochemistry. Immunoperoxide and immunofluorescence, in conjunction with election microscopy, are widely used in many histology laboratories.

The part of histology that truly remains unchanged is the 'meat cut'. Machinery just can't replace the human eye and judgement when it comes to selecting the specimen to be processed and the section to stain.

DO YOU REMEMBER .....

..... the person who was frustrated while trying to sharpen a knife, threw it across the room where it stuck in the door jamb. The pathologist who was just entering backed out and closed the door.

..... having to hit guinea pigs over the head to kill them so the blood could be used for complement.

compiling trays of stained specimens

Transfusion Science

The second world war provided a major stimulus for the development of blood transfusion and this, coupled with the discovery that haemolytic disease of the newborn resulted from blood group incompatibility, provided the basis for the emergence of transfusion science.

In the early 1940's all Bacteriologists were multi-skilled and blood banking, as it was known, formed a small but important part of their training. When specialist subjects were introduced in 1967, Blood Bank Serology formed twenty percent of the Haematology syllabus. The name was changed in 1969 to Immunohaematology to reflect the growing understanding of the immunological basis of the subject. It became a specialist discipline in its own right in 1977. In 1990 a further name change introduced Transfusion Science which incorporates Blood Banking, Red Cell Serology, Blood Products, Tissue Typing, Platelet Serology and a growing role for Molecular Biology.

Blood donor room - Christchurch Hospital 1959

EVENTS WHICH SHAPED THE COURSE OF TRANSFUSION SCIENCE

- The introduction of the Coombs test in 1945 made possible the recognition of a host of previously unknown blood group antibodies of clinical significance eg. anti-Fy™ and anti-Jk™. Automated cell washers arrived in the 1970's to reduce the drudgery of the repeated manual washing and improved the sensitivity of the test. In the mid 1970's the introduction of Low Ionic Strength Solution (LISS) made it possible to reduce the incubation time of the indirect Coombs test without sacrificing sensitivity. This facilitated faster delivery of crossmatched blood for emergency situations.
- The introduction of abbreviated pretransfusion testing, which meant that blood was issued on the basis of a negative antibody screen without additional crossmatching, dramatically reduced the Blood Bank workload in the late 1980's.
- One of the major technical advances was the replacement of glass blood storage bottles with disposable plastic bags in the mid 1960's. The collection bags were later developed to incorporate compartments, to facilitate storage and transfusion of different blood components eg. Red cells, plasma and platelets.
- The development of sophisticated fractionation techniques starting in the 1960's resulted in production of the range of immunoglobulins, coagulation factors and albumin preparations currently available for component therapy.
- The discovery of screening tests for blood-borne viruses : Hepatitis B surface antigen in the early 1970's, HIV antibody in the mid 1980's, and Hepatitis C antibody in 1990, and the subsequent development of automated computer controlled assays to screen for them.
- Automated blood grouping machines became available in the 1970's and reduced the rate of error in typing and labelling of blood donations.
- The development of the McClelland and Terasaki microlymphocytotoxicity test in 1964 marked the beginning of the unravelling of the Human Leucocyte Antigen (HLA) system. In the early 1990's the introduction of D.N.A. techniques refined the typing of Human Leucocyte Antigens (H.L.A.) and made reliable typing of platelet antigens possible.
- The development of cyclosporin-A as an immunosuppressive agent which reduced graft rejection, and opened up the whole field of transplanation in the late 1970's.

Blood bank fridge (1959)

SOME MEMORIES FROM THE PAST

- The concept that blood was clean and safe to handle as opposed to shigella strewn faeces and TB laden sputum.
- Performing donor haemoglobins by the copper sulphate specific gravity test back in the 1950's. If the drop of donor blood sank to the bottom of the solution the donor was suitable to bleed.
- Preparing packed cells for transfusion by passing a hollow needle through the rubber bung in the top of the bottle of blood and aspirating off the supernatant plasma was standard practice in the 1950's.
- The feeling of self importance engendered by carrying the Blood Bank locator down to the cafeteria, coupled with the sheer terror at being in sole charge of the transfusion requirements of a major hospital at the age of 17.
- Home made antisera including anti-H made from gorse seeds supplied by school children in response to a radio appeal and Coombs reagent courtesy of Mike and Paddy - goats tethered at Middlemore Hospital are features of Blood Banking 1950 - 1965.
- The approved screening test for donations likely to transmit hepatitis in the 1960's - hold the serum sample up to the light and reject those that appear bright yellow.
- Two hour crossmatching using donor cells from a pilot tube attached by a rubber band to the bottle of blood. Common practice in the very early days of Transfusion Science.
- Sharpening needles on a grindstone for re-use, washing and sterilising tubing and bottles for the next blood donation - disposable was not a word which featured in the early laboratory vocabulary.

Plastic bag system(s) from the 1970's

DO YOU REMEMBER .....

..... blood was collected into re-usable glass bottles through recycled needles and rubber tubing.

..... being a guinea pig as someone learned to venepuncture - the agony as the needle was carefully inserted

..... sharpening the needles on the grindstone for re-use

..... the days when blood donors got a slug of brandy after donation

..... what good fertilizer, expired blood made for tomato plants and rose bushes

..... the rubber arms used to practise venepunctures on

Cross-match, Blood bank 1970's

Checking blood for transfusion to a patient

Haematology

50 years ago Haematology was a well recognised section within the laboratory. In 1950 a British Medical Journal review entitled "Fifty Years in Clinical Pathology" by Sir Lionel Whitby stated that Morbid Anatomy and Bacteriology were declining sciences which were being ousted in importance by Haematology and Biochemistry. The number of staff involved at this stage is uncertain but there were very few people who were specialising in Haematology on a full-time basis. The services provided by the Haematology section varied from laboratory to laboratory but included in many, the developing discipline of Blood Group Serology and Blood Banking.

Finger prick 1930's

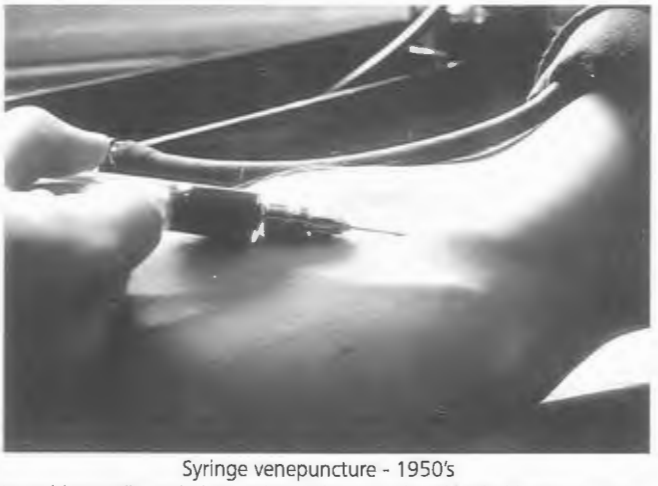
Blood specimens obtained by venepuncture in the 1940's were collected using re-usable needles and glass syringes, and were anticoagulated with a mixture of ammonium and potassium oxalates. The duties of the bacteriologist included the preparation of the anticoagulant tubes, the sharpening of needles and cleaning and sterilisation of needles and syringes. The 'instrument' used to obtain capillary blood specimens was usually a broken glass capillary tube and while effective, its appearance did little to calm the apprehensive patient. The introduction in the 1960's of disposable lancets, needles and syringes together with the use of Ethylene Diamine Tetra Acetic acid salts (EDTA) as the anticoagulant and the use of vacutainer tube systems in the 1970's to replace syringes have been important developments in blood specimen collection. The staffing of blood collection services has also changed with the introduction of appropriately trained medical laboratory assistants or nurses as full time phlebotomists.

The performance of the 'Blood Count' was the main requirement of the Haematology laboratory fifty years ago and this is still the most frequently requested test group. The number of tests included in this group has increased. The accuracy, precision and turn around time of the results has improved significantly and the technology used has changed dramatically.

The procedures used in the 1940's included :

- visual counting of red cells, white cells and platelets using a special diluting pipette (Thoma) to dilute blood samples and a haemacytometer (counting chamber) to count the cells.
- examination of Romanowsky stained blood films
- haemoglobin estimation by visual colorimetry using a method such as Sahli's acid haematin or by the comparatively new oxyhaemoglobin method using photoelectric colorimetry.

During the 1940s/1950s relatively simple developments such as the locally made slide rule for the calculation of red cells indices, the use of electro-mechanical diluters, dispensers and mixers all contributed to improving the service. In the 1950's the introduction of the microhaematocrit centrifuge allowed the measurement of packed cell volume (PCV) to be widely used. Haemoglobinometry also benefited from the availability of better photoelectric colorimeters, better access to controls and in the early 1960's, from the introduction of the cyanmethaemoglobin method with reliable standards and improved stability. Blood cell counting and film examination using conventional visual techniques continued to be time consuming procedures until the 1960's when automation started to become available. The two most successful types



Syringe venepuncture - 1950's
Reusable needle and glass syringe, sharpened and boiled between uses

Venepuncture - 1970's

of systems were; the optical/dark field counting system, variations being offered by Technicon, Sanborn and Fisher, while Coulter and Celloscope offered counters in which cells were detected by the change in impedance as they flowed through a small orifice. These counters became widely used during the 1960's for red and white cell counts and later with modifications for platelet counts.

Next, single direct sampling of whole blood to give red and white cell counts, haemoglobin, mean cell volume packed cell volume, mean cell haemoglobin and mean cell haemoglobin concentration were developed, and so by 1980 the addition of mixing, sampling and platelet counting modules provided a fully automated system. During this time alternatives to the visual examination of blood films and white cell differentiation were also being investigated. Automated blood film stainers were modified and used with automatically prepared blood films, in one type of system, to differentiate the white cells by computerised pattern recognition. Another approach was to classify the cells according to their cytochemical reaction in a continuous flow analyser while a third type of system used the laser light scatter pattern to differentiate cells. Automation of the examination of red cell and platelet morphology has been more difficult and has resulted in the use of precise measurements of cell dimensions to attempt to detect abnormalities.

By 1990 many of these developments were combined to give very sophisticated blood cell analysers which automatically mix and sample whole blood specimens and produce within 40 seconds, the array of up to thirteen results that make up today's blood count. These developments in technology have been paralled by steadily decreasing costs making technology available to most sizes of laboratory.

The basic coagulation tests available in the 1940's included whole blood clotting time, bleeding time and prothrombin clotting time. The Coagulation, or more appropriately, Haemostasis section of the Haematology laboratory, has changed dramatically as it has made use of new technologies to cope with the advances in the understanding of haemostasis. The fibrin clot end point tests are still in use however instruments have been introduced to replace the visual detection of a clot in a test tube. Timing systems using end point detection by either the photoelectric recognition of turbidity or the electro-mechanical detection of fibrin strand formation, are now widely used.

What has happened to some of the other tests available 50 years ago? The Reticulocyte count has survived virtually unchanged although automated systems are now available to those who have the most recent counting systems. The Erythrocyte Sedimentation Rate (ESR), a test for which more scientific alternatives have always been promised, continues to survive, with automatic timing and a closed tube system to improve operator safety. The Icterus Index with its rows of tubes containing dichromate dilutions for serum colour matching, has been replaced by the serum bilirubin and a range of other sophisticated biochemical tests to assist in the diagnosis of liver disorders. There is no longer a need to prepare guinea pig kidney emulsion and boiled ox cell suspension in the laboratory as the Paul Bunnell test for mononucleosis has been replaced by simple screening tests or specific immunological procedures.

1970's - Haematology laboratory (Coulter counter at right)

DO YOU REMEMBER .....

..... grinding up brains to make thromboplastin

..... the mess if the haemocrit centrifuge lid wasn't screwed on properly

..... when mouth pipetting was still the norm.

Cytochemical tests were introduced in the 1960's for the differential diagnosis of acute leukaemia. Later as the understanding of haematological malignancies developed, new tests, including immunofluorescence and immunoenzyme techniques were introduced to demonstrate specific malignant cell markers.

Microbiological assays for Vitamin B12 and folic acid assays were introduced in the 1960's but were generally replaced during the 1970's with radioassays. The malodorous Schumm's tests that caused occasional release of ammonium sulphide into the laboratory, is no longer the basis for highly unprofessional comment.

The last Institute staff survey (1994) showed 185 medical laboratory scientists and 85 medical laboratory assistants, a total of 270 staff, working in New Zealand's Haematology laboratories. This is 17% of the staff employed in medical laboratories in 1994 and nearly four times the total Association membership fifty years ago.

Haematology laboratory 1980's - 'Technicon H -1', Coag-a-mate at rear

Microbiology

It has been said that if Louis Pasteur were to come back to life today, he would be able to step straight into a microbiology laboratory and pick up where he left off. However the implication that nothing has changed since 1895 does not stand up as we look back over the last 50 years.

Microbiology as practised in the 1940's and 1950's entailed the use of various agar media in heavy glass petri dishes - both German inventions not used by Pasteur, indicator broths in large test-tubes with home-made cottonwool stoppers of various colours to identify them and loops made of platinum wire embedded in glass or brass rods. The ubiquitous Pasteur pipette and piped coal gas for the bunsen burner were also standard. Some of these things Louis would have recognised, but much equipment and most media would have been new to him.

Media preparation and glassware cleanup area 1950's

In the 1950's, practically everything was re-used. Culture plates, faeces pots, test tubes etc. were steeped overnight in baths of Lysol which not only 'sterilised' them, but also provided the characteristic smell which pervaded the lab, your clothing, your hair, everything! Other glass items were autoclaved and then everything was boiled up in a strong caustic detergent, dried and stored for reuse. Even microscope slides and coverslips were recycled!

All media was made 'in house' either from commercially available powder or from basic ingredients, eg. cooked meat. Blood for blood agar plates was either out of date donor blood, from staff 'volunteers' or collected from the local freezing works by junior staff.

Sensitivity testing against the limited number of agents available (about 6 or 7), was done on blood agar using home made 'discs' impregnated with diluted agent from the pharmacy. They were made by dropping the diluted fluid from hand-held Pasteur pipettes onto sterile paper squares or discs laid out in a petri dish, after which they were dried in the incubator. No controls were used. With advantage of hindsight and progress, one has to wonder at the accuracy of results.

One of the more important jobs was the production of autogenous vaccines from organisms isolated from the patient. These were generally staphylococci. The vaccines were well regarded in some quarters, but we had to be absolutely certain that they had been carefully sterilised. One mistake and the result was a potential disaster.

Laboratory animals played a very important part, and use of them was the only way of producing a definitive answer in cases of Tb, diphtheria or tetanus. Koch's Postulates were actually put to use. Learning to care for, feed, kill and perform autopsies on small animals, was an important part of training to be a Bacteriologist in the 1950's.

The changes between the 1890's and the 1950's were certainly great, but since then they have been dramatic. The list is long and impressive. What follows is not exhaustive, but the advances listed have all impacted either directly or indirectly on Clinical Microbiology.

Examination of bacterial cultures and identification tests - 1950's

DO YOU REMEMBER .....

..... hand pouring large batches of agar plates

..... setting out trays of bijous (bottles) to dispense - by automatic dispenser, then screwing on hundreds of caps.

..... collecting blood for blood agar plates, from the abattoir

..... making pasteur pipettes from glass tubing then plugging the ends with cotton wool

DO YOU REMEMBER .....

..... wine, beer or sa'ke production in back room incubators

1950's

- Watson and Crick untangle DNA - profoundly influencing microbiology and taxonomy
- The Penicillin molecule is isolated, synthetic penicillins can now be produced eg. Ampicillin
- Penicillin resistant staphylococci create major problems in hospitals - the 'H bug'
- Fluorescent microscopy becomes the 'in' technique
- Aminoglycosides developed
- Commercially produced disposables begin to appear eg. throat swabs
- Plastic petri dishes become available
- "Infectious diseases will be eradicated by antibiotics within a few years!"
- Polio vaccines developed
- Diphtheria on the decline
- Wharf rats no longer sent to the lab for evidence of Plague
- Kass rescues urine microbiology - cellular and bacterial counts from fresh MSU are defined for useful interpretation of UTI

1960's

- Methicillin introduced
- The 'H' bug epidemic gradually fades away
- The cephalosporin proliferation begins
- Gram negative infections on the increase
- Antibiotic resistance recognised as a potential threat
- Resistance mechanisms studied. Plasmids discovered and role described
- Lassa fever emerges from Africa
- Melioidosis: disease of the month as a result of the Vietnam War
- Hepatitis B raises issues of safety in Clinical Labs. Forces re-think of current practices.
- Commercial sensitivity discs available in NZ

1970's

- Legionella pneumophila and close relatives isolated
- Other haemorrhagic fevers cause alarm - Ebola, Marburg
- Plastic disposables commonplace
- Toxic Shock Syndrome hits the headlines
- Use of preformed enzymes in ID systems allow for rapid results
- Penicillin resistant N. gonorrhoea (PPNG) first noted in USA
- Smallpox eradicated world-wide
- Automation of blood cultures developed
- Automatic ID systems and instruments begin to appear
- Plastic Pasteur pipettes arrive on the scene
- AIDS

1980's Blood cultures

1980's

- Campylobacter becomes No.1 intestinal pathogen
- Hepatitis B vaccine developed
- Helicobacter pylori isolated
- EIA technology expands rapidly
- Lab kitsets for ID and other diagnostic tests now commonplace
- Gene probes promoted as the coming technology
- Laboratory Accreditation introduced
- Rise in incidence of infection by 'commensal' organisms due to immunosuppression and greater use of plastic prostheses
- Fluoroquinolones introduced

1980's - Microwell identification test system and Kirby-Bauer antibiotic sensitivity testing

1990's

- Rapid and reliable automated ID and susceptibility instruments released
- Fully automated non-invasive blood culture technology arrives
- PCR developed and rapidly utilised
- Hepatitis A vaccine released
- Resistant Mycobacterium tuberculosis emerges
- Bacterial resistance to antibiotics reaches worrying levels
- Malaria increasing in spread and resistance to drugs
- AIDS uncovers Cryptosporidium, M. avium, Microsporidia infections

The events of the 90's do not all seem to be strikingly advantageous to humankind.

But the struggle between adaptability and human ingenuity is still fully engaged. Like a tug-o-war, the balance still swings one way and then the other. Who knows which way it will move over the next half century? In the meantime, the pace of development will probably continue to increase.

Early DNA probe identification kits - 1980's-90's

Biochemistry

An example of a Duboscq type colorimeter

In the late 1940/50s Medical Laboratory Technology was not on the usual list of possible vocations a school leaver could contemplate and a visit to the Biochemistry Department - one short bench in a small room of the local hospital - produced a lasting memory of unpleasant smells, an encrusted boiling water bath and a fascinating piece of equipment, the Duboscq colorimeter, fore-runner of the modern spectrophotometer. Some may have used one, others have learned of them for examinations, whilst others have never heard of such equipment. Let us take a moment to reminisce on the 'good old days' - were they that good?

Remember yesterday:

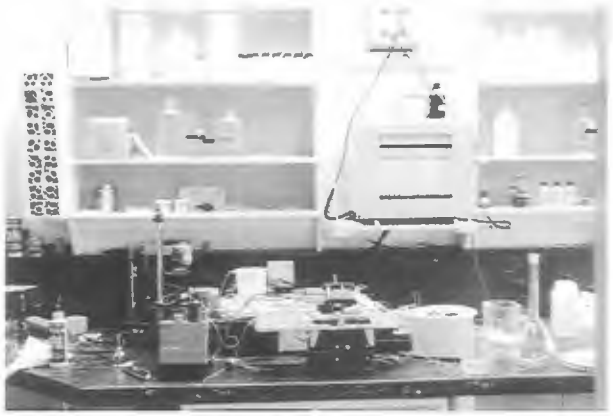
- Catching frogs in the local pond - remember them getting loose in the Laboratory? Pregnancy testing in the 1950's relied on the frog - an exotic diagnostic tool used for the diagnosis of human pregnancy, but because of the commercial value, used much more frequently for racehorses.

Autoanalyser - generation II (6-8 channels) 1970's

It was not until the 1960's when the Haemagglutination, and later Latex agglutination, tests became available that pregnancy testing became routine.

- Blood gases comprised Blood pH and Total CO_2. 0.5mL of blood into the pH meter, watching the needle on the vibrating reed voltmeter seesawing back and forth, never settling, the reading being the best midpoint you could determine. 1mL of serum for the CO_2 to a Van Slyke burette filled with 300mL of mercury - the surrounding bench containing a similar quantity!

The 'guesswork' of Blood pH and gas analysis lessened with the introduction of blood gas analysers in the 1960s. These instruments combined pH, and pCO_2 electrodes. A manual calculation using a Siggard-Anderson nomogram was required for the Base Excess and Standard Bicarbonate. Fully automated, self calibrating analysers were a 'breath of fresh air' in the early 1970's.



Autoanalyser - generation I (2 channel) early 1970's

- Urea - TNPN (Total nonprotein nitrogen) - 2mL of whole blood and a protein free filtrate digested with acid using a Bunsen burner. Too much digestion and it went cloudy when the Nesslers reagent was added and you started all over again. These were done one at a time BUT if you were lucky, the lab was the proud owner of a 'bank of burners' and you could over-digest 6 or 8 at a time!

Urea, measured using urease and Nesslers reagent, replaced the TNPN in the early 1960's and was one of the first analytes automated with the advent of the Technicon continuous flow systems.

- Calcium - 2mL of serum into a centrifuge tube, oxalic acid added and the calcium oxalate left to precipitate for a minimum of 2 hours, or overnight. The centrifuged button of precipitated calcium oxalate was washed, - Oh disaster, as it too, got poured down the sink!! It was then redissolved in acid, and titrated with potassium permanganate - 4 to 18 hours later a calcium result.

DO YOU REMEMBER .....

..... the times abnormal results have been explained by the specimen collection technique,

eg. The same syringe or leur site used to collect blood after administering gentamicin or potassium or .....

..... chasing mercury that escaped from the Van Slyke apparatus when doing CO_2 estimations

..... your first analyser or kit set when you couldn't see what was going on inside.

SMA - 12/60 autoanalyser (12 channel) 1970's

The introduction of dye complexing methods in the 1960's speeded up the analysis and the measurement of calcium became much more routine.

- Sodium and Potassium on an EEL Flame Photometer. 0.5mL serum into each of 2 volumetric flasks, 100mL for the Sodium and 25mL for the Potassium. The endless row of flasks lined up beside the flame photometer to be aspirated and read, washed and used for the next batch of samples.

The flame photometer is still in use in many laboratories today - the 'Old EEL' has been superseded by automated, computerised models but the principles of flame emission analysis remain the same.

- Controls - what were they? They were certainly the exception rather than the rule until they were introduced, somewhat tentatively, in the early 1960's.
- 'Mouth pipetting', remember using enamel backed micropipettes and 'tapping' the end of the pipette with a finger to bring the blood or serum down to the line? Several Laboratory workers died in 1969/70 from Hepatitis B. 'Mouth Pipetting' was outlawed, laboratory hygiene measures were implemented, and automatic pipettors became the 'norm' - rather than the exception.
- the great upheaval in 1976 with the introduction of SI units (Systeme Internationale) - New units, new reference ranges and clinicians to educate.
- Automation - In the late 1950's Technicon Equipment Pty Limited led the rapid advance of technology in the Clinical Biochemistry laboratories. The Technicon continuous flow analyser exploited simple analogue technology to automate repetitive processes with precision unattainable by manual procedures. This equipment is still in use in laboratories today. By the late 1960's many laboratories had some Technicon equipment. Many had single channel systems where a batch of samples was analysed for one analyte. Platens holding test specific pump-tube configurations were then changed, new reagents connected

Abbott Spectrum - 20 test plus a random access autoanalyser 1980's

DO YOU REMEMBER .....

..... faeces and faecal fat estimations that blew their lids

..... drying samples in the oven for faecal fat estimations - pooh !

..... singed eyebrows when the gas in the flame photometer went whoomph !

..... The 'smells and splurts' when boiling urine for glucose or albumin estimations

up and a batch of a second analyte was run. The most common analytes were urea, sodium, potassium, creatinine, CO_2 and glucose. Following closely on the heels of the single channel systems came the multiple channel systems which were built around a single sampling module heralding the beginnings of multichannel analysis. Output from these devices was recorded and measured individually for each channel. The technology then advanced to true multichannel analysis, the SMA 12/60 (Sequential Multichannel Analyser, 12 tests at a rate of 60 specimens per hour) and in the mid 1970's the SMAC - the first fully computerised analyser. The latest instruments incorporated ion selective electrodes for the electrolytes and were capable of measuring up to 20 analytes on one specimen.

Early discrete analysers were generally failures, rapidly becoming imprecise and unreliable - until the development of computer technology and the availability of the digitally controlled stepper motor. These developments have largely surpassed continuous flow technology resulting in high speed, multitest random access analysers used as the prime production equipment in all laboratories. Specific analytes are chosen for each sample, the sampling rate is typically less than 10 seconds and the analytical time has been reduced, in most cases, to less than 10 minutes.

As a result of the development of Enzyme Immunoassays and the Fluorescent Polarisation technique, quantitation of antibiotics and other drugs became possible in the late 1970's. Chromatographic separation and quantitation became a practical method for the routine laboratory - Gas liquid chromatography in the 1970's and High Performance Liquid Chromatography in the 1980's - now used for analysing metabolites and drugs.

What is 'today'?

- Pregnancy testing - a few drops of urine to a sample pad of a reagent cell. Results within 4 minutes and pregnancy detectable about 10 days after conception.
- Blood Gas Analysers with automatic calibration and error detection, measuring not only pH and gases but also sodium, potassium, chloride, glucose and ionised calcium - all from a sample of 120uL or less with automatically calculated parameters and validity checking.
- Urea, electrolytes and calcium - about 5uL of sample, 100 to 200uL of reagent and a result available within 10 minutes.
- Controls - many commercial products are now available, assayed or unassayed, for all analytes routinely quantitated. Controls are run at timed intervals on random access analysers, and at least two different levels are routinely run with all other assays.

There are, already in existence, totally automated Clinical Biochemistry systems performing sample preparation including centrifugation, transport, instrument loading and unloading, sample storage and result reporting. The increasing prevalence of 'near patient testing' equipment and in vivo monitoring devices, has added a new dimension to Clinical Biochemistry.

It is our duty, as a profession, to foresee advances and to keep ourselves abreast of the times. The pace of change will not slow. The challenge of the 21st century will not be just to 'keep up' but to 'keep ahead'. Fitness training for all to be included in the next BMLSc curriculum!

Journal Advertisement 1947

Hitachi 704

Conference

Annual Scientific Meeting: for Medical Laboratory Scientists and people of related industries who discuss, debate, consult and share ideas of learning and knowledge.

There has been an Annual Scientific Meeting every year of the Institute's 50 year history. For forty eight of these years New Zealand Bacteriologists, Technologists or Scientists have planned, organised and accomplished highly successful Conferences both scientifically and socially. After all it is the social contacts and friendships made at conference that facilitate the sharing and expansion of knowledge.

The first Annual Scientific Meeting (or 2nd conference) was held in Palmerston North on Saturday 3 August 1946. (See table for programme - copied from the minute book). However, the business took all afternoon, so the meeting adjourned for tea at 5.00pm. At 7.30pm Mr Hurran, the guest speaker, commenced his presentation on "Wartime Penicillin Production". Minutes - read and certified correct by Mr E L Buxton, President. *"Delegates were most interested in Mr Hurran's talk, which though scheduled for one hour, occupied almost 2 hours. This was followed by the paper by Mr Mckinley. This again proved so interesting ..... it continued after supper until 10.30pm, so there was not time available for the paper by Mr Whillans. This was regretted by all. The consensus of opinion was that one day was not sufficient for conference, and that all agreed that if possible, future conferences should extend over three days to allow for further papers to be given, this being one of the main functions of conference. Conference officially closed at 10:30pm "*

The following year the business section, covering remits, various syllabi and proposed salary scales, again took all afternoon, so that scientific papers did not commence until the Friday evening. They were completed on Saturday morning. Five scientific papers were presented in 1947, two by assistant pathologists, and the remaining three by delegates. It was not until 1983 that the order was reversed so that scientific papers were held first and the AGM at the end of the afternoon, to go late if necessary.

By 1950, two additional features had been added to the conference. This Dunedin based conference had 32 exhibits and demonstrations including :

- Dust proof slide holder
- Lamp to illuminate and warm rabbits ears prior to IV injection
- Release of jammed syringes
- Mechanical differential counter
- Viruses - (*L B Fastier*)
- Pathogenic Fungi isolated in NZ and Scheme for Identification - (*Dr Mary J Marples & Miss M DiMenna*)
- Freeze Drying Apparatus for Stock cultures and Centrifugal Freeze Drying Apparatus - (*J A Samuel*)

The second feature was that of a formal or arranged **social function** as a specific part of conference although oral history would maintain that a drink or three generally followed the official closures, prior to 1950. "On the final evening of the

NZAB CONFERENCE - 9:30AM 3 AUGUST 1946		
	Nurses Tutorial Block - Palmerston North Hospital	
9.30 am	Opening of Conference -	Dr T H Pullar, Pathologist, Honorary Member NZAB Mr Nash, Chairman Hospital Board
10.00am	Presidents Address and Annual Report Balance Sheet, Minutes of previous meeting Correspondence etc Election of Officers	
11.30am	Luncheon - Hospital cafeteria	
1.00 pm	General Business and series of half hour papers Papers - "Theoretical Aspects of TB and the 'Auckland Paper'" *Mr D Whillans* "Practical Application of TB routine methods etc at Waipukarau Hospital" *Mr G Mckinley*	
7.30 pm	Guest Speaker - Mr Hurran "Wartime Penicillin Production in England"	
9.30 pm	Supper	
Sunday	Informal trip to Massey College to inspect D.R.I. and Plant Research Division	

Conference, a cocktail party was held at the University Club Rooms, and was an undoubted success. This social function filled a need which has been apparent at all previous conferences, that of providing time for delegates to exchange ideas informally" - minutes (1950).

In 1953 the Christchurch conference committee gained approval to arrange a formal trade display. This is recorded as having occurred, but without detail or comment. In Wanganui (1954) there were ten trade exhibitors and in Auckland (1955) there were the following nine.

- Biological Laboratories
- Fletcher Humphries & Co. Ltd
- ICI NZ Ltd
- E C Lackland & Co. Ltd
- E A Piper Ltd
- Restar Auckland Ltd
- Salmond and Spraggan Ltd
- Satterthwaite, AM & Co. Ltd
- Watson Victor Ltd

For the first five years, the conference was held either on Saturday or Friday/Saturday. From 1950 the AGM and scientific forums were being held on Thursday/Friday, with a cocktail evening on Friday night. Weekend entertainment options usually involved tours of local scenery, although Christchurch offered a day's skating in 1953 and Whangarei a Poor Knight Island Fishing Trip in 1976. In the late 1970's and 1980's conference was sometimes a two day affair and sometimes three. The additional day, either a Wednesday or Saturday, was dedicated to workshop education (usually 'hands on'), general forums or occasionally purely social. From 1987, conference has nearly always been three days, Wednesday-Friday with Monday and/or Tuesday as workshop days.

Conferences were initially organised by the Council Executive, then by local people with a Council member as Chairperson. By 1950 Council members were not necessarily involved in this increasingly challenging role. In 1962 it is recorded that the private Auckland laboratories organised conference. However, what generally evolved and is practised today, is that interested volunteers from both private/community and hospital laboratories and occasionally from the Commercial Industry form a Conference committee. A Council member, if not already involved, is usually appointed, ex officio, to the conference committee to keep Council informed of progress and programmes. As the administrative body of the profession Council has forwarded a 'float' for conference expenses since 1963 (Wellington - for initial expenses £20). It underwrites all Institute Conferences.

In 1967 Council approved a **Registration Fee** (unknown) for the Christchurch conference. However, from 1971-75 Council set the registration fee at $2.50 for members to cover teas and meals. Late fees were $5.00 and non-members paid extra - $12.50 (1973) and $28.50 (1975).

Conferences Fees			
	1984	1990	1994
Full Registration (3 days)	$40	$85	$195
Day Registration	$20	-	$100
Late Fee	$50	$50	$50
Non Members	$50	$135	$245

The first recorded conference profit comes from the 25th Jubilee Conference in Auckland in 1969 - $247.82. Palmerston North made a paper profit of $2,400 in 1975 but the Institute only saw $1,000. Unpaid expenses claimed $400, $500 was donated to Palmerston North Hospital, and $500 retained for the Staff Seminar Fund. 1988 saw Rotorua make a handsome profit of $8,000, the majority of which was donated by Council to the struggling NZ Science Trust launched the year before (see NZST). The 1994 Conference made a profit of $5,285 which helped with Institute expenses. The conference profit contributes significantly towards the on-going costs and activities of the Institute.

The Scientific Trade Display Award, started in 1983, is an engraved plaque presented by the Institute to the firm with the most outstanding display at the Annual Scientific Meeting. Also included in the prize is 2 pages of free advertising in the Journal. The first recipient was Medic D.D.S. The most recent recipient at the 1994 Conference in Hamilton was Boehringer Mannheim NZ Ltd.

In 1993 Jim Le Grice, the Council Representative from Region IV (Christchurch) was killed in a mountain accident. Jim was always popular socially and able to cut to the heart

Technologists from around the country, 1991

of things in a meeting. Memorial tributes Council determined or ratified included naming the Icebreaker evening prior to Conference after Jim. Jim would have seen the humour in the title. 'Jim Le Grice Ice Breaker Evening'.

The first discussions between Australia and New Zealand to have a combined scientific meeting occurred in the late 1970's. The first South Pacific Congress was in Christchurch in 1982. Now every 4th year both countries put their own Annual Scientific Meeting efforts into this joint congress. Each country hosts the Congress every 8 years.

SOUTH PACIFIC CONGRESS	
Year	Place
1982	Christchurch, NZ
1986	Sydney, Australia
1991	Auckland, NZ
1995	Gold Coast, Australia

The South Pacific Congress draws medical scientists from other Pacific countries, including Asia and occasionally the northern hemisphere. It offers the opportunity for international contact.

The 1991 Auckland Congress was the first to trial using a commercial conference organiser. With the increasing pressures on time in the work place this has been a necessary expense to remove the purely organisational demands, such as Registrations and other booking details from scientists. Of the functions retained by the Conference committee, the key role has to be the Scientific Session Convenors, followed closely by the Social Convenors.

Employers have always, usually knowingly, carried the cost of supporting staff involved in conference committee work, if one recognises the phone calls, meetings and small jobs that inevitably occur in work time. However there is prestige for them in being recognised as supportive of their staff who choose to be involved in continuing education and professional development forums. This is true whether organisers, participants, delegates or all three.

Conferences today involve much sponsorship and quite a few freebies, sometimes taken for granted. This is only a recent refinement to those details that make conference so enjoyable. Our gratitude must go to our colleagues in the commercial sector who sponsor forums, conference satchels, pens, pads, wine for the banquet, the Jim Le Grice Ice Breaker Evening, or alka seltza tablets, as well as buying a Trade Display Stand to exhibit their products. The first conference folder was donated by D.D.S (Dominion Dental Supplies Ltd) in 1968. (This was also the first year the delegates list was published in the program). Conference needs the commercial companies as much as it needs delegates to attend. Without their support Registration Fees would be much much higher.

The primary aim of conference is an Annual Scientific Meeting, but our annual conference offers so much more.

Conferences are about People meeting People - all else flows on from that.

Trade display, 1987

CONFERENCES

The New Zealand Association of Bacteriologists (NZAB) held its first meeting 7-8 August 1945, in Wellington, attended by 20 people. This was counted as the first conference.

Year	Date	Location	Delegate Numbers
1945	7 - 8 August	Wellington	20
1946	3 August	Palmerston North	32
1947	18 - 19 July	Christchurch	30
1948	30 - 31 July	Auckland	48
1949	29 - 30 July	Wellington	51
1950	17 - 18 August	Dunedin	47
1951	16 - 17 August	New Plymouth	43
1952	7 - 8 August	Hamilton	53
1953	16 - 17 July	Christchurch	56
1954	15 - 16 July	Wanganui	54
1955	28 - 29 July	Auckland	53
1956	23 - 24 July	Dunedin	54
1957	4 - 5 July	Palmerston North	67
1958	17 - 18 July	Wellington	58
1959	2 - 3 July	Invercargill	63
1960	30 June - 1 July	Christchurch	81
1961	15 - 16 June	New Plymouth	78
1962	12 - 13 July	Auckland	72
1963	22 - 23 August	Dunedin	89
1964	18 - 19 June	Wellington	102
1965	5 - 6 August	Tauranga	120
1966	4 - 5 August	Hamilton	119
1967	17 - 18 August	Christchurch	102
1968	11 - 12 July	Napier	94
1969	21 - 22 August	Auckland	172
1970	30 - 31 July	Dunedin	126
1971	26 - 27 August	Wellington	118
1972	24 - 25 August	Tauranga	145
1973	23 - 24 August	Christchurch	211
1974	15 - 16 August	New Plymouth	138
1975	20 - 23 August	Palmerston North	200
1976	25 - 27 August	Whangarei	153
1977	11 - 13 August	Queenstown	182
1978	23 - 25 August	Nelson	169
1979	15 - 17 August	Auckland	232
1980	20 - 22 August	Hamilton	157
1981	2 - 4 September	Wellington	178
1982 = SOUTH PACIFIC CONGRESS (NZIMLT)	9 - 13 August	Christchurch NZ NZ = 259 (55%)	470
1983	18 - 19 August	Napier	168
1984	15 - 17 August	Dunedin	213
1985	12 - 14 August	Palmerston North	271
1986 = SOUTH PACIFIC CONGRESS (AIMLT)	18 - 22 August	Sydney, Australia NZ = 70 (17%)	412
1987	19 - 21 August	Nelson	139
1988	31 Aug - 2 Sep	Rotorua	188
1989	30 Aug - 1 Sep	New Plymouth	164
1990	27 - 31 August	Invercargill	169
1991 = SOUTH PACIFIC CONGRESS (NZIMLS)		Auckland, NZ NZ = 250 (63%)	395
1992	26 - 28 August	Wellington	256
1993	24 - 27 August	Christchurch	219
1994	31 Aug - 2 Sep	Hamilton	303
1995 = SOUTH PACIFIC CONGRESS (AIMS)	9 - 13 October	Gold Coast, Qsld. Aust. NZ = 116 (17%)	698
1996	27 - 30 August	Auckland	?

The New Zealand Association of Bacteriologists

Seventh Annual Conference – 1951

New Plymouth Hospital

THURSDAY, 16th AUGUST, 1951:

In the Old Lecture Room, Tutorial Block, Nurses' Home.

9.30 a.m. Welcome to Delegates by Mr. P. E. Stainton, O.B.E., M.B.E., Chairman Taranaki Hospital Board. Opening of Conference by Dr. L. C. McNickle, M.D., Medical Superintendent, New Plymouth Hospital. Business.

10.45 a.m. Morning Tea in Nurses' Cafeteria.

11.00 a.m. Business.

AGENDA

1. Welcome, opening and addresses.
2. Roll call and announcements.
3. Apologies.
4. President's address.
5. Proxies.
6. Remits.
7. Minutes of 1950 Conference. As these were published in the Journal of the New Zealand Association of Bacteriologists, to be taken as read.
8. Business arising out of the Minutes.
9. Annual Report and Balance Sheet.
10. Election of Officers.
11. General.

1.00 p.m. Lunch.
2.15 p.m. Business.
3.45 p.m. Afternoon tea.
4-5.30 p.m. Papers.
7.30 p.m. Film on Island Research Trips (40 minutes). J. A. Samuel.
Papers.

The New Zealand Association of Bacteriologists

FRIDAY, 17th AUGUST, 1951:

9-10.45 a.m. Papers.

11.00 a.m. Visit to Hospital Laboratory: Demonstrations. Symposium on Laboratory Equipment, introduced by D. Whillans.

1.00 p.m. Lunch.

2.00 p.m. Papers.

3.30 p.m. Sight-seeing tour of New Plymouth as guests of Taranaki Hospital Board.

5.30 p.m. Cocktail Party. Because we recognise the value of a social gathering of this nature we hope everyone will come. Tea will be available for those not drinking cocktails.
(N.B.—Charge for cocktails, 7/6. Tea 2/6.)

SATURDAY, 18th AUGUST, 1951:

A trip to Mt. Egmont for those wishing to go will be arranged.

PAPERS ALREADY PROMISED:

Estimation of Sodium and Potassium in Biological Fluids, by Flame Photometry. H. Olive.
Clinical Applications of Advances in Infectious Diseases. Dr. D. N. Allen.
Non-pathogenic Acid Fast Bacilli. I. W. Saunders.
Fluid Egg Yolk Culture of M. tuberculosis. J. A. Samuel.
Photometric Instruments and their applications. R. T. D. Aitken.
"Mistura Biochemicals." J. Murray.
Bacteriological subjects will also be discussed by D. H. Adamson and L. Reynolds.

DEMONSTRATIONS:

A number are being arranged in the Laboratory and facilities will be provided to allow the showing of material brought by visitors.

Tauranga - 21st Annual Scientific Meeting, 1965

THURSDAY, AUGUST 5, 1965.

9.00 a.m.—Address of Welcome, Mr H. J. Clark. Chairman, Tauranga Hospital Board. Conference Address, Dr M. G. Somerville, Pathologist, Norfolk Laboratory. Opening Address, Dr D. P. Short, Medical Superintendent, Tauranga Hospital.

9.45 a.m.—Official Photograph.

10.00 a.m.—Morning tea and inspection of Trades Display, at Nurses' Home Recreation Hall.

10.30 a.m.—Annual General Meeting.

Agenda

1. Welcome and opening addresses.
2. Roll Call and Announcements.
3. Apologies.
4. Proxies.
5. President's Address.
6. Minutes of last Annual General Meeting.
7. Presentation of Annual Report and Balance Sheet.
8. Election of Officers.
9. Consideration of Notices of Motion and Remits.
10. General Business.

12.30 p.m.—Luncheon.

2.00 p.m.—Completion of Business.

2.45 p.m.—Afternoon Tea.

3.15 p.m.—Forum on Bacteriology. Chairman Dr T. H. Pullar. Papers presented will include: — "The isolation of *Monosporium apiospermum* in N.Z." —F. Rush-Munro.
"The Use of Antibiotics in the Diagnostic Laboratory."—H. C. W. Shott.
"Faecal Parasites."—D. McCarthy.
"Preliminary Biochemical Differentiation of *Salmonella*."—Miss R. Allen.
Topics for discussion are: — Interference phase contrast microscopy and *Haemophilus vaginalis*.

8.0 p.m.—Forum on Examinations and Training. Chairman: Mr H. Bloore. Completion of Business (if necessary).

FRIDAY, AUGUST 6, 1965.

9.0 a.m.—Forum on Biochemistry.
Chairman: Mr T. E. Miller.
Papers: "The Estimation of Calcium and Magnesium by Atomic Absorption"—J. Pybus.
"Semi-automation in Chemical Pathology."—J. L. Braidwood.
"Occupational Health—Procedures Progress and Potential of a New Laboratory."—D. A. McArthur.
"Protein Fractionation."—I. Lyon.
Topics for Discussion:—The creatinine estimation; quality control and the auto-analyser; errors in auto-analyser procedures; normal values of serum P.B.I. obtained by different procedures; quality control; an appraisal and discussion on the recent Clinical Chemistry Survey.

10.15 a.m.—Morning tea.

10.45 a.m.—Completion of Biochemistry forum.

12.00 (noon).—Buffet Luncheon at Nurses' Home Recreation Hall, followed by conducted tours of New Tauranga hospital.

1.30 p.m.—Forum on Immunology.
Chairman: Mr A. Fischman.
Papers: "Some Technical Aspects and Uses of Immunoelectrophoresis." —R. Douglas.
"Auto-antibodies."—K. G. Couchman.
Topics for Discussion: — Recent advances in Immunology; should hospital laboratories have separate immunology departments?

3.10 p.m.—Afternoon tea.

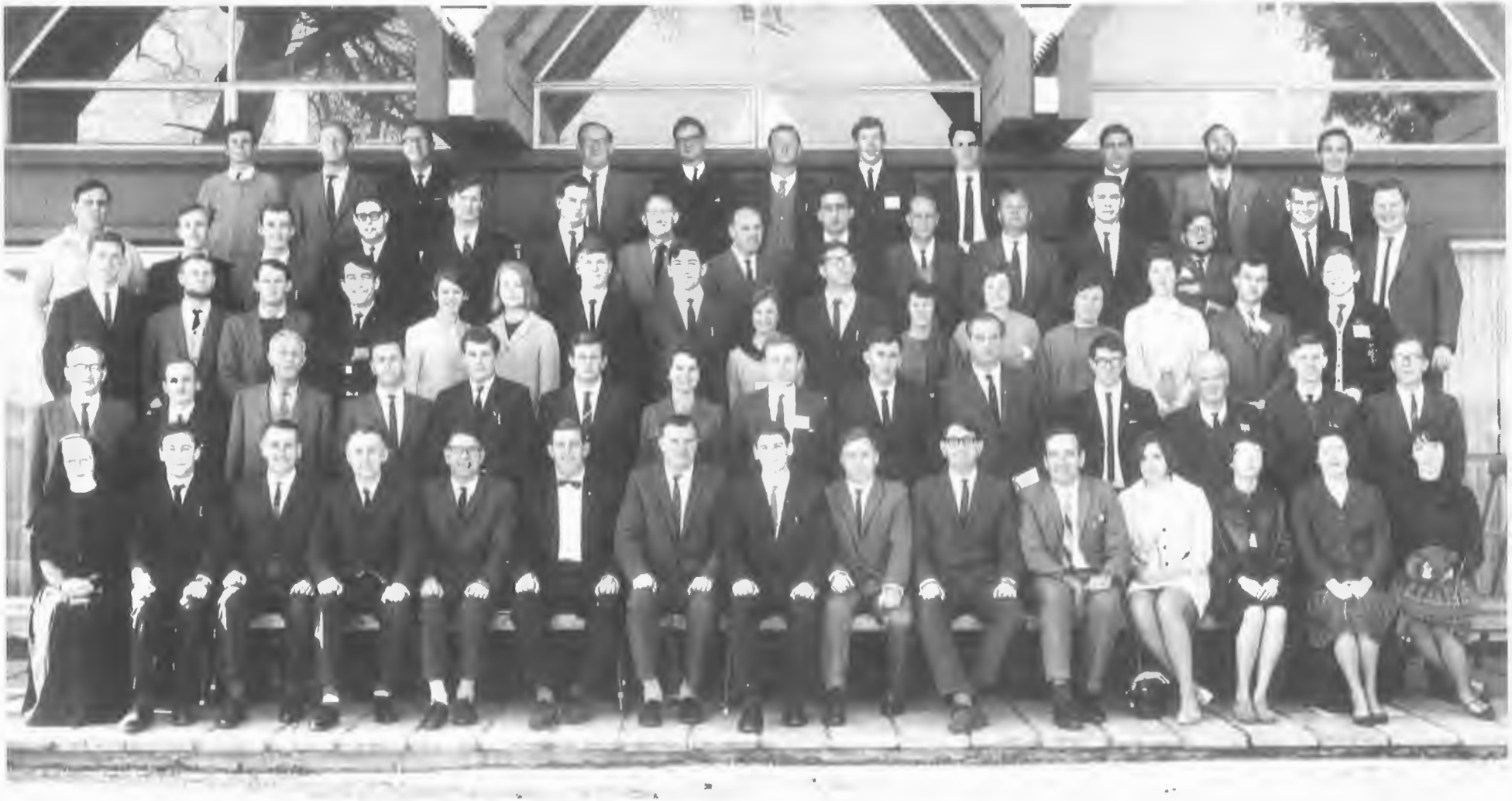
3.30 p.m.—Forum on Haematology.
Chairman: Mr J. Case.
Papers: "Techniques of Chromosome Studies." — Miss Chambers.
"Microbiological Assay of Folic Acid Activity."—J. T. Holland.
"A Family History of Hereditary Elliptocytosis." — H. E. Hutchings.

8.30 p.m.—Cabaret Evening at "San Francisco."

The Trades Display will be situated in the Nurses' Home Recreation Hall and will be open for the duration of the Conference.

List of Display Booths:

Watson Victor Ltd.
William R. Warner and Co. Ltd.
Scientific and Laboratory Equipment Ltd.
Townson and Mercer (N.Z.) Ltd.
Potter and Birks Ltd.
E. C. Lackland Ltd.
Geo. Wilton and Co. Ltd.
Edwin A. Piper (Oxoid) Ltd.
Dominion Dental Supply Ltd.
Dental and Medical Supply Co. Ltd.
Burroughs Wellcome and Co. (N.Z.) Ltd.
Biological Laboratories Ltd.



1967 Conference Degates - Christchurch

TECHNICAL PROGRAMME

THURSDAY, 26th AUGUST

Times	MICROBIOLOGY Chairman: Mr A. Harper	CHEMICAL PATHOLOGY Chairman: Mr D. MacArthur	HAEMATOLOGY/ IMMUNOHAEMATOLOGY Chairman: Dr E. Johnson	LABORATORY MANAGEMENT Chairman: Mr F. Lowry	SMALL LABORATORY Chairman: Mr C. Felmingham
1.00 - 3.00 p.m.	Anaerobic Microbiology (1) —**Dr Hawkins** Review of recent anaerobes referred to NZ Health Institute— **D. Norris** Microbiological data, recording, processing and reporting using an optical mark reading system— **C. Curtis** Fungal otitis media—a case history— **I. Wilkinson**	2 Microglobulin and renal function— **G. Tisch** Enzymatic determination of placental function— **M. Legge** Acetaldehyde, foct or fiction?— **K. G. Couchman** Hormone assay in Obstetrics and Gynaecology —**Dr J. France**	A further example of Kpa: Ko exhibiting depression of some Kell group antigens— **A. E. Knight** Statistical analysis of genetic typing in paternity disputes— **R. A. M. Anderson** HB Ag testing: Macro or Micro?— **D. J. Haines** 1, HB Ag testing, 2, Staining procedures for blood films. Technique for in vitro culture of haemopoietic cells— **B. F. Postlewaight**	Discussion topics: —Stock management and bulk ordering —Budgeting —Management courses currently available —Problems of growth. —Motivation. —Laboratory records	Discussion topics: —Minimum protocol for microbiology. —Manual kinetic enzymes —Staffing standards. —Blood banking. —Bacterial identification kits. —Discrete analysis and similar equipment.
3.00 - 3.30 p.m.	AFTERNOON TEA — TRADE DISPLAYS				
3.30 - 5.00 p.m.	Identification of Anaerobic isolates in a clinical laboratory— **Dr Pritchard** Anaerobic microbiology (2)— **Dr Hawkins**	The problems associated with quantitation of IgM by electroimmuno-assay— **T. Taylor** Investigations into anti-placental components— **M. Legge** Variegate porphyria— **C. Harrison** Significance of Total T3 and a method for its estimation using Sephadex G25— **D. Cottrell**	Classification etiology of hereditary haemolytic anaemias— **R. Mitchinton** **HISTOLOGY** A comparative evaluation of cassettes versus other methods of embedding in a medical histology laboratory— **M. Sorenson** Demanstration of water-soluble crystals in tissues— **R. J. Patterson**	Continuation of management forum if necessary.	Continuation of small laboratory forum if necessary.
5.00 p.m.	SOCIAL HOUR				
7.15 p.m.	A.G.M. CONTINUATION/TRADE DISPLAYS				

FRIDAY, 27th AUGUST

Times	MICROBIOLOGY Chairman: Mr A. Harper	CHEMICAL PATHOLOGY Chairman: Mr D. MacArthur	HAEMATOLOGY/ IMMUNOHAEMATOLOGY Chairman: Dr E. Johnson
9.00 - 10.00 a.m.	A case of failed therapy— **Dr D. MacCulloch** Identification of human Staphylococci using a heat stable nuclease test— **R. Menzies**	Glycosuria in pregnancy— **M. Legge** A mixed drug overdose— **T. E. Rollinson** C.K. Isoenzymes— **D. Dohrman**	A case of thrombotic thrombocytopenic purpura— **B. W. Main** A case of rapid disseminated intravascular coagulation— **S. D. Darling** Electronic speed controller for low speed centrifugation— **L. Sampson**
10.00 - 10.30 a.m.	MORNING TEA — TRADE DISPLAYS		
10.30 a.m. - 12 noon	Infection due to **M. bovis** strain B.C.G.— **R. H. Vaughan** Nutritionally deficient Streptococci— **C. Smitheran** Anaerobic microbiology (3)— **Dr Hawkins**	Aspects of bilirubin protein binding— **M. Killip** Serum gastrin assay— **G. Tisch** Two ABA-100, one ABA-100 plus one Beckman TR or a Centrifichem— **B. R. Day** Evaluation of the Pye Unicam SP30 reaction rate system— **M. Legge** Evaluation of Guilford 3500 analyser.— **R. McKenzie**	A family with thalassaemio-1-trait; as an introduction with discussion— **B. Tapper** Acanthocytosis and McLeod red cell phenotype in non-CGD subjects—second and third world examples— **C. S. Shepherd** Factor XIII deficiency— **C. Hickton** Comparative analysis of antinuclear antibodies— **B. A. Christie** Broad spectrum Coombs reagents—a discussion topic— **R. Austin**
12 noon - 1.00 p.m.	LUNCH — TRADE DISPLAYS		
1.00 - 2.00 p.m	Semi-automated analysis of blood cultures— **N. Wood** Sensitivity patterns of Bacteroides species— **B. Cornere** Sensitivity of **Candida albicans** to 5 F.C.— **S. Vaughan**	Use of analytical ultra centrifuge in typing lipoprotein abnormalities— **Dr R. Bickerstaffe**	The importance of complement in the antiglobulin test —**B. Walker** Polymerized bovine albumin —**M. Inkster**
2.00 p.m.	GENERAL FORUM — INSTRUMENTATION: ASSESSMENT AND SELECTION. Chairman: Mr I Cole.		To include a short presentation on the Nationwide Clinicol Laboratory Computer System— **B. Kirkham**
3.00 - 3.30 p.m.	AFTERNOON TEA — TRADE DISPLAYS		
3.30 - 5.00 p.m.	GENERAL FORUM — EDUCATION. Chairman: Mr D. Philip.		

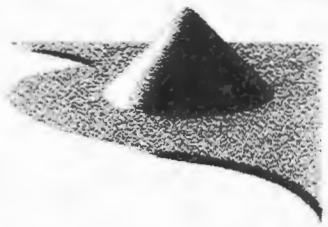
1976

THIRTY-SECOND ANNUAL CONFERENCE WHANGAREI.

PROGRAMME FOR THE NZIMLT 44TH ANNUAL SCIENTIFIC MEETING NEW PLYMOUTH 1989

	0830 THURSDAY 31 AUGUST	FRIDAY 1 SEPTEMBER
WEDNESDAY 30 AUGUST		CONCURRENT FORUMS
OPENING CEREMONY CHAROLAIS ROOM	BEECHAM RESEARCH LABORATORIES GENERAL FORUM The Role of the Medical Laboratory in Environmental and Industrial Health Monitoring CHAROLAIS ROOM	OLYMPUS MICROSCOPES FORUM for smaller laboratories — POOLSIDE LOUNGE BIOTEK IMMUNOHAEMATOLOGY — JERSEY ROOM MILES-TECHNICON MICROBIOLOGY — FRIESIAN ROOM GENERAL — CHAROLAIS ROOM
MORNING TEA	MORNING TEA	MORNING TEA
BIORAD LABORATORIES FORUM on QUALITY CONTROL and LABORATORY SAFETY CHAROLAIS ROOM	BEECHAM RESEARCH LABORATORIES GENERAL FORUM (Continued) CHAROLAIS ROOM	GENERAL SESSION MANAGEMENT OF CHANGE CHAROLAIS ROOM
LUNCH	LUNCH	
NZIMLT EDUCATION DISCUSSION ON INSTITUTE FUTURE CHAROLAIS ROOM	BEECHAM RESEARCH LABORATORIES GENERAL FORUM (Continued) CHAROLAIS ROOM	CLOSING CEREMONY CHAROLAIS ROOM
		LUNCH
	1500 AFTERNOON TEA 1530	
AFTERNOON TEA	CONCURRENT FORUMS	
NZIMLT A.G.M. & S.G.M. CHAROLAIS ROOM	MILES-TECHNICON MICROBIOLOGY — FRIESIAN ROOM COULTER ELECTRONICS HAEMATOLOGY — POOLSIDE LOUNGE BIOTEK IMMUNOHAEMATOLOGY — JERSEY ROOM ABBOTT DIAGNOSTICS BIOCHEMISTRY — CHAROLAIS ROOM MILES-TECHNICON HISTOLOGY/CYTOLOGY — CHALET 3 LOUNGE	1730

Meeting will adjourn to Poolside Lounge if it extends beyond 1730



TARANAKI
THE ENERGY CONFERENCE
N.Z.I.M.L.T.

ORGANISING COMMITTEE:

Convenor	Syd Shepherd
Professional Conference Organiser	Ann Livingston Marion Diplock
Scientific Convenor	Alison Idema
Industry Coordinator	David Dohrman
Social Convenor	Annmarie Clarkin
Secretary /Treasurer	David Dohrman
Transport /Accom	Steve Soufflot
Venue /Catering /Sound Coordinator	Sarah Thirlwall
Signs	Tony Mace

SCIENTIFIC SUBCOMMITTEE:

Biochemistry	Don Mikkelsen
Haematology	Robin Allen
Microbiology	Sarah Thirlwall
Immunology	Tim Taylor
Virology	Trish Lush
Transfusion Science	Andrew Mills

EXHIBITORS 1994 CONFERENCE HAMILTON

Abbott Diagnostics
Baxter Diagnostics
Bayer Diagnostics
Biolab Scientific Ltd
Bio-Rad Laboratories
Biotek
Boehringer Mannheim NZ Ltd
Canterbury Health Laboratories
Coulter Electronics
Endeavour Scientific NZ Ltd
ESR: Health Communicable Disease Centre
Hoechst NZ Ltd - Behring Diagnostics
Hyde Instruments Ltd
Intermed Scientific Ltd
John Knowles Scientific (NZ) Ltd
Kodak NZ Ltd
Laboratory Services - Auckland Healthcare Ltd
LabSupply Pierce
Life Technologies Ltd
McConnell & McConnell
Med-Bio Enterprises Ltd
Medic Corporation
Medica Pacifica Ltd
Murex Diagnostics
NZIMLS
Ngaio Diagnostics
Radiometer Pacific
Roche Diagnostic Systems
SCIANZ Corporation
Science & Technology
SmithKline Beecham
Syva
Waikato Hospital Laboratory
Watson Victor Ltd

IAMLT
International Association of Medical Laboratory Technology

The IAMLT was formed in 1954. It was aimed at bringing together and providing a common international forum for the exchange of thoughts and innovations in the field of laboratory medicine for organisations and people engaged in medical laboratory sciences.

J J Cannon attended the 1958 Congress to represent New Zealand and the NZAB. Two years later the IAMLT President, Mr Norman, toured New Zealand to promote membership of the international body. However it was not until July 1962 that a formal request was made by the NZIMLT that members of the NZIMLT, who held the Certificate of Proficiency be considered for membership of the IAMLT. At this time it appears membership was individual rather than organisational. In 1995 the option exists for both.

Although the 1970 AGM resolved that the NZIMLT organisation would not join the IAMLT, five years later this decision was reversed. Having made the decision to join, the Council under Mr Brian Main as President, decided to instigate a **NZIMLT Travel Award**, specifically to attend the IAMLT Conference as the official representative of the NZIMLT. The award of $30 per day to cover travel and registration at the 1978 IAMLT was made to Mr Des Philip.

In 1979 the Wellcome | NZIMLT Award was approved.

The NZIMLT sponsored $500 and Wellcome Diagnostic Limited the balance, to enable recipient to travel (economy class) by air to the IAMLT biennial conference. The criteria for judging included both scientific and professional prowess. Mr R Allan attended the Congress in Durban. It was a splendid affair with the South African Government prepared to invest a lot of money to attract overseas participants to an international congress, which would show the world that they were not the bad guys that everyone was making them out to be. In the event, many stayed away and there was only just enough countries represented to allow the General Meeting of Delegates to take place. The NZIMLT had nominated Des Philip for a Council member and it was in South Africa that he joined the Council of the IAMLT where he would serve as Council Member, Treasurer, President Elect and President. While still President Elect, Des took on the role of Editor of Med Tech International, a post he still holds. In 1983 Wellcome Diagnostic Limited took on full sponsorship of this award although the award remained - entitled the **Wellcome / NZIMLT Award.**

1978	Mr Des Philip	12th Congress Medical Technology	Edinburgh, Scotland
1980	Mr R Allan	14th Congress Medical Technology	Durban, South Africa
1984	Mr Gilbert Rose	16th Congress Medical Technology	Perth, Australia
1986	Mr Kevin McLoughlin	17th Congress Medical Technology	Stockholm, Sweden
1988	Miss Marilyn Eales	18th Congress Medical Technology	Kobe, Japan
1990	Mr Roger Austin	19th Congress Medical Technology	Geneva, Switzerland
1992	Mr Dennis Reilly	20th Congress Medical Technology	Dublin, Ireland
1994	Mrs Carol Green	12th International Congress of Cytology	Madrid, Spain

In 1993 Wellcome Diagnostic Limited had a change of ownership to Murex Diagnostics. At this time the award changed to enable the winner to attend an international scientific meeting of their discipline. Scientific contribution and/or development remains the key criteria for the **Murex Diagnostic Award**. Mrs Carol Green attended a Cytology conference in Spain 1994.

1994 Murex award
Liz Fox (Murex), Carol Green (Award winner), Dennis Reilly (President N.Z.I.M.L.S.)

Over the years there has been much debate by various councils as to the value of continued membership of the IAMLT - as dominated as it appears to be by the Northern Hemisphere countries. Nevertheless, one of our members has chosen to serve for over ten years on this international body and a number of members have published in the Med Tech International.

On the world scene, the number of New Zealand medical laboratory scientists is small as compared with many countries. There is always value in broadening one's perspective, knowledge, skills and associates through international contact.

T H Pullar Address

Each year the NZIMLS Council invites a person who has made a significant contribution towards Medical Laboratory Science to deliver the T H Pullar Memorial Address at the Annual Scientific Meeting. This prestigious address was initiated by council upon recommendation by R Kennedy and K Fletcher in April 1967 in honour of Dr T H Pullar who passed away on 29 August 1966. The proposal was that this Memorial Address was to be given at Conference, that prominent pathologists at that time be invited to give the Address, and that it be published in the Journal. From 1967 until 1974 a number of pathologists (1967: Dr F W Gunz; 1968: Dr PP Lynch; 1969 Dr SE Williams; 1970: Dr N P Markham; 1971: Dr W L Kenealy; 1972: Dr P B Herdson; 1973: Dr D T Stewart) presented the T H Pullar Memorial Address. From 1974 this Address was delivered predominantly by members of our Institute, nm. Harry Hutchings, John Case, Desmond Philip (twice), Rod Kennedy, Bob Allan, Janet Marsland, Brian Main, Burt Nixon, John Whitely (President AIMLS), Jan Parker, Ron MacKenzie, Barrie Edwards and Walter Wilson.

So who was Dr T H Pullar and why does the NZIMLS honour his name each year at the Annual Scientific Meeting?

Thomas Henry Pullar was born in Auckland in 1907. His father was a General Practitioner and returned with his family to Scotland, where Thomas was educated at George Heriot's School in Edinburgh. He subsequently attended the Universities of Glasgow and Sheffield, the latter where he graduated MB.ChB with Honours in 1929. He started his professional career as Biochemist to the Sheffield Royal Hospital in 1930 and then spent 2 years as Assistant Pathologist at the Sunderland Royal Infirmary, obtaining the London Membership of the Royal College of Physicians there in 1933. For the next three years he was Clinical Pathologist at the Middlesex Mount Vernon Cancer Hospital, and then in 1937 moved to New Zealand to take up appointment as Pathologist at the Palmerston North Hospital, a position he held for the next 25 years. He was admitted MRACP in 1951 and elected FRACP in 1962. A foundation member of the New Zealand Society of Pathologists, he was elected MRCPA in 1965.

During his professional career he was for a number of years External Examiner in Pathology and Microbiology to the University of Otago, pioneered the introduction of BCG vaccination in New Zealand (late 1940's), and for many years was an active member of the New Zealand Cancer Society. His main outside interests were fishing and golf.

Thomas Pullar, or "Thos" as he was affectionately known, was a champion and great friend of New Zealand Medical Laboratory Technologists. For many years he was involved with the gradual building up of professional laboratory standards throughout the country, and with the formation of the Medical Laboratory Technologists' Board. He was intensely concerned and involved with the training and welfare of Medical Laboratory Technologists. He helped draft conditions of employment and prepared new syllabi for the Intermediate Examinations.

Deteriorating health necessitated a lighter work load, and in 1963 he moved to the milder climate of Tauranga engaging in part time private laboratory practice there. During the last year of his life he visited medical laboratories throughout the country, supervising and setting up Technologists' exams and introducing new educational training schemes. Thomas

T.H. Pullar

H Pullar was a friend, teacher and lifelong champion of New Zealand Medical Laboratory Technologists, and thus it is fitting that to this day our Institute continues to recognise his many contributions to our profession through the T H Pullar Memorial Address.

'T H PULLAR MEMORIAL ADDRESS' RECIPIENTS

Inaugural address given to the 23rd Annual Scientific Meeting of the NZIMLT, held in Christchurch, August 1967.

1967	Dr F W Gunz	'Cytogenetics'
1968	Dr P P Lynch	'The Development of Diagnostic Laboratory Services in New Zealand'
1969	Dr S E Williams	'Some Perspectives in Medical Technology'
1970	Dr N P Markham	'Changing Habits of Men and Microbes'
1971	Dr W L Kenealy	'Laboratory Medicine'
1972	Dr P B Herdson	'Education of Medical Laboratory Technologists'
1973	Dr D T Stewart	'Clinical Pathology and its Body Politick'
From 1974, it was decided this honour should also be for distinguished Medical Laboratory Technologists.		
1974	Mr Harry E Hutchings	'Medical Technology Education: Where is it going?'
1975	Mr John Case	'A Look Towards the Past .... and a Glimpse in Levity Towards the Future'
1976	Dr J M Staveley	- Representation of Mr Roy Douglas' (MLT) paper proposing a suitable B.Sc qualification for Medical Laboratory Technologists
1977	Mr Des Philip	'Adaptation or Engineering'
1978	Mr Rod Kennedy	'Plotting a Proper Course'
1979	Dr M B Gill	'Back from Basics to the Tea Lady'
1980	Mr Bob Allan	'The Journal'
1981	Mr Malcolm Donnell	'Has 'High Technology' added any more useful information?'
1982 = keynote Address at 1st South Pacific Congress (Christchurch) - Mr Des Philip		
1983	Miss Janet Marsland	- Education and the Hospital Board Association refusal to support the Massey Degree Proposal
1984	Dr T Miller	- Contributions of Laboratory Technologists to Medical Research
1985	Mr Brian Main	- Future Concerns for the Profession * Extra Laboratory Testing * Education * Role of Laboratory Assistants
1986 = South Pacific Congress in Australia		
1987	Mr Bert Nixon	'The Challenges of Change' or 'Labcorp (1988) Ltd - Fact or Fantasy'
1988	Mr John Whitely (AIMLS)	'CPR - Closer Professional Relations between NZ and Australia'
1989	Mr Des Philip	'Medical Laboratory Technology examined against Darwins Theory of Evolution'
1990	Mrs Jan Parker	'The under-utilized potential of Women in Medical Laboratory Science'
1991 = keynote Address 3rd South Pacific Congress (Auckland) - Dr David Beecroft		
1992	Dr Ron MacKenzie	'Changes in Laboratory Services'
1993	Mr Barrie Edwards	'Health Reform Opportunities and Appropriate (Change) Responses'
1994	Mr Walter Wilson	'Health Reforms - One year Down the Track'
1995 = South Pacific Congress in Australia		

South Island Seminar

The secret of the success of the South Island (SI) Seminar is in its healthy mixture of professional and social interaction.

Originally proposed as a South Island Conference in the correspondence between the fledgling Christchurch and Dunedin branches, the Dunedin Branch minutes of 4 April 1963 recorded. 'The postponement of the planned S.I. conference in April due to a poor response from the 'Northerners'. However, by November of the same year, the Christchurch Branch had written to the Dunedin Branch Secretary 'informing us of their intention and organisation of a South Island Seminar'. [Dunedin Branch minutes held Invercargill (9/11/63)]

1st South Island Seminar - 4 April 1964, Timaru

The primary aims have always been:

- to enable younger members to present papers in a less formal atmosphere than that of the annual conference. Senior staff to provide support, advice and encouragement.
- for senior technologists/scientists to share their knowledge and expertise.
- to have a jolly good social time together.

From the first, the Branches supported those attending with some form of travelling subsidy. For many years, the Dunedin and Christchurch Branches undertook to organise the S.I. Seminar in alternate years. Today with the Branches closed down, the South Islanders simply arrange it among themselves with different laboratories taking turns. Although it has lapsed in some years for lack of papers (1976) or other reasons, it has run almost annually since 1964. Ashburton, Timaru and Oamaru were the favoured meeting places for many years with Christchurch and Dunedin less frequently chosen to favour more, those at the top and bottom of the South Island respectively. The West Coasters have always had to cross the Alps, except in 1991 when Greymouth Hospital laboratory staff were the hosts. In recent years, central and more interesting venues have been chosen including Maruia Springs (1988), Hamner Springs (1992) and Akaroa (1994).

The social lures over the years have always included evenings of 'song, dance and frivolity', plus a range of activities, such as soaking in thermal mineral waters, white water rafting and the seaside.

The seminar has always been held in the earlier half of the year so as not to clash with the annual scientific meeting, and often in fact, provides papers to go forward to the national conference. It most frequently falls in March/April between the summer and winter sports seasons, and before roads get too frosty, to gain maximum potential attendance. Council has shifted its meeting when possible to coincide with the seminar and be available to meet and talk with members.

Organising the S.I. Seminar requires:

- choosing a date, venue and attractive social event
- arranging accommodation, lunches, morning and afternoon teas, overhead and slide projectors and pointers
- deciding on a theme or any guest speakers
- chasing papers and setting the order of the speaking programme
- promoting attendance (usually 50-90 members, plus some partners attend)

The Med-Bio Enterprises Ltd South Island Seminar Travel Prize has been offered since 1991. It was established to encourage inexperienced presenters to prepare and give a scientific presentation at the annual South Island Seminar. The successful recipient receives travel funds to attend the national scientific meeting of the NZIMLS, to present their paper in that forum.

Friendly debates were introduced in the 1980's. Initially, formally arranged, Christchurch versus Dunedin with topics like:

- *That Pathology Departments exist to provide employment for Technologists',*
- *It does not all boil down to Biochemistry in the end,*
- *Laboratory Coats - a badge of office,*
- *Women make the best Technologists'.*

The 1988 (Timaru) S.I. Seminar report records:

'Because the general discussion went on longer than expected, the impromptu debates were held during dinner at the Grosvenor Hotel.

'Haematologists are worth more than Microbiologists'

Affirmative	Judy Cartwright (Cytologist)	
	Jim Le Grice (Biochemist)	
Negative	Rachel Jenkins (Virologist)	
	Geoff Mills (Microbiologist)	

"Every Woman over 40 should have a Toyboy"

Affirmative	Paul McLeod	(>40)
	Grant Goodman	(<40)
Negative	Warren Dellow	(<40)
	Graeme Bennett	(>40)

and **'Supermarket Trolleys have a mind of their own'**

Affirmative	John Aitken	(ChCh)
	Ben Harris	(ChCh)
Negative	Ron Fyfe	(Dn)
	Jan Parker	(Dn)

We kept ourselves and most of the hotel diners entertained'

This author does remember the two mature ladies attending an adjacent dinner party who were NOT impressed with the 'Toyboy' debate, but who were soothed by a MUCH younger male member of our delegation. Winners of the debates were decided by acclamation, if it was possible to distinguish which team had achieved most noise.

Although started by Branches, now long gone, the South Island Seminar continues to go from strength to strength. Today with the majority of S.I.G. meetings and national conferences held in the more populated North Island, the South Island Seminar offers, and meets, an important need for professional interaction within affordable time and money costs.

This commitment of the South Islanders, to get together annually for a general scientific forum and professional and social interaction, is to be commended.

SOUTH ISLAND SEMINAR
TIMARU HOSPITAL: 9TH APRIL 1972
Chairman: Mr B Main

Papers	Presented by
The Cooke Microtitre in the Routine Laboratory	Stewart Entwistle (Pearson Lab. ChCh)
Isolation of Allesheria boydii from a Case of Madura Mycosis	Nelson Dennis (Kew Hospital Inv.)
A Rapid Method for Buccal Smears	Wayne Bumstead (Pearson Lab. ChCh)
A Case of Myelofibrosis	Miss J. Case (Dunedin Hospital)
Radio Immuno Assay 'Kit' for the Estimation of Serum Digoxin Levels - Evaluation and Modification	Gavin Tisch (M.R.C. Princess Margaret ChCh)
Detection of Antibacterial Substances in Urine	David Robertson (Pearson Lab. ChCh)
A Comparison of Dye Degradation Amylase Techniques	Mrs Diane Potter (Dunedin Hospital)
Quantitative Estimation of Methaqualone in Plasma	John Tizzard (ChCh Hospital)
A Review of Muramidase Estimation	Brian Bodger (ChCh Hospital)
Screening Tests for Defibrination Syndrome	Bruce Rae (ChCh Hospital)
Any Technical Problems?	
Present State of Polytechnic Training (NZCS Medical) in Dunedin	Don McDuff (Dunedin Hospital)
Report on the T.C.A. Workshop held in Wellington 26-27 April 1972	Brian Main (Dunedin Hospital)
Institute Affairs	

Following the Meeting a Dinner will be at the Dominion Hotel - Cost $2.50.

1992 SOUTH ISLAND SEMINAR - HAMNER SPRINGS

9.30 - 10.30 REGISTRATION AND MORNING TEA

10.30 - 12.30 GENERAL FORUM

- A Twin Dilemma — Kevin McLoughlin
- Experiences with a Fully Automated Method for Glycated Haemoglobin Measurement — Richard Fowler
- Meningococcal - Prognosis — Ingrid Christiaans
- I Never Knew These Were Here — Warren Dellow
- Entamoeba histolytica: A Chance Remark — Sue Orbell
- Blood Donor Recruiting — Gerard Verkaaik
- Hitch Hikers Guide to the Cellular Galaxy — Joy Nimmo
- A Sometimes Fatal Attraction — Sue Robertson

12.30 - 1.30 LUNCH

1.30 - 2.30 GENERAL FORUM

- Perspectives on Listeria — Tom Henderson
- Did Micro Get It Wrong? — Jim Le Grice
- You Betcha Bum We Did! — Paul McLeod
- Green Carrots and I — Lorriane Craighead
- Giving Donors a Boost — Helen Norton

2.30 - 3.15 MLTB PRESENTATION

- Competency Requirements for Medical Laboratory Science

3.15 - 3.45 AFTERNOON TEA

3.45 - 5.00 NZIMLS PRESENTATION

- Discussion Document on the Role of Medical Laboratory Assistants

5.00 - 7.30 SOCIAL HOUR (OR TWO)

- Lounge Bar

7.30 BUFFET MEAL

- Hamner Lodge $20.00 per person

JOURNAL

AUGUST 1945

A number of interested medical laboratory staff from laboratories throughout New Zealand met in Wellington to establish the New Zealand Association of Bacteriologists. The twenty-nine senior members of the new Association were levied two shillings and sixpence (2/6) each to cover the cost of printing an Association Journal. A journal expense account of ten pounds (£10) was set up. An editorial committee to produce an Association Journal was nominated. It consisted of Mr Sutherland (as Editor), Doug Whillans and John Murray, all based in Auckland. The editorial committee was directed to publish the first issue by the end of April 1946, but before this Mr Sutherland had resigned and Doug Whillans assumed the editorship.

The editorial of Volume 1 No.1 April 1946 set out the following aims for the journal.

"It was the unanimous opinion of those present at the first annual general meeting of the Association, held in Wellington, that a journal was a necessity as a means of keeping all the members of the Association acquainted with the progress of their fellow members, and the dissemination of all knowledge thought to be of interest and use. The progress of the Journal and its value will, however, depend upon the active support of all members, senior and junior, for material to publish, for constructive criticisms and suggestions, and in the initial stages for a generous allowance for difficulties in publication".

This theme was to be repeated often by successive Editors over the years, as they at times struggled to find sufficient material to fill the journal pages. Even Rob Sieber's Editorial in the first issue of the Fiftieth Volume in March 1996 ends up with a similar plea in his last sentence, *"I look forward to the start of the next 50 years with a little help from the Members of the New Zealand Institute of Medical Laboratory Science".*

Doug Whillans, on the recommendation of a reputable printer, bought a 'bargain' printing press for £45 on behalf of the Council, both sight unseen, and undiscussed with Council. However this enterprise was endorsed by the Institute as the typed, set and printed appearance would be superior to that of cyclostyled copy. Doug was initially paid £25 but had to wait till the end of the year for the remainder of the £45 (it was said the press was probably worth £100).

During the first year the Editor was out of pocket for expenses in spite of the previous senior member's levy. A letter was then sent out to members asking for subscriptions one year in advance to finance the Journal. A Publishing Fund was also set up and donations were received towards the printing of the journal. Several Honorary members (Pathologists) made generous donations. Costs for 1946 were £78. This was offset somewhat by the Association being able to print its own letterhead and envelopes, membership cards, conference circulars, as well as 200 copies of the Association Rules.

The first issue in April contained 8 pages and 130 copies were printed. Using the new printing press, the July issue contained 12 pages and 140 copies printed. It also contained the first advertisement from Geo. W Wilton Ltd. Advertisement rates were £2 for a full page, £1.50 for half page and 15 shillings for a quarter page. Volume 1 No.3 contained advertisements from Geo W Wilton Ltd, Kempthorne and Prosser Co. Ltd and Watson Victor Ltd. In Issue No. 4 N M Peryer Ltd was added to the list of regular advertisers.

In early issues the cost of blocks for illustrations, diagrams and graphs were expensive and their use in articles was discouraged. Advertisers paid for their own blocks which became their property. Regular supporters of the Journal right throughout the years to 1962 were Geo W Wilton Ltd., Kempthorne and Prosser Co. Ltd., Watson Victor Ltd., N M Peryer Ltd., Townson and Mercer Ltd., Imperial Chemical Industries Ltd., Littlejohn's Scientific Supplies., Edwin A Piper agents for OXOID, and Biolab Ltd.

From 1946 through to the end of 1950 Doug Whillans remained as Editor, Printer and Publisher. He resigned for health reasons in 1950.

1951

Alan Murphy took over the editorship and continued through to the end of 1955. Doug Whillans remained as Assistant Editor until April 1953 when he stepped down from the Editorial committee, which now included Joan Byres, Ian Cole and John Sloan. In 1951 it was decided to have the Journal printed commercially. Percy Salmon, Wills and Grainger Ltd., Auckland became the printers for the publishers, the New Zealand Association of Bacteriologists. However, Doug Whillans continued to do some of the maintenance printing such as stationery and other smaller items for the Association thus saving money. He continued this right up till the time when the press was sold in 1956 for £50, ie. £5 more than the purchase price in 1945.

In 1953 the Editor was invited to attend the Association's Council meetings, if not already a member of Council.

1956

The Journal was moved to Christchurch. This ended the first decade of the Journal of the New Zealand Association of Bacteriologists which had been very firmly established by a dedicated team in Auckland.

In Christchurch John Cannon acted as Editor during 1956 and 1957 with assistance from Fred Corey, Caroline Curtis, Lois Evans, Gilbert Rose, and Joan Speden. Beginning from this period Journal Representatives were called upon to act principally as a journal article liaison person in the main centres. The first were Graeme Cameron of Auckland, Alex Schwass of Wellington and John Morgan of Dunedin. Except for a change in Auckland where Rennie Dix replaced Graeme Cameron in 1959, the Journal representatives remained the

same while the Journal was in Christchurch. Simpson and Williams Ltd were the printers.

Among journal material sent down from Auckland were advertising blocks for the current advertisers and also boxes of Addressograph plates. There was an individual Addressograph plate for each member of the Association on the mailing list and these plates were used in the Addressograph machine to imprint envelopes and mailers for Journal and Institute use. Bob Allan's T H Pullar Memorial Address of 1980 refers to the "infernal machinery of the Addressograph system redolent of the Victoria era". Bob was able to enlist the help of Syd Shepherd, Colin Curtis (Membership Committee) and the Hamilton Medical Laboratory to bring the Institute into the computer age by producing a computerised mailing list, but even so there was still some difficulty keeping up to date with new members and resignations.

The first issue of 1957 had a different cover on a heavier grade of paper, with a new layout and an image of a Steindorf microscope as drawn by Tom Tanner. This image of an unusually shaped microscope is still retained in the Institute's logo.

John Cannon resigned in 1958 with Lois Evans and Gilbert Rose then becoming Co-Editors until the end of 1962. During these years they were ably assisted in the production of the Journal by Gwen Collyer, Fred Corey, Caroline Curtis, Brian Main, Joan Speden and Tom Tanner. The cover saw a name change from the Journal of the New Zealand Association of Bacteriologists to that of *The New Zealand Journal of Medical Laboratory Technology* in 1960.

1963

The Journal moved to the 'deep south' and was based in the Medical School, at the University of Otago, Dunedin. John Case became the Editor, with 'Taffy' Rees, Henry Shott, Chris Kershaw and Kingsley Fletcher as the editorial staff. The new Printer was Evening Star Co. Ltd.

The Journal Representatives were later renamed Publications Sub-committee. For twenty years the Journal was in Dunedin where the following people served for varying times on the Publications Sub-committee.

Brian Cornere, Marilyn Eales, John Holland, Rod Kennedy, Don de Silva all of Auckland; Merton ('Hapi') Harper and Syd Shepherd of Hamilton; Colvin Campbell of Palmerston North; Bill Aldridge, Dorothy Hitchcock, Janet Marsland and Alex Schwass of Wellington; David McConnell, Gilbert Rose and Tony Titheridge from Christchurch. On different occasions doubts were cast upon the effectiveness of such a sub-committee, apart from the usefulness of having a contact person in each centre.

Throughout John Cases's editorship he tried many innovative ways of encouraging people to submit articles and adding interest to the contents of the Journal. There was also a marked increase in the advertising content and revenue. The increased revenue allowed the Journal to become virtually self sufficient for the first time in its history.

In 1967 a new cover design was introduced on a glossy light cardboard. The bulk of the Journal in its present format had increased due to more advertising, hence John Case submitted a paper to the Council in November 1968 suggesting the removal from the Journal of all material dealing with domestic affairs of the Institute and printing it separately in the form of a *Newsletter*.

From 1969 through to 1981 the Newsletter was printed six times a year and although it involved some increase in expenses it was thought that it would serve the membership better by keeping them both more closely and promptly informed of Institute matters. Items contained in the newsletter over these years included Council Notes; Membership applications and resignations; Conference, Regional and Branch Seminar Reports; the Library List of current periodicals; Abstracts; Examination papers; Examinations Pass lists; Awards; Prize Winners; announcement of future meetings and conferences; changes in the Hospital Employment Regulations as published by the Health Department; Medical Laboratory Technologists' Board reports; and letters to the Editor.

After a very successful and busy eight years as Editor, John Case resigned at the end of 1970 prior to taking up a position with the Commonwealth Serum Laboratories in Melbourne.

1971

Bob Allan became Editor; with Marie Johnstone, Alan Knight, Hugh Mathews, John Morgan, Lyn White and Bert White serving at different times on the editorial committee. Again in 1971 there was a change in the cover design and an increase in the format size.

There was always a big demand upon the Editor's time, maintaining the mailing list, addressing envelopes and wrappers, packing and posting the Journal. Managing the advertising in itself was a time consuming task involving the details of contract, copy and final placement of the advertisement in the Journal. With the Journal becoming more self sufficient it was appropriate to have advertising, printing and distribution done commercially.

When The Evening Star merged with the Otago Daily Times in July 1972, they then became printer, publisher, and then from March 1977, they also managed the advertising completely. In March 1979 The Allied Press Ltd, took over.

1981

Hugh Mathews became Editor with the assistance of Marie Johnston and Alan Wilson. Later in July, John Lucas replaced Marie and then in November Lucas and Wilson were joined by Gillian McLeay and Les Milligan. At this time it was noted that the Journal had been abstracted by overseas services and was now regularly abstracted by :- Allied Health Literature, Biological Abstracts, Cumulative Index Nursing, Current Chemical Chemistry, Hospital Abstracts, Institute Noutchnoi Informatsii.

1982

The NZIMLT Newsletter was discontinued and its contents absorbed back into the Journal. The increased amount of material allowed the format to be increased in size to quarto and the cover completely redesigned. In July 1983 because of demands upon his time, Hugh Mathews found it necessary to resign the Editorship and the Journal was moved again to Auckland. This ended 21 years of the Journal being produced in Dunedin. The overall number of papers for publication

increased, particularly during the years 1967 to 1983, varying between 17 - 27 papers per annum and regular numbers of technical communications in each volume. Generally the papers had come from two centres, that of Auckland and Dunedin. Similarly the number of advertisements and the advertising rates were at such a level that the Journal became essentially self sufficient.

During the years in Dunedin there were many changes in both the format and content, due mainly to the innovative drive and energy of both John Case and Bob Allan over the eight and ten years respectively that they served as editors.

1983

Dennis Dixon-McIver of Auckland assumed the Editorship . The Editorial Committee consisted of Raewyn Bluck, Bruce Dove, Ian Green, Mary Sorenson, Dennis Reilly and Walter Wilson. An advertising manager, Trish Reilly, was appointed on commission, to separate this task from the scientific editorial functions.

From 1984 the Journal was printed quarterly by The Institute Press of Auckland and they remain the printers to the present date.

From 1983 colour was introduced to advertising. The advertising rates are:

	1983	1988 - 95
Black and white page	$330	$625
Two colour page	$430	$780
Three Colour page	$530	$940
Four colour page	$630	$1125

The Institute for the Blind in Auckland labelled and packed the Journal for distribution from 1984 to 1987 but since then the process has been automated.

The first article of the Pacific Way was printed in the August issue 1983 and Marilyn Eales has contributed copy for this section in every issue to the present date. The inaugural meeting of the Pacific Paramedical Training Centre was reported in the NZIMLT Newsletter of November 1980. From 1981 copies of the Institute's Journal have been posted to laboratories in the Pacific Islands where they are well received. A small number of papers of scientific interest from laboratory workers in the Pacific Islands have been published.

From 1984 Continuing Education was another section introduced which featured subjects of topical interest. It was aimed to bring technologists up to date in their own discipline and also to inform others of progress in those subjects. Continuing Education developed into the Specialist Interest Groups which have become a very important part of the Institute's activities. The groups have run successful individual workshops thus enhancing technologists knowledge. These groups are, where needed, able to advise Council on matters associated with technical aspects of Medical Laboratory Science. Reporting on the activities of these groups provided extremely useful copy for the Journal from 1991 onwards.

As well as education topics, another section entitled Current Comment was introduced and this allowed members to discuss and comment on topics of interest or controversy.

The second issue of 1986 included pages containing the Med. Tech. International, the official paper of the International Association of Medical Laboratory Technology. Following this the Med. Tech. International has been included as an insert for our Journal. With Des Philip as Editor of the Med. Tech. International, it was printed by Institute Press and more recently they have done the typesetting and artwork, with printing done in Hong Kong.

EDITORS, PUBLISHERS AND ADVERTISING MANAGER

1945 **DOUGLAS WHILLANS** (Auckland) - 'A one man band'. Editor, printer, publisher, plus canvassing for advertising and prodding reluctant contributors. Published for 'New Zealand Association of Bacteriologists Inc', Wellington, New Zealand by Doug Whillans, 139 Kohimarama Road, Auckland (in his basement garage).

1951 **A M MURPHY** (Auckland) - Editor. Printed by 'Percy Salmon, Wills & Grainger Limited' 64 Fort Street, Auckland.

1956 **J J CANNON** (Christchurch) - Editor. Printed by 'Simpson and Williams Limited', 169 Asaph Street, Christchurch.

1958 **MISS LOIS EVANS** and **MR GILBERT ROSE** (Christchurch) - Editors.

1963 **MR JOHN CASE** (Dunedin) - Editor. Printed by 'Evening Star Co Limited'.

1971 **MR R D (Bob) ALLAN** (Dunedin) - Editor. Printed by 'Otago Daily Times Limited' (merged with Evening Star).

1981 **MR HUGH W MATTHEWS** (Dunedin) - Editor.

1983 **MR DENNIS DIXON-McIVER** (Auckland) - Editor. Published/printed by Institute Press, 25 Exmouth Street, Auckland.

1990 **MISS MAREE GILLIES** (Auckland) - Editor.

1994 **MR ROB SIEBERS** (Wellington) - Editor.

1983- **MRS TRISH REILLY** (Auckland) - Member appointed on commission as advertising manager.

All Editors were and are supported to variable degrees by their editorial boards. These have not been consistently published in the Journal and so the records are incomplete. The lion's share of the work and commitment always falls to the key person - the Editor.

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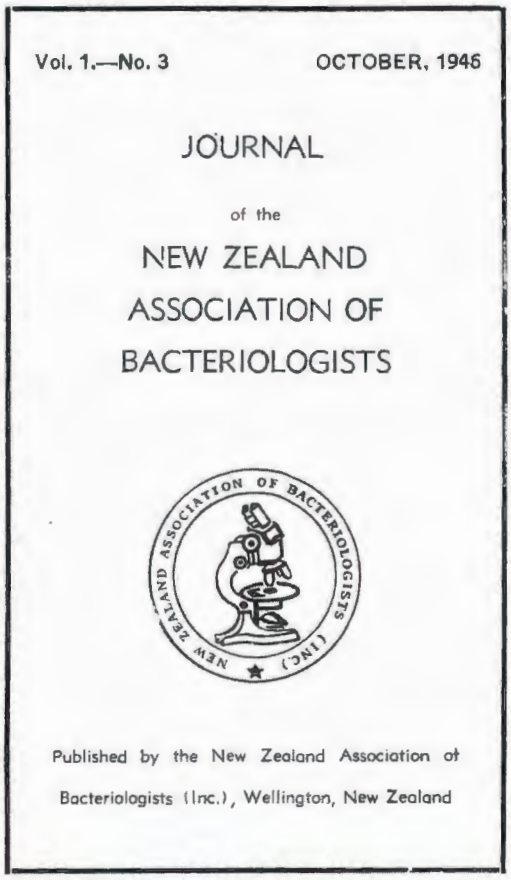


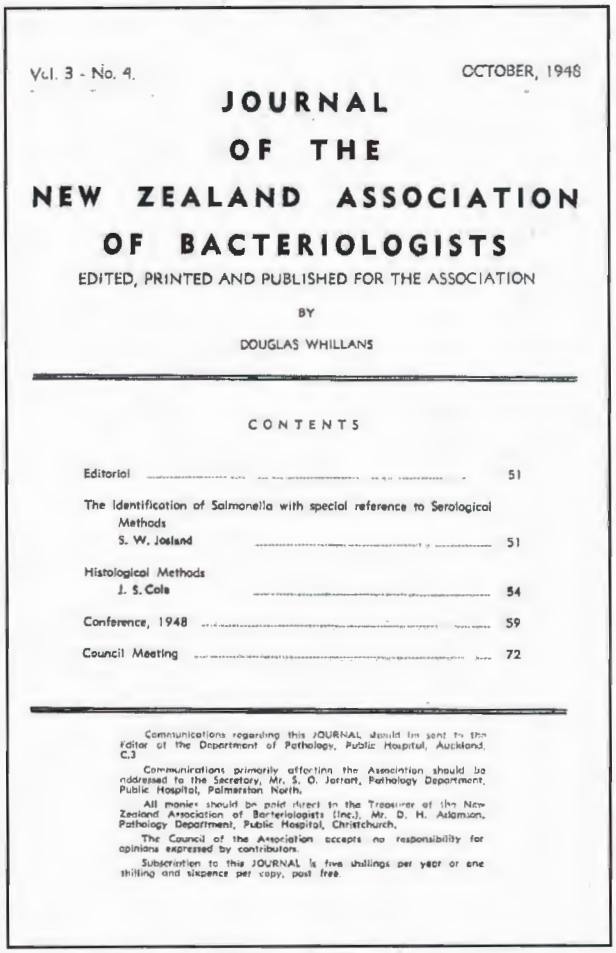
Vol. 1.—No. 3 OCTOBER, 1946

JOURNAL

of the

NEW ZEALAND ASSOCIATION OF BACTERIOLOGISTS

Published by the New Zealand Association of Bacteriologists (Inc.), Wellington, New Zealand



Vol. 3 - No. 4. OCTOBER, 1948

JOURNAL OF THE NEW ZEALAND ASSOCIATION OF BACTERIOLOGISTS

EDITED, PRINTED AND PUBLISHED FOR THE ASSOCIATION BY DOUGLAS WHILLANS

CONTENTS

Communications regarding this JOURNAL should be sent to the Editor at the Department of Pathology, Public Hospital, Auckland, C.3

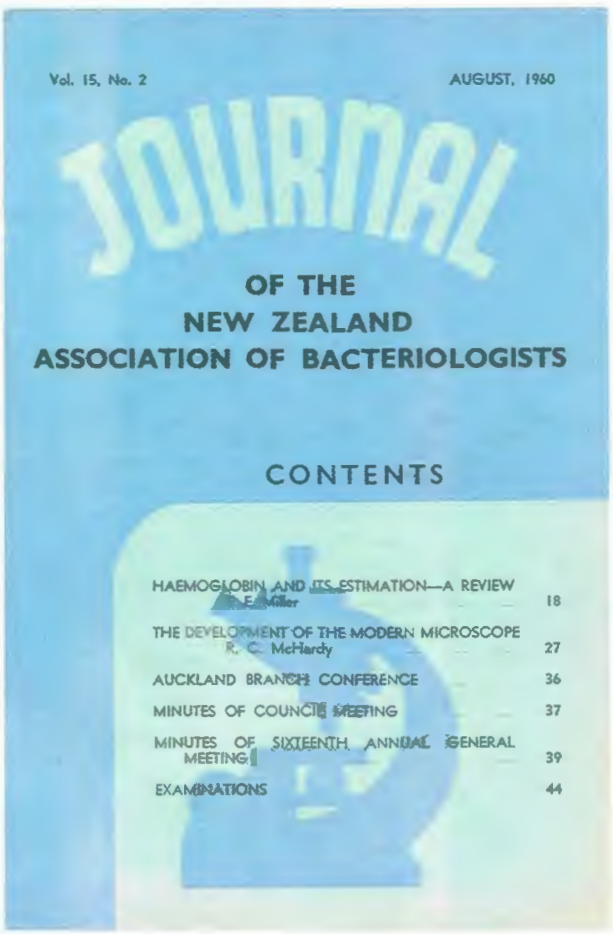
Communications primarily affecting the Association should be addressed to the Secretary, Mr. S. O. Jarratt, Pathology Department, Public Hospital, Palmerston North.

All monies should be paid direct to the Treasurer of the New Zealand Association of Bacteriologists (Inc.), Mr. D. H. Adamson, Pathology Department, Public Hospital, Christchurch.

The Council of the Association accepts no responsibility for opinions expressed by contributors.

Subscription to this JOURNAL is five shillings per year or one shilling and sixpence per copy, post free.

Representative Journal Covers 1946 - 1995



Vol. 15, No. 2 AUGUST, 1960

JOURNAL

OF THE NEW ZEALAND ASSOCIATION OF BACTERIOLOGISTS

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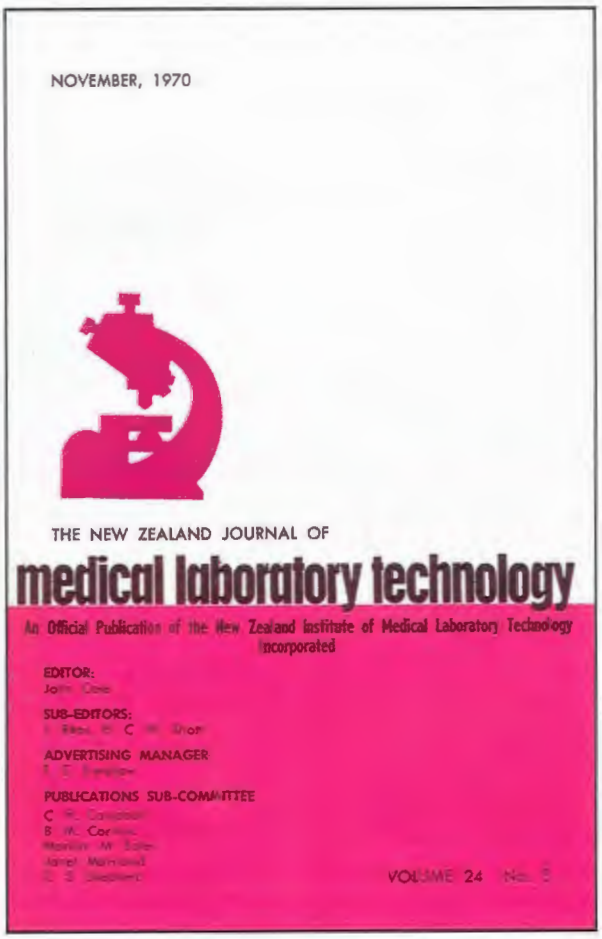

NOVEMBER, 1970

THE NEW ZEALAND JOURNAL OF

medical laboratory technology

An Official Publication of the New Zealand Institute of Medical Laboratory Technology Incorporated

EDITOR:

SUB-EDITORS:

ADVERTISING MANAGER

PUBLICATIONS SUB-COMMITTEE

VOLUME 24


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1990.

Marie Gillies replaced Dennis Dixon-McIver and she remained Editor through to the end of 1993.

Marie Gillies brought a change in cover design with the change of name to The New Zealand Journal of Medical Laboratory Science.

1994

After ten years in Auckland there was a move to Wellington in May 1994 with the Editorship going to Rob Siebers. His Editorial Board consisted of Anne Cooke, Stephen Henry, Michael McCarthy, Graeme Thorne, all from Auckland; Grant Goodman, New Plymouth; Kevin McLoughlin, Christchurch; Trevor Chew of Dunedin. The publishers remain the Institute Press of Auckland. With this change of venue also came a change of cover with a more pictorial aspect.

The Editorial Board changed in 1995. Members are Jan Nelson and Michael McCarthy of Auckland; Shirley Gainsford, Wellington; Harold Neil; Christchurch; Les Milligan, Dunedin; Keith Harrison and Trevor Forster (Editors, Australian Journal Medical Science); and Stephen Henry (Sweden).

Even in these few years that the Journal has been in Wellington, there has been a noticeable change in format and character which bodes well for the future.

During the years of publication between 1946 and 1981 there were three issues per volume; 1982 and 1983 there were five issues in each year and since 1984; issues were quarterly.

The Journal only subscription rate per year has risen as shown:

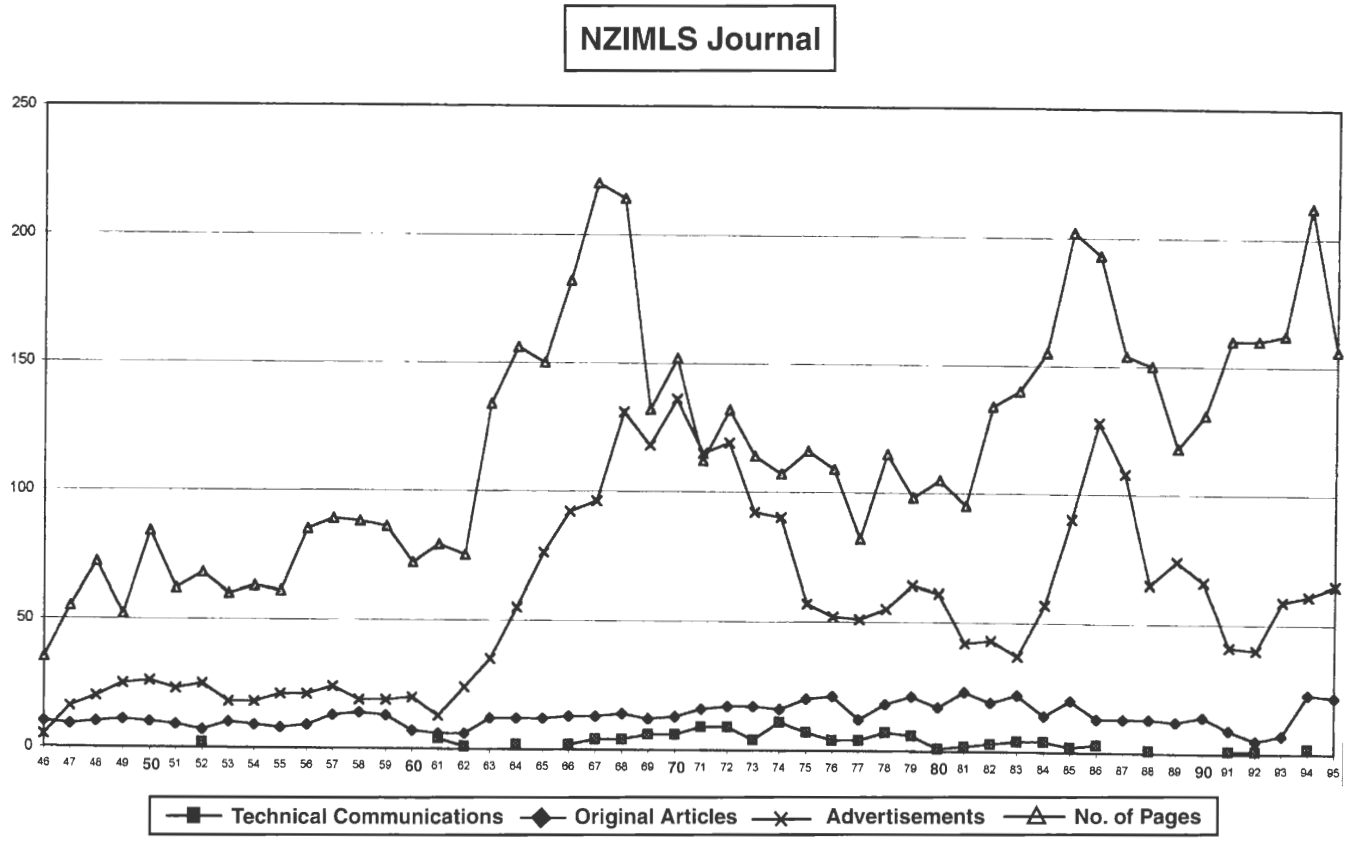
1947 - 63	5/-
1964 - 70	10/-
1971 - 72	$ 2.00
1973	$ 2.50
1974	$ 3.00
1975 - 76	$ 4.50
1977 - 80	$ 6.00
1981	$ 9.00
1982 - 84	$18.00
1985	$25.00
1986 - 87	$30.00
1988 - 95	$33.00

These prices reflect the cost of producing the Journal commercially.

Doug Whillans' editorial of the very first journal in 1946 and Rob Sieber's editorial in the first issue of the Fiftieth Volume in March 1996, and indeed editors between these years, have repeated the plea for material for publication.

With the Conferences, Seminars and Specialist Interest Group Meetings that have been held, many papers and other communications have been presented, but only a small portion of this material has ever found its way to the hands of the Journal Editor.

Hopefully future presenters of papers will give serious consideration to forwarding their material to the Editor so that the New Zealand Journal of Medical Laboratory Science may progress through the next 50 years and build on the good foundation that has already been established.



Education

From apprentice to University Graduate

At the Association of Bacteriologist's first conference in Wellington in 1945, the profession recorded that a university degree course was the preferred option for training and qualification of staff to work in medical laboratories. There was also a strong desire on the part of pathologists of the day, that the minimum qualification should be a BSc. This was one of the prime objectives in the formation of the NZ Association of Bacteriologists. However it took nearly fifty years before the first graduates emerged from Massey and Otago Universities.

1920 - 1949

Horace Holt became one of the first people to gain the NZ Department of Health's **'Certificate of Proficiency in Bacteriological Technique'** in 1920.

By 1923 the title had changed to **'Certificate of Proficiency in Bacteriology and Clinical Pathology'**. The first certificate we have been able to locate is that of Laurie Buxton who became the Institutes first President. This is reproduced with successive qualifications. Below is the syllabus that was printed on the back of the certificate.

1923

SYLLABUS OF TRAINING FOR BACTERIOLOGICAL TRAINEES.

THE following schedule is deemed to be the minimum knowledge and work required of hospital bacteriologists:—

1. Proficiency in the use of autoclave, sterilizers, and other laboratory apparatus.
2. Making glass laboratory requisites.
3. Making culture media, staining and other solutions.
4. Microscopical examination of sputum for the tubercle bacillus.
5. Microscopical and cultural examination of swabs for the diphtheria bacillus, meningococcus, &c.
6. Microscopical examination of urethal and vaginal smears for the gonococcus.
7. Microscopical examination of smears for the presence of spirochaetes.
8. Agglutination reactions for diagnostic purposes.
9. Blood culture.
10. Isolating organisms in pure culture.
11. The preparation of vaccines.
12. Examination of urine and fæces for pathogenic organisms and parasites.
13. Examination of pleuretic and other fluids for organisms and crystals.
14. Microscopical and cultural examination of pathological exudates generally—*e.g.*, pus.
15. Qualitative chemical examination of urine for albumen, sugar, bile, blood.
16. Quantitative examination for albumen, sugar, and urea.
17. Microscopical examination of deposits from urine for epithelial cells, casts, pus, crystals.
18. Counting red and white cells of blood.
19. Estimation of hæmoglobin in blood.

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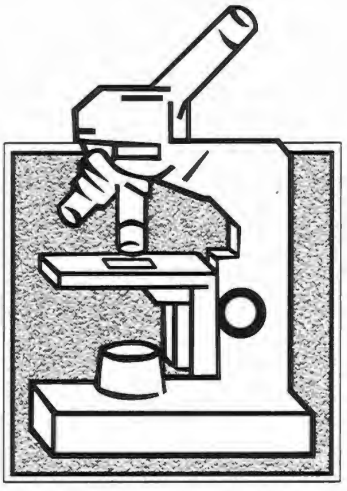
POSTGRADUATE PROGRAMS

DIRECT ENTRY INTO A MASTERS FOR REGISTERED MEDICAL LABORATORY SCIENTISTS



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The numbers of Bacteriologists over the early years was very small, as is shown in the graph under MLTB and Registration. Trainee Bacteriologists, or cadets as they were sometimes known, worked a five year apprenticeship in a hospital laboratory, at the end of which they were given a single general examination, at the Medical School in Dunedin. The lab examinations were 'tacked on' to the end of the medical student "specials" to utilize the same three visiting Pathologists. The examination was sometimes forgotten about, as three candidates found out after arriving in Dunedin after a two day journey from Auckland, only to be told "come back tomorrow". These early examinations consisted of written, practical and oral tests, with the pass or fail being largely determined by the oral. The practical occupied three or four days. The training and examinations remained static until 1949. In its first year of existence, the new association immediately began to address training and education, particularly a preliminary examination prior to the final.

By the end of 1946 there was an improved syllabus for the 'COP in Bacteriology and Clinical Pathology' which remained until 1950. The syllabus from the final year of the examination is reproduced below.

SYLLABUS OF TRAINING FOR BACTERIOLOGICAL TRAINEES
1950

THE following schedule is deemed to be the minimum knowledge and work required of hospital bacteriologists :—

1. Proficiency in the use of autoclaves, sterilizers, and other laboratory apparatus and general knowledge of the equipment and reagents for a District Laboratory.
2. Making laboratory requisites (*e.g.*, the preparation of throat swabs ; and the preparation and sterilization of specimen bottles).
3. Making culture media, stains, and other solutions.
4. Microscopical and cultural examination of sputum for the tubercle bacillus and other pathogenic organisms.
5. Microscopical and cultural examination of swabs for the diphtheria bacillus, meningococcus, &c.
6. Microscopical and cultural examination of material for the gonococcus.
7. Dark ground examination for spirochaetes ; microscopical examination of stained smears for the presence of spirochaetes.
8. Diagnostic agglutination reactions.
9. The technique of blood culture including knowledge of selective methods.
10. Isolating organisms in pure culture.
11. The preparation and standardization of vaccines.
12. Examination of blood, urine, and fæces for pathogenic organisms and cells.
13. Examination of pleural and other fluids for organisms and cells.
14. Microscopical and cultural examination of pathological exudates generally.
15. A knowledge of immunity with special reference to antigen-antibody reactions ; skin testing for allergic conditions.
16. Urinalysis. A detailed knowledge of the ordinary methods of urinalysis, including the quantitative examination for albumin, sugar, and urea, and the microscopical and bacteriological examination of centrifuged deposits from urine, and a general knowledge of renal function tests.
17. The usual technique of a complete blood count including knowledge of the use of the haemocrit and vital staining and the technique of blood groupings.
18. The usual methods of biochemical analysis. The estimation of blood non-protein nitrogen, sugar, &c.
19. Biochemical examination (*e.g.*, estimation of chlorides and protein and the cell count of spinal fluids).
20. The preparation of sterile solutions such as glucose-saline for intravenous administration.
21. The estimation of H-ion concentration of media and other fluids by the colorimetric method.
22. A knowledge of the postal regulations as applied to the sending of pathological specimens through the post.
23. A knowledge of the diagnostic value of animal inoculations and general knowledge of the selection and care of laboratory animals.
24. The preparation of sera and cerebro-spinal fluids for the Wassermann and precipitation reactions and an elementary knowledge of the principles involved in these tests.
25. The preparation of tissues for routine histological examination (*i.e.*, dehydrating, paraffin embedding, section-cutting, and staining by the usual methods.)
26. A detailed knowledge of, and practical experience in, the organization and maintenance of a blood bank.
27. A knowledge of the use of antibiotics, a detailed knowledge of the dispensing, storage, and distribution of penicillin. A knowledge of methods of assay and testing of sensitivity of organisms.
28. A knowledge of parasites—identification and methods of transmission. The identification, transmission, and culture of fungi.
29. A general knowledge of the bacteriological examination of samples of water, milk, and other foodstuffs.

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1949 - 1966

The ground work for the new qualifications was achieved over 1948/49. Agreement was reached with the Pathologists and the Department of Health to revise both the Final Examination and introduce an Intermediate Examination part way through the apprenticeship training. This new scheme occurred because of intense pressure and negotiation by the newly formed association.

It is remarkable, given the efforts of succeeding councils to make changes in education, that the fledgling Association took only four years to convince the authorities that this change was sensible and realistic.

The Intermediate Examination (1949 - 1966)

The Intermediate Examination was introduced in October 1949. It was taken after three years training (two for a registered nurse), the prerequisite being School Certificate. This was altered to University Entrance in 1951. Training was apprenticeship style and could only be undertaken in a Department of Health approved hospital or private laboratory under the supervision of a senior Hospital Bacteriologist or Pathologist. Two examiners, a Senior Bacteriologist and a Pathologist ran two examinations annually, consisting of a written theoretical, practical and oral examination. Laurie Buxton was the first Bacteriologist examiner for Intermediate. In the first examination there were 18 candidates with 16 passes.

SYLLABUS

1954

INTERMEDIATE EXAMINATION FOR HOSPITAL LABORATORY TRAINEES

(1) **The Operation and Maintenance of Laboratory Equipment:**

All types of sterilisers; the microscope; centrifuges; stills; thermo-regulated apparatus; filters; hydrogen ion apparatus (visual); colorimeters; balances.

(2) **Preparation of Glassware and Reagents:**

Types of laboratory glassware, including graduated glassware; the cleaning of glass; the disposal of cultures and specimens; the preparation and sterilisation of:—
(a) Specimen containers, (b) Pasteur pipettes, (c) Culture media; the preparation and use of routine stains and solutions.

(3) **Bacteriology:**

An elementary knowledge of the classification and nomenclature of bacteria; an elementary knowledge, including practical recognition, of the following:—Staphylococci, streptococci (including S. pneumoniae and enterococci), the Neisseria group, C. diphtheriae and diphtheroid organisms, H. influenzae, the typhoid-dysentery-foodpoisoning group, the coliform group, Br. abortus, M. tuberculosis, Vincent's organisms; the routine bacteriology of water, milk and milk products.

(4) **Urinalysis:**

Deposit; bile; specific gravity; acetone; sugar and albumin (qualitative and quantitative); urea (hypobromite).

(5) **Antibiotics:**

The storage and dispensing of antibiotics. Standard methods of testing sensitivity of organisms to antibiotics.

(6) **Haematology:**

The collection of specimens, excluding venipuncture; an elementary knowledge of the origin and development of cells; the technique of the complete blood count; a knowledge of the differential count, excluding opinion on anaemias, leukaemias, etc., but ability to recognise such abnormalities; reticulocyte and platelet counts; haematocrit technique; sedimentation rate; coagulation and bleeding times; blood grouping and compatibility test; icterus index.

(7) **Examination of Puncture Fluids:**

Cytology of such fluids; bacteriology and chemistry as under separate sections.

(8) **Biochemistry:**

Blood, sugar, T.N.P.N., C.S.F.; estimation sugar, chlorides, protein, Faeces; Occult blood. Gastric Analysis.

(9) **Miscellaneous:**

A knowledge of first-aid treatment and antidotes to cover accidental injuries and poisoning in the laboratory. A thorough knowledge of aseptic technique as applied to laboratory work and to personal safety; the packing of specimens and the postal regulations.

Certificate of Proficiency in Hospital Laboratory Practice (1950 - 1966)

The final two years of training after the Intermediate examination, had to be in a Base Laboratory under the charge of a Pathologist, prior to taking this new COP. There had been an attempt to move this into the university system and call the qualification a Diploma but when this did not eventuate, Dr's Pullar and Mercer put considerable effort into the new syllabus. The title was not acceptable to all but it was agreed that at least the word technique was no longer included anywhere. For the first ten years, the examiners were always Pathologists, however from 1960, a senior Bacteriologist was added to the panel of examiners. The examinations were moved to the National Health Institute (NHI) in Riddiford Street, Wellington, opposite Wellington Hospital. This was an advantage for both candidates and examiners, as Wellington was a central location (although the airport closed occasionally). Furthermore all candidates were in unfamiliar surroundings. Previously when the examinations were held in Dunedin it was felt that the local candidates had an unfair advantage, being in local conditions. By the same token there were disadvantages with the NHI. It did not possess the necessary equipment to run complex practical examinations, with the exception of microbiology. Most of the equipment had to be 'borrowed' from Wellington Hospital across the road. The technical staff from the laboratory were involved in the examinations at NHI for many years. At one stage, two Intermediate and two final examinations were held each year in Wellington. This meant a lot of work for all concerned. Although this system worked very well for a number of years, eventually the numbers being examined were too large to be handled in one spare laboratory at NHI.

A joint committee of the society of Pathologists and the Association of Bacteriologists was set up in 1960. The major purpose of this committee was to draw up comprehensive syllabi for the intermediate and final examinations. This was long overdue as the complexity of laboratory work had overtaken the syllabus. Dr Claude Taylor, Director of the Hospitals Division, Department of Health, was instrumental in organising this committee. He had a real interest in the training and certification of laboratory technologists. This joint committee evolved into the Medical Laboratory Technologists' Board that was finally constituted by Act of Parliament in 1964, becoming effectively the examining and certificating body for both Intermediate and Final Examinations. (See section on Registration).

A system of partial passes was introduced in 1962, that meant that a trainee who failed in one of the three sections of the final examination only needed to sit a special in the paper failed. By 1964 examinations were being held in three of the main centres (Auckland, Wellington and Dunedin) with the chief examiner Dr T H Pullar personally assessing the doubtful and failed candidates at each centre.

1966 - 1990

With the Medical Laboratory Technologists' Board, came further changes in Examinations and qualifications at both levels. Much of the history of these years is covered under 'Registration' and MLTB.

Basic Training Certificate (1966 - 1976)

The intermediate examination had been upgraded over the years and the MLTB further reviewed and developed it, to become recognised as a general certificate of training. Over the years it was variously known as Intermediate, Part I, General Certificate and Basic Training Certificate. The practical had to be discarded because the ever increasing numbers of candidates presenting. By 1968 the Basic Training examination consisted of three, 3 hour written papers and an oral examination. A set of practical assignments also had to be completed leading up to the examination. These were signed off by the charge technologist.

Certificate of Proficiency in Medical Laboratory Technology (1967 - 1981)

Following the Basic Training examination, candidates were required to present themselves for examinations at the end of their fourth and fifth years of training in elected subjects which could include;

* Chemical Pathology
* Microbiology
* Haematology and Blood Bank Serology
* Histology and Cytology

Previously, candidates had sat an examination covering the three major disciplines (ie. did not include Histology/ Cytology) so that staff technologists were 'generally qualified' in the 'major' laboratory sciences. This change was quite momentous, as it introduced and recognised the age of specialization. Many pathologists and senior technologists were unhappy with the development, as they felt it limited career opportunities for these technologists. There was a particular concern about how, smaller country hospital laboratories would find adequate generalists. Candidates could take a Part II or 'O' (Ordinary level) examination followed by a Part III or 'A' (Advanced level) examination in the same subject OR two Part II subjects or 'O' levels to qualify. If so inclined, qualified staff could undertake any of the remaining examinations to gain specialist qualifications in all subjects. These were recognised with a Certificate of Attainment. Examining centres were Massey University for Haematology, Auckland Hospital for Chemical Pathology, Dunedin Hospital for Microbiology and both Dunedin and Christchurch for Histology. These examinations were held in November or December each year with the twice yearly exams being abandoned.

The submission of the Institute to the National Development Conference in June 1968 was an important document as it highlighted the possible changes that could occur in the training of Medical Technologists.

Options included;

* Technical Institute courses
* Full time training schools like the pharmacy school
* University diploma course or (Technicians Certification Authority TCA) Diploma
* University degree courses

Prophetically, council indicated that most of these schemes could operate in the future and it was likely that their introduction would be in the order indicated.

Approaches to the TCA saw a **New Zealand Certificate in Science (Paramedical Option)** (1970 -1995) introduced

in 1970. After the MLTB had run or recognised several options at their intermediate level for several years, the NZCS (paramedical option) formally replaced the Basic Training Certificate in 1980. The change had great merit in that the training was beginning to move from the routine laboratory to the professional education system. There was a realisation that teaching was not necessarily a forte of the skilled professionals in the health field. Trainees were on 'day release' in major centres to the Local Polytechnic or on 'block release' from the provincial laboratories to attend the Central Institute of Technology at Heretaunga in the Hutt Valley. Specialised examination options continued to expand. By 1982 when the COP was retitled as -

Diploma in Medical Laboratory Technology (1982 - 1995) the specialization subjects included for both

Part II - now called Certificate level
Part III - now called Specialist level

* Clinical Biochemistry
* Cytogenetics
* Immunology
* Immunohaematology
* Haematology
* Histology
* Medical Cytology
* Microbiology
* Nuclear Medicine
* Virology

These specialist disciplines were still available in 1990 but only at Certificate level. Specialist level had been dropped by the MLTB and picked up by the Institute at the direction of the membership (AGM Nelson 1987). Note Immunohaematology had been retitled Transfusion Science in 1990. Nuclear Medicine was deleted in 1992.

Certificate and Specialist examinations both consisted of two, 3 hour written papers and a practical examination. An oral examination for borderline candidates only, determined pass or fail in the 1980's. Candidates could still choose to take further examinations post qualification/registration. The log book mastery assessment programme that replaced practical examinations in the 1990's is covered under MLTB and Registration.

1990 - 1995

As early as 1968 Massey University had indicated that there may be opportunities in the future to undertake a Diploma Course at the University. It was further suggested that in future, there would be a place for a degree in Medical Laboratory Technology being gained by full time students. Some of the other health professionals notably Pharmacy, Physiotherapy and Occupational Therapy managed to negotiate degree courses before Medical Technology. However Medical Technology differed from these other groups, in that it was attempting to gain funding from Hospital Boards for its university based education proposals. It was argued that as the hospital boards had supported students financially with day and block release at Technical Institutes the same funding should apply to university based education. In hindsight it is possible a University degree may have become a reality much earlier if students had been required to support themselves at tertiary institutions.

The Hospital Boards Association (HBA) flatly turned down any prospect of financial support for a degree proposal by Massey University in 1983. Janet Marsland commented in the Pullar Memorial address in 1983 that, in the light of the present economic climate, she was not surprised by the HBA response.

The Hospital Boards Association opposed the degree proposals from Massey on the following grounds.

* Training is too specialised at senior level
* Automation has reduced the need for high level analytical work by Medical Technologists
* International trends towards higher education were dismissed as inappropriate for the New Zealand health industry

In rejecting the Institute and Massey proposals, the HBA did agree that the post NZCS courses needed review and formalisation of teaching. To the professions credit, the severe knock back in achieving a degree course in 1983, did not lead to the abandonment of their hopes and desires for a university based course. The universities were also moving to provide more vocationally orientated degree courses. Both Massey and Otago, through their Veterinary and Medical courses respectively, had well developed courses in Biochemistry, Microbiology, Virology, Genetics and more recently Immunology. The perceived deficiency in these Universities was in the field of Haematology and Transfusion Medicine. In the 1980's the close hospital/university relationship at Otago was fostered by hospital based Medical Laboratory Technologists. Professor David Stewart became an enthusiastic advocate for the University providing a degree course for Medical laboratory Technologists. Jan Parker, as the regions Institute council member, was well known and respected in the University. With the support and encouragement of Associate Professor Colin Watts, the development of a course at Otago University, for Medical Laboratory Scientists proceeded through the various levels of university course development and approval. At the same time Massey University, which had assumed following the earlier knock backs, that the qualification was to remain hospital based, realised that the environment had now changed and were still keen to offer a degree course.

In early 1991, applications for the establishment of a University degree in Medical Laboratory Science were lodged by both Massey and Otago Universities, with the newly formed Committee for University Academic Programmes (CUAP). Both Universities were given permission to proceed with their proposed degrees. In 1992 Otago and Massey Universities selected their first classes of students into a Bachelor of Medical Laboratory Science programme in New Zealand. At the end of 1994 Massey University produced 17 BMLS graduates and the University of Otago 25 BMLSc graduates.

Massey University BMLS Programme

The first year of the Massey BMLS programme is composed of basic science subjects. Students apply and compete for entry to the BMLS programme, after satisfactory completion of the first year. The second year programme concentrates on the biological sciences and includes courses specific to the BMLS degree. Third year students cover the MLS subjects

of Clinical Biochemistry, Medical Microbiology, Virology, Immunology, Haematology, Transfusion Science, Histological Technique, Medical Cytology and Cytogenetics. In each of these subjects, students attend lectures and laboratories, that introduce the students to the laboratory skills specific to each of the disciplines. In the fourth year Massey BMLS students are placed in clinical laboratories throughout New Zealand. They specialise in two of the MLS subjects offered in the 300 level, (ie 3rd year), the sole exception being in cytogenetics. In almost all instances, students select their subjects and in most instances students are able to select the laboratories for their final year. During the fourth year, the practical teaching is supervised by laboratory-nominated staff with sufficient expertise as to be recognised as Associates of Massey University. Students are required to complete a logbook for each subject, and prepare fortnightly reports based on their progress. In addition, students are required to complete three assignments. To complete the semester, students sit a written examination.

Class of '94 - Massey University, First Graduation

University of Otago BMLSc Programme

The Bachelor of Medical Laboratory Science offered by the Division of Health Sciences at the University of Otago provides an in-depth education in the theoretical and practical aspects of laboratory science involved with the medical diagnosis and treatment of human health disorders.

The degree course is four years of full-time study. Year 1 is a first year Health Science course similar to Medicine, Dentistry and Pharmacy which can be taken at any University in New Zealand. Years 2 and 3 are spent full-time at the Otago Medical School in Dunedin. Subjects for Year 2 and 3 include Anatomy, Macromolecular Biochemistry, Human Metabolism, Microbiology, Cellular Communication, Systematic Physiology, Medical Microbiology, Clinical Biochemistry, Haematology, Transfusion Science and General Pathology. Year 4 consists of two semesters, in selected medical laboratories in New Zealand, to gain service experience, combined with an academic course from the University of Otago. For this year, Tutors that meet required standards, are appointed in the supervising laboratory to oversee the graduates. Each student must complete a number of specified assignments and a practical project that is presented to academic and laboratory staff on site. At the end of the semester, students must pass an oral examination. Subjects for Year 4 include two of the following: Clinical Biochemistry, Clinical Microbiology, Clinical Virology, Cytogenetics, Cytopathology, Haematology, Histopathology, Transfusion Science and Immunology.

Concurrently the courses at the Auckland Institute of Technology (AIT) were being upgraded and retitled as a Diploma.

Auckland Institute of Technology

In 1989 the **National Diploma of Medical Laboratory Science (N.D.M.L.S)** began at Auckland Institute of Technology (AIT). The following year the same course was initiated at the Central Institute of Technology (CIT). These were four year sandwich courses consisting of blocks of theoretical training at the AIT or CIT and practical training in clinical laboratories. In 1994 the NDMLS became part of the Bachelor of Applied Science at AIT and in 1995 is a **Bachelor of Medical Laboratory Science** (BMLS) in its own right. This degree course involves three years academic study at the AIT with a strong bias towards the medical laboratory science subject from year one. The fourth year of study is has an approval training laboratory specialising, in the majors which have been selected and studied in year 3.

1995

The Registration Board (MLTB) provided the Certificate level examinations until the end of 1995. Today the training and qualifications of Medical Laboratory Scientists is completely in the education sectors' arena. In 1995 three educational institutions are offering courses for the education and training of Medical Laboratory Scientists. These are:

* Bachelor of Medical Laboratory Science (BMLS), Auckland Institute of Technology
* Bachelor of Medical Laboratory Science (BMLSc), University of Otago
* Bachelor of Medical Laboratory Science (BMLS), Massey University

These degrees are all four year courses, leading to Registration after 6 months satisfactory work experience. This work experience, to demonstrate skills mastery, must be signed off by Registered Medical Laboratory Scientists, 6 months after graduation.

It has taken nearly 50 years of development and negotiation by the profession, until the goal set at the first conference for a University degree course, has been finally achieved.

Qualifying Certificates	
-1920	'Certificate of Proficiency in Bacteriological Technique'
1920-1950	'Certificate of Proficiency in Bacteriology and Clinical Pathology'
1950-1966	'Certificate of Proficiency in Hospital Laboratory Practice'
1967-1981	'Certificate of Proficiency in Medical Laboratory Technology'
1982-1995	'Diploma of Medical Laboratory Technology'
1993-1994	'National Diploma of Medical Laboratory Technology'
1994-current	**'Bachelor of Medical Laboratory Science'**

Pre-requisites to Qualifying Examinations	
1949-1966	'Intermediate Examination'
1967-1979	'Basic Training Certificate'
1980-1995	'New Zealand Certificate in Science (Paramedical Option)' or Bachelor of Science degrees

DEPARTMENT OF HEALTH.

PROFICIENCY IN TECHNIQUE IN

Bacteriology and Clinical Pathology.

This is to certify that Ernest Laurence Fletcher Buxton has by a theoretical and practical examination satisfied the Examiners that his knowledge of PRACTICAL BACTERIOLOGY AND CLINICAL PATHOLOGY, as defined in the syllabus of training for Bacteriological Trainees, qualifies him to undertake the duties of a Bacteriological Assistant in any Bacteriological Laboratory conducted by the Department of Health or attached to any general hospital in New Zealand.

In testimony whereof this certificate has been awarded, and is signed by order of the Minister of Health.

DATE OF EXAMINATION: Week ended 25th August 1923

BOARD OF EXAMINERS:

Charles E. Hercus M.D. D.P.H.

Approved.

Director-General of Health.

DEPARTMENT OF HEALTH

CERTIFICATE OF PROFICIENCY IN

Hospital Laboratory Practice

This is to certify that Rodney Terence Kennedy has by a theoretical and practical examination satisfied the Examiners that his knowledge of HOSPITAL LABORATORY PRACTICE, as defined in the syllabus of training for Hospital Bacteriologists, qualifies him to undertake the duties of a Hospital Bacteriologist in any Hospital Laboratory conducted by the Department of Health or attached to any general hospital in New Zealand.

In testimony whereof this certificate has been awarded and is signed by order of the Minister of Health.

DATE OF EXAMINATION: 27th, 28th, 29th February, 1956.

BOARD OF EXAMINERS:

Approved.

John Cairney

Director-General of Health.

DEPARTMENT OF HEALTH
NEW ZEALAND

Certificate of Proficiency in Medical Laboratory Technology

This is to certify that Lorraine Jean Rimmer

having followed the prescribed course of study and practical work for five years and passed the required examinations in the subjects of— Chemical Pathology II
Microbiology II

has qualified for the Certificate of Proficiency in Medical Laboratory Technology. *In testimony whereof* this Certificate has been awarded under the authority of the Minister of Health.

Chairman, Medical Laboratory Technologists' Board.

Director General of Health.

Date of Qualification: December 1970

MEDICAL TECHNOLOGISTS' BOARD
NEW ZEALAND

Certificate of Proficiency in Medical Laboratory Technology

This is to certify that ANNE FRANCES PATERSON (nee WILSCHEFSKI)
holds a basic qualification as required by the Board and has followed a prescribed course of study and practical work in the subjects of:

HAEMATOLOGY PART II

MICROBIOLOGY PART II

thus qualifying for the Certificate of Proficiency in Medical Laboratory Technology. *In testimony whereof* this Certificate has been awarded by the Medical Technologists' Board

Seal

Deputy-Chairman Registrar, Medical Technologists' Board

Chairman, Medical Technologists' Board.

Date of Qualification: DECEMBER 1978

MEDICAL LABORATORY TECHNOLOGISTS BOARD
NEW ZEALAND

Diploma in Medical Laboratory Technology

This is to certify that

ROSEMARIE EDNA HELMELINK

has followed a prescribed course of study, and has demonstrated the required practical competence and has passed the prescribed examination in the subject of

MICROBIOLOGY

thus qualifying for the Diploma in Medical Laboratory Technology. In testimony whereof this Certificate has been awarded by the Medical Laboratory Technologists Board on

the FIRST day of MAY 19 91

CHAIRMAN
MEDICAL LABORATORY TECHNOLOGISTS BOARD

DEPUTY-CHAIRMAN
MEDICAL LABORATORY TECHNOLOGISTS BOARD

AUCKLAND INSTITUTE OF TECHNOLOGY
Te Whare Takiura O Tamaki Makau Rau

NATIONAL DIPLOMA IN MEDICAL LABORATORY SCIENCE

This Diploma is Awarded to

Leigh Carmen Karl

Who has completed the prescribed programme of study and has satisfied all the requirements for this Diploma at the Auckland Institute of Technology, New Zealand.

Chairperson of Council — President — Academic Registrar

10 April 1995
Dated

This is a national course approved by the New Zealand Qualifications Authority under the provisions of the Education Amendment Act 1990 and the Auckland Institute of Technology is accredited to teach it

UNIVERSITY OF OTAGO

WHEREAS THE UNIVERSITY OF OTAGO HAS BEEN EMPOWERED BY ACTS OF THE LEGISLATURE OF NEW ZEALAND TO CONFER DEGREES AND AWARD DIPLOMAS OF THE UNIVERSITY

THIS IS TO CERTIFY THAT

Leanne Marie Bleakley

HAS BEEN ADMITTED BY THE UNIVERSITY TO THE DEGREE OF

BACHELOR OF MEDICAL LABORATORY SCIENCE

REGISTRAR — CHANCELLOR

DUNEDIN, NEW ZEALAND
9 December 1995 No 27

MASSEY UNIVERSITY

WHEREAS MASSEY UNIVERSITY HAS BEEN EMPOWERED BY THE LEGISLATURE OF NEW ZEALAND TO GRANT DEGREES OF THE UNIVERSITY: NOW THEREFORE

THIS IS TO CERTIFY THAT

Carlene Nicola Ray

HAVING PURSUED THE PRESCRIBED COURSE OF STUDY AND HAVING IN THE YEAR 1995 SATISFIED THE COURSE REQUIREMENTS, HAS BEEN AWARDED THE DEGREE OF

BACHELOR OF MEDICAL LABORATORY SCIENCE

Given under our hand this 30th day of May 1996

Academic Registrar — Chancellor

MASSEY UNIVERSITY, NEW ZEALAND.

Registration and the Medical Laboratory Technologists' Board

The Path to Registration

Stand today on the steps of Wellington Hospital and look across Riddiford Street and the parking lot of the Cancer Society is clearly visible. Years before the site was home to the severe Victorian facade of the Newtown Public Library, which was later taken over by the Health Department and converted into the poorly designed National Health Institute. Ask any of the staff who worked there and you realize quickly how inconveniently it housed laboratory facilities. However if the laboratory facilities left something to be desired it did boast an excellent seminar room. Here, in a sense, was the birthplace of the **Medical Laboratory Technologists' Board**. In reality it was Phoenix rather than a natal experience. On Friday the 5th June 1964 the first meeting of the Board was held with Dr J P Kennedy, the Director, Division of Hospitals, of the Health Department in the chair. The Institute's representatives were Hugh Bloore, Gordon McKinley and Les Reynolds and the Society of Pathologists was represented by Stewart Alexander, Neil Markham and Thos Pullar and Derry Manning of the National Health Institute. The first Secretary was Mrs Barbara Domb. The ashes from which this Phoenix arose was the Hospital Laboratory Advisory Committee - the body which from 1960 had advised on and arranged the examinations for the Intermediate Examination and the Certificate of Proficiency. The events leading up to the formation of this Committee are recorded in the Education section.

The new Board was established to act as an *examining and advisory authority* to the Director General of Health in relation to:

- Duration and syllabi of courses for the Basic Training Certificate and the Certificate of Proficiency (COP)
- Prerequisite qualifications of trainees and supervision of trainees
- Conduct, time, place and form of examinations
- Appointment of examiners
- Publication of examination results
- Recognition of equivalent qualifications
- Recognition of training laboratories
- Maintenance of a register of Trainees and Technologists

The minutes of that first meeting show how little the function of the Board in regard to examinations changed over many years - in fact until recent developments have allowed the Board to divest itself of the role of examiner. The meeting started at 1.30pm and finished at 6.20pm and apart from recognizing the roles of the participants as representatives of their respective bodies, was entirely devoted to the arrangement of examinations and recognition of laboratories as fit training centres and of candidates as fit examinees.

There was an early change in the chairman of this Board and Claude Taylor who had retired as Director of the Hospitals Division within the Health Department was appointed. Dr Taylor was a man who was meticulous about the recorded minutes of a meeting, and there could never be any doubt about what the members of a Board or Committee were voting on. The Secretary was required to write the motion in full and hand it to Dr Taylor who then read it (often twice) to the meeting before putting the motion to the vote. Needless to say there were very rarely any amendments to the minutes when they were approved as a correct record at the next meeting.

Like the poor, some things seem destined to be with us always and the first minutes contain what was to be the oft repeated criticisms of the organization of the papers and the instructions and the difficulties related to the receipt of the papers and .....!! Significantly this first meeting also set up a concessions subcommittee to recommend concessions for recognition of qualifications - a committee that continues until the present although now its function is related more to recognizing overseas training for registration in New Zealand.

The emphasis on examinations by a Board which was not yet a Registration Board explains a great deal about 'The Regulations' that were drafted when the Board underwent its first great metamorphosis to become the Registration Board.

In **July 1968** the Health Department, needing some Boards to whom the *Medical and Dental Auxiliaries Act* applied, approached the Medical Laboratory Technologists Board with the proposal that the Board be changed to a **Registration Board**. There was more than a certain irony about this approach because in 1945 the Association of Bacteriologists had had their request for registration firmly turned down by the then Director-General. (Appendix 1 details the report from the deputation that met the Director-General.) The Board in 1968 felt this to be a worthy change and so the Health Department approached the Institute stating its intention to convert the Medical Laboratory Technologists Board into a Registration Board. The approach may well have been to seek the Institute's approval but the Department made no secret of its avowed intent to set up such a Board. The supposed advantage was that the profession could exclude non-qualified practitioners and the public would have protection against charlatans and inappropriately trained (or non-trained) personnel. Many an hour was spent by the Council of the day in arguing the pros and cons of the proposals, and in meeting with the Office Solicitor of the Health Department, a certain Mr K Digby who in these formative stages seemed able to agree to everything the Institute wanted but in the final analysis strayed not one whit from the 'party' line. This Office Solicitor had the ability like Syd Josland, the microbiologist from Wallaceville, to remove every trace of ash from his cigarette without removing it from his mouth. The resultant stentorian snort became his trademark but the efforts of those reporting on meetings with the Department to simulate it were but pale imitations. Incidentally one wonders if the Registration Board, had it been in existence,

would have spotted what Mr Josland's employers missed when they appointed him as a graduate - his degree was in music! One of the early problems which faced the law draughtsman (and indeed provided a platform for discussion for years to follow), was to find a definition of just exactly what the practice of 'Medical Technology' actually meant. The argument was more than academic as on it hinged who could do various laboratory tests - pathologists or scientific officers, nurses, trainees, laboratory assistants or technologists.

When an answer to the Health Department was urgently needed, the Council having now been convinced that Registration was a good thing, (or perhaps more correctly that it was going to come despite anything we said), decided to hold a referendum among the Institute members as to the desirability of the move. It was decided that someone from the Council needed to go on a whistle-stop tour of the country and convince the technologist populace at large. Someone with charisma, someone with a missionary zeal, someone who by oratory, cajoling and even by the so-called facts could do the persuading. The lot fell to Syd Shepherd who in fact did such a good job, despite some real opposition in the capital, that the vote was overwhelmingly in favour of Registration - 89.2% in favour and only 4.5% opposing it (even in matters like this over 6% returned invalid votes!!).

More meetings with the Office Solicitor, more bargaining to try to get a Board representation that gave the Institute a majority, ended finally with the gazetting on 26 February 1973 of *The Medical Technologists Regulations 1973 pursuant to the Medical and Dental Auxiliaries Act* 1966.

1973/38

THE MEDICAL TECHNOLOGISTS REGULATIONS 1973

DENIS BLUNDELL, Governor-General

ORDER IN COUNCIL

At the Government Buildings at Wellington this 26th day of February 1973

Present:

THE HON. H. WATT PRESIDING IN COUNCIL

PURSUANT to the Medical and Dental Auxiliaries Act 1966, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

ANALYSIS

REGULATIONS

1. Title and commencement—(1) These regulations may be cited as the Medical Technologists Regulations 1973.

(2) These regulations shall come into force on the 1st day of April 1973.

2. Interpretation—In these regulations, unless the context otherwise requires,—

"The Act" means the Medical and Dental Auxiliaries Act 1966:

"Board" means the Medical Technologists Board constituted under regulation 3 of these regulations:

"Certificate of proficiency" means—

(a) A certificate of proficiency in medical technology awarded by the Board pursuant to regulation 10 (2) of these regulations; or

(b) A certificate in technique in bacteriology and clinical pathology, or a certificate of proficiency in hospital laboratory practice awarded by the Department of

Price 10c

H Bact. 1

Dominion of New Zealand

DEPARTMENT OF HEALTH

Certificate of Pass

INTERMEDIATE EXAMINATION FOR HOSPITAL LABORATORY TRAINEES

This is to certify that Carlyle E. Felmingham has by a theoretical and practical examination satisfied the examiners as to his knowledge of Hospital Laboratory practice as stipulated in the syllabus for the Intermediate Examination for Hospital Laboratory Trainees (see back hereof) and has been granted a pass in the Examination.

In testimony whereof this certificate has been awarded, and is signed by order of the Minister of Health.

DATE OF EXAMINATION: 28th–29th October, 1949.

EXAMINERS: Thos H Pullar, Ex. J. Buxton

APPROVED: John Cairney, Director-General of Health

DEPARTMENT OF HEALTH
NEW ZEALAND

Basic Training Certificate in Medical Laboratory Technology

This is to certify that MAURICE WOODROW ROBERTS

having followed the prescribed course of study and practical work for three years and passed the required examinations in the subjects of—

CHEMICAL PATHOLOGY—Part I
HAEMATOLOGY and BLOOD GROUP SEROLOGY—Part I
MEDICAL MICROBIOLOGY—Part I

has completed the Basic Training Qualification prerequisite to the Certificate of Proficiency in Medical Laboratory Technology.

Chairman, Medical Laboratory Technologists' Board.

D.P. Kennedy. *Director General of Health.*

Date of Examination: NOVEMBER 1967

1,000/2/68—44220 W

H 1782

MEDICAL TECHNOLOGISTS' BOARD
NEW ZEALAND

Basic Training Certificate in Medical Laboratory Technology

This is to certify that ANNE FRANCES KILSCHEFSKI (now PATERSON)
having followed the prescribed course of study and practical work for three years and passed the required examinations:

LABORATORY EQUIPMENT AND MATERIALS
MANAGEMENT AND HANDLING PROCEDURES
SAFETY PRECAUTIONS
CHEMICAL PATHOLOGY (PART I)
MICROBIOLOGY (PART I)
HAEMATOLOGY AND IMMUNOHAEMATOLOGY (PART I)

has completed the Basic Training Certificate Qualification, prerequisite to the Certificate of Proficiency in Medical Laboratory Technology.

Deputy-Chairman/Registrar, Medical Technologists' Board

Seal

Chairman, Medical Technologists' Board

Date of Examination: NOVEMBER 1976

TECHNICIANS CERTIFICATION AUTHORITY NEW ZEALAND

New Zealand Certificate in Science

This is to certify that

Julie Alice Watson

has passed the examinations and satisfied all the other requirements of the Authority for the issue of this Certificate in the

Paramedical

option

Seal

Chairman: E W Mills
Technicians Certification Authority

No. 69/1979

Our efforts to have Regulations of our own and not under the Medical and Dental Auxiliaries Act had failed, as had a number of other proposals especially in regard to representation. The whole thing was perhaps epitomized by the fact that we even lost the word LABORATORY in our title!! That one may have been a genuine oversight. That it would not be righted for another nine years is a good indication of just how long it took to get any changes made to the Regulations. Every change had to be drafted in the Department of Health's solicitors' office and then wait its turn to get on to the Government's legislative programme. Somehow it never seemed to have a great priority and got left to the next or another session - unlike fee increases. (Later the Board would overcome this problem by introducing a Manual which allowed some of the items that originally appeared in the Regulations to be in a **Manual** that could be altered as Board decisions about changes were made.)

The composition of the Board was:

- A medical practitioner employed in the Hospitals Division of the Department of Health
- Two medical practitioners nominated by the NZ Society of Pathologists
- Two medical technologists nominated by the NZ Institute of Medical Laboratory Technology
- Two persons appointed by the Minister after consultation with the Society of Pathologists and the Institute of Medical Laboratory Technology (in practice these have always been medical technologists)
- A person nominated by the Minister of Education and employed by the Division of Technical Education.

The first chairman of this Board was **Harry Hutchings (1973 - 76)**, starting the precedent of the chairman being a technologist - the others being **Des Philip (1977 - 91)** and **Kevin McLoughlin (1992 - present)**.

It can be seen that as a matter of right the Institute did not have a majority on this Board, although the record of the years is that the Board never divided along the lines of so-called loyalty to nominating bodies. In fact, a later technologist chairman, much to the chagrin of his colleagues, used his casting vote to defeat a proposal from the Institute on the basis that he believed casting votes should maintain the status quo, and not necessarily reflect the views of the Chairman.

Predictably the emphasis was on training and examinations for which the Board would be responsible and in this sense differed in no way from the previous Board. It gave the Board however the responsibility of registering technologists and disciplining offenders. Just what a weak power the latter was, was soon to become evident. From time to time the Board received complaints about unregistered and unqualified people who were alleged to be performing medical technology. Efforts to prosecute never proved to be successful from the perspective of those who lodged complaints. The strength of registration lay not in this area but in the fact that the Board, and the Institute through the Board would be able to call the shots in regard to curriculum and examinations. At this early stage there was probably no one who realized the strength of the hand dealt to us in this direction, but that is part of the rest of the story of registration covered later in this chapter.

During this period not all laboratories were allowed to train to the COP level and the Board had to devise 'suitable' definitions of who could and who could not train. There were also some who maintained that the Intermediate Examination should be a qualification in its own right, which would obviate some of the difficulties of defining who could train to the COP level. One very senior Pathologist wrote to the Board supporting this suggestion reasoning that "a number of (in particular) girls who undertake training have no ambition to qualify as "charge or sole technologists". They may well be happier with a shorter period of training and a less academic qualification". As there is no recorded nuclear explosion for that year it perhaps goes without saying that there were no girls on the Board at that stage!! While in today's world of inclusiveness we may shudder at that letter about girls, the record of representation of women on the Board is more than somewhat deficient. While in the 1970's the Department of Education had Margaret Nolan as their representative, it would be 1987 before a technologist in **Janet Marsland** appeared (and she was another Department of Education representative) and February 1989 before **Jan Parker** as an Institute representative sat around the Board table. It has to be said, however, that the Board had consistently used women as examiners for years before this.

In one of its earliest meetings the Board approved a logo and seal which Des Philip in collaboration with a graphic artist in Auckland had designed. The various icons of the logo represented:

- Medicine - the Caduceus staff of Aesculapius
- Learning - the open book
- The Institute - the stylized microscope
- New Zealand - the stars

It was remarkable that the seal had to be made in Dunedin - apparently the only photoengravers of the day. In December 1976 the Government Printing Office informed the Board that it believed that an import licence would be required for the Seal!! The Board resolved to use printed seals until the embossing stamp could be obtained and when it was made it had to be returned many times before it finally gave an adequate but not perfect embossing.

In 1985 the NZIMLT asked the Board to produce a qualifying badge, but the legal opinion of the Office Solicitor was that the Board could not issue such badges. However the Institute was allowed to use the Board logo when it issued badges. These are still sold ($5.63) from the Executive Office NZIMLS. Each badge has a unique registration number engraved on the reverse.

Concessions

One of the continuing functions of the Board has been the assessment of qualifications from both within New Zealand and overseas to see if they are acceptable for registration here. It has been the one area where the Board has had to appear in court to defend its decisions - a process that was twofold in its consequences. From one case the Board learned that though it often got scolded for its so-called tardiness, it really was a babe in arms in this area. The result of the case, although it vindicated the Board's decision, was so long in coming that it had lost its relevance to the applicant and the Board felt so sorry for the applicant that it just about felt constrained to alter its decision as some sort of compensation for all the wait and anxiety that had been occasioned. From the other case the decision made it quite clear to the Board that it was not possible to judge on some sort of global application of degree/qualification levels. Each case had to be considered separately taking into consideration every aspect of experience as well as qualification. It has never been an easy part of the Board's functions.

Examinations

The history of the Medical Laboratory Technologists Registration Board in many ways is the history of the education programme for medical technologists in New Zealand. As has been seen, the formation of the Board occurred in such a way that the responsibility to plan and run the examinations, together with all the associated curricula and syllabi definitions, fell completely into the lap of the Registration Board. Just how incongruous that a body should both set examinations and then approve those examinations as the criterion for registration did not seem to be evident for quite some time, and then as we shall see, divorcing themselves from the role of examination provider was not easy to accomplish.

NZCS/Intermediate Examination

The first efforts by the Board to separate themselves from the role of examiner were in the area of the Intermediate Examination. As recorded in the education section, the efforts of both the Society of Pathologists and the Institute had resulted in an Intermediate Examination beginning in 1949, the Hospital Laboratory Advisory Committee, which was the forerunner of the Board, being responsible for its administration.

However Rod Kennedy - tutor technologist in Auckland - was lecturing in the evenings at the Auckland Technical Institute and it seemed to Rod that the NZCS course might well form an excellent alternative to the course that he was running at the hospital to train students to the Intermediate level. The Institute agreed and the approach was made to the Board. They in turn approached the Technicians Certification Authority (TCA) which showed more than a passing interest. At that stage the Chairman of the TCA - Mr Geoff Wild - having had his fingers burnt by a group who persuaded him to set up a specific course in upper atmosphere physics and then did not provide any students, was reluctant to introduce any more specific subjects than he could possibly help. Thus the NZCS for trainees in medical technology began with specific medical technology subjects in the third year, but existing subjects in the first two years. From the students' view they were asked to learn what they felt were completely irrelevant subjects, (students have probably always felt that way) but more importantly the haematologists and immunohaematologists were concerned that formal lecturing directly related to those disciplines was left till too late in the course. Nevertheless the course got underway and provided the first glimmer of hope that theoretical training at least could be undertaken away from the precincts of the hospital. In December 1976, six years after the NZCS training officially started the Board resolved that it would be acceptable in lieu of the Basic Training Certificate i.e. as a prerequisite for continuing to the next step in the examination system, provided that students had completed three years in an approved medical laboratory with 36 weeks of full-time study. Within the laboratory 1000 hours of practical work in Microbiology and Clinical Chemistry, 600 hours in Haematology and 400 hours in Immunohaematology had to be completed. One of the strange anomalies of the system was the number of times trainees were held up because they had not passed the Communications English unit of the NZCS.

By 1977 medical technologists had a 'friend in court' as Harry Hutchings had resigned from Palmerston North Hospital and taken up a position, the Head of the Department of Health Sciences at the Central Institute of Technology. Ted Mills the new Chairman of TCA was persuaded to attend a workshop in March at CIT where technologists, teachers and Board members met to discuss possible changes to the existing NZCS. One of the recommendations of this workshop was that the "reasons or the concept of a diploma be reaffirmed and that a paper be prepared in support". Although this may not have been the very first mention of a Diploma it certainly reflects the thinking that was in the minds of a number of people at that time. How that 'Diploma' proposition translated into the later Diploma in Medical Laboratory Technology of the Board and the current degree and diploma programmes of the Universities and Institutes of Technology is another story dealt with under education.

But if theoretical training might be provided away from the workplace, the thought of someone, even a medical technologist, providing certifiable practical training away from the 'pit-face' of the medical laboratory, (and perhaps even then only the hospital laboratory), was far too great a step to be contemplated. Fierce were the arguments fought at the Institute's conferences and forceful if not always convincing were the contentions in letters to the Board, reasoning that ours was a practical science that could only be taught by an apprentice system and the white hot furnace of the real situation where an ogre of a house surgeon or worse was demanding results 'right this minute'. So if the Intermediate Examination (later called The Basic Training

Certificate and later still The General Certificate) was the crucible for theoretical training being undertaken away from the medical laboratory, it was also the start of some sort of on-going assessment in the practical arena, for the end result of all the discussions was a compromise situation which saw the introduction of log-books - a tale told under that heading.

For a number of years there was a mixture of programmes with some sitting the NZCS (run by AAVA Dept. Of Ed), MLP I&II papers and the Board setting other papers for its Basic Training Certificate; with the Board running separate orals for some of the AAVA students; with the Board nominating examiners to the AAVA and then using those examiners for its own papers or borrowing papers from the AAVA examinations; with the Secretary on a grace and favour basis getting results from AAVA (a day's exercise in the AAVA offices for her) so that the Board could then take these results in conjunction with log-books and laboratory experience to grant a Basic Training Certificate. In July 1980, after what the Board's secretary of the day described in the minutes as "a very spirited discussion", it was resolved "that the New Zealand Certificate in Science (Paramedical) Option A with three years related work experience be accepted as a prerequisite for Part II examinations of the Medical Technologists Board". A small step for mankind - a giant step for the Board as it saw the Board divesting itself from the role of examiner but retaining the right to assess the qualifications that were presented for acceptance into the final stages of the course for qualification.

It is obvious that not all the Board's discussions were all that riveting. The 'Picasso', above, produced during one of the Board's meetings was rescued by the Secretary at the end of the meeting. It is reproduced with the approval of the artist. The original does not hang in any art gallery.

Qualifying Examination

When the Registration Board was first formed it took over an already existing qualification examination based on a five year (three years for graduates) course. Prior to 1965 the examination had been a comprehensive one embracing the disciplines of Bacteriology, Chemical Pathology, Haematology, Blood Bank and Histology, and had led to the conferring of the Certificate of Proficiency in Hospital Laboratory Practice. But by the time the first registration regulations were introduced in 1973 the examination led to the Certificate of Proficiency in Medical Laboratory Technology (after 1982 to be called the Diploma in Medical Laboratory Technology) and candidates following the successful completion of the Basic Training Certificate were required to pass either two subjects at the Part 2 level, or one subject at both the Part 2 and 3 levels. Graduates had a three year course and were required to pass two subjects at the Part 2 level (and in the early days of this system, one of these had to be Haematology/Immunohaematology).

The subjects available 1973-76 were:	
Part 2	Chemical Pathology Microbiology Haematology and Immunohaematology (as a combined subject) Histology and Cytology (as a combined subject)
Part 3	Chemical Pathology Microbiology Haematology Immunohaematology Histology and Cytology (as a combined subject)

These were the heady days of laboratory growth. At the 1969 Conference of the Institute in Auckland, Dr Stephen Williams in the T H Pullar Memorial Address spoke of a robust profession which was growing exponentially and which could expect to double its size every 5-10 years - a projection that would, he said, give Green Lane Hospital Laboratory a staff of 500 by 1990. That it was indeed a time of phenomenal growth is witnessed by the fact that by 1978 the Board had separated Haematology from Immunohaematology(1977);

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The system for the new *millennium*

Sanofi Diagnostics Pasteur and Science & Technology (NZ) Ltd have pleasure in announcing a new partnership in New Zealand for the marketing, application and technical support of the ACCESS Immunoassay System.

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Some Pacific facts ... in less than three years, over 50 ACCESS Systems have been placed in Australia, with 25 in Sydney alone, this also tells a story....

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ACCESS offers:

- 24 resident assays in refrigerated reagent packs
- On board refrigeration of all reagents
- 24 hour system availability
- Full random and continuous access to both sample processing and reagent management—any assay, any time, any order
- Stat interrupt capability
- Automated reagents resource inventory management
- Rapid throughput of up to 100 tests per hour
- A broad expanding menu
- Magnetic particle separation with chemiluminescent technology

ACCESS also offers ... true third generation TSH, full anaemia panel and a cardiovascular profile which includes Troponin-I.

Sci Tech has operated in New Zealand for over 20 years, and is a successful technology business with operations in five NZ centres and also now in Australia.

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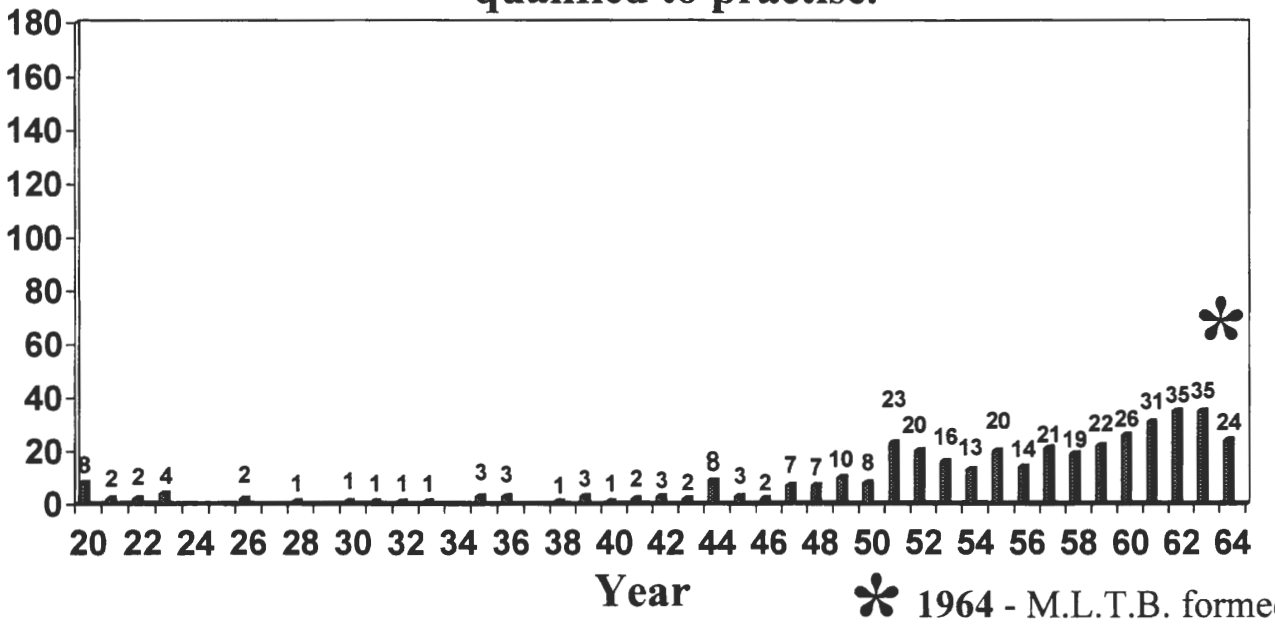
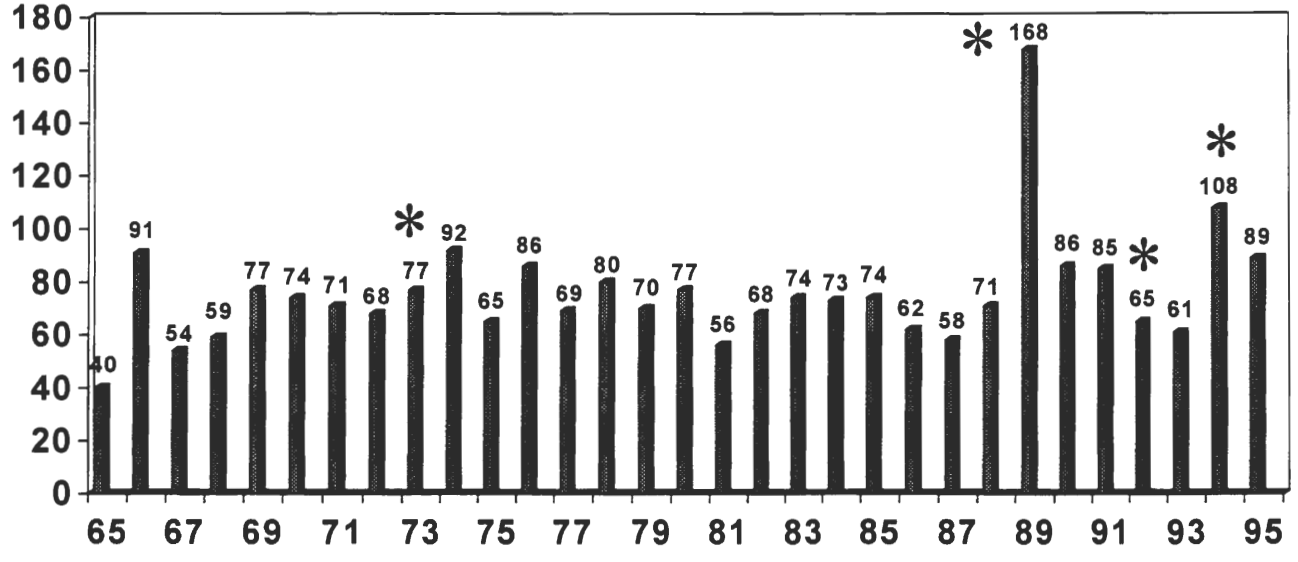
and Histology from Cytology(1977); and added Immunology (1978) and Nuclear Medicine (1978) to give eight subjects at both the Part 2 and Part 3 levels, and within the next four years it had added Cytogenetics and Virology to increase the subjects to 10 at both levels.

In 1981 it was decided to extend the final examinations and have two three hour papers at each level. The administration of two papers and practicals for each at each level, and the appropriate appointment of moderators, examiners and assistants together with the increasing number

Bacteriologists (1920 - 1959) and Technologists (1960 - 64) qualified to practise.



Technologists / Scientists (1965 - 95) qualified to practise.



* **1973** - All M.L.T. required to be registered with the M.L.T.B.
* **1989** - Registrations changed to one Certificate level.
* **1992** - N.D.M.L.T. graduates emerge
* **1994** - University graduates emerge

of candidates meant that the Board was a major examining body -a task for which they were, in fact, as practising pathologists and technologists ill-fitted. If this applied to the Board it could even more be applied to the Department under whose aegis the Board administered the examinations. Repeated requests for a computer system to deal with the increasing amount of data seemed to fall on deaf ears. The Institute had computerised all of its Technical Assistants QTA and QTO examinations in a Christchurch data base and with some real misgivings on the Department's part (but certainly not on the Board's part) in the mid 1980's they allowed the Board to use this system for the Board's examinations. While this relieved the Board of some quite inappropriate functions it still left a cumbersome system in the hands of a Board who made no pretence that they were educationalists. It was imperative that the system have some major changes. However the tiger, whose tail they held, was extremely difficult to be rid of, and indeed his replacement was by no means agreed. Changes of name from O & A Levels to Parts 2 & 3 to Certificate and Specialist Levels were not necessarily cosmetic but they were only changes within a system designed to allow a better evaluation of the competency of the students. What was really required was a complete break with an almost Narcissian system that allowed the Board to be both the examining body and then appraise its own examinations as the yardstick for registration. Increasingly the Board became aware of this problem. In the laboratory, quality control was moving towards a total quality management and the Board was conscious that the examination system should in no way be less subject to this type of control that any other part of the laboratory systems. In hindsight it is interesting to see the way the inexorable, indeed almost relentless changes, were moving the Board towards relinquishing its role as an examination body and truly fulfilling its proper role as a Registration Board.

In 1935 the three candidates for the final examination (J E P Johnston, Miss T J McCarthy and D Whillans) presented themselves to the Pathology Department at the Otago Medical School. Douglas Whillans told the story of how he approached the department's secretary to enquire where the examination for the 'Bacteriologists' was to be held. Bemused, the secretary disappeared, only to come back with the news that they were a day too early!! The next day they started the obviously hurriedly cobbled together examination which quite clearly had been completely forgotten. Perhaps not surprisingly. No one had presented for examination in 1924, 1925, 1927, 1929 or 1934, and for the five immediately previous examinations there had been only one candidate.

The graph shows how the numbers dramatically increased and the possibility that an examination could be overlooked became a distant memory with a whole raft of involved examiners (theory and practical), assessors, moderators and local invigilators. The numbers brought their own problems and while an examination was never overlooked there were anxious moments when materials for practical examinations (often bulky packages) and theory papers did not arrive until the last moment. Examination time was a nightmare for the Board's secretary and the examiners who had also to continue with their normal jobs. The amount of time that they had to invest and the amount of materials that they used did not go unnoticed by some Hospital Boards, especially as the heyday of health finance started to wane. Numbers of candidates and the need for a more centrally located examination site finally saw the Otago Medical School disappear as the lone centre. There were myriad stories about Dunedin's examinations and on many a night at the Institute's Conferences youngsters would be regaled with these stories. A wonderful story told by a born raconteur, related how in orals he was questioned about the names of various 'sugars' identified by several wisps of coloured cotton wool caught into the main cotton wool plug. Not having a clue what they were he guessed inulin, trehalose and sorbitol and in each case received the approbation - 'well done'. After the examination he returned to the laboratory to check, only to find that in every instance he had been wrong!!

SECRETARIES

Hospital Laboratory Advisory Committee (HLAC)
Medical Laboratory Technologists Board (MLTB)

H L A C	1957	R W Burns
H L A C	1957 - 64	Thea J van de Zande
M L T B	1964 - 67	Barbara Domb
M L T B	1967 - 68	Ron Pilgrim
M L T B	1969 - 71	Sheila V Burgess (nee Anthony)
M L T B	1971 -72	Tony Leverton
M T B/M L T B*	1972 - 84	Helen Robertshawe
M L T B*	1984 -85	Jenny van Hunen
M L T B*	1985 - 87	Lucille Boxer
M L T B*	1987 - 90	Leigh Llewellyn (nee Chapman)
M L T B*	1990 - 95	Lisa Orr
M L T B*	1995 -	Sonia Thistoll

*= Registration Board

If Secretaries write tactfully they are verbose; If they're brief, they're tactless; If they draft a report they're wrong, if they don't there's nothing to work on; If they advise the committee they're butting in, if they don't they're useless; If they send a reminder they're a pest, if they don't they're slack; If they ask for resolutions they're cheeky; If they don't get things done they're incompetent; If the meetings a success it's the committee, its a failure the secretary is to blame; If they ask for instructions, they have no initiative, if they don't they're swollen headed; Ashes to ashes, Dust to dust, if others won't do it; THE SECRETARY MUST.

The National Health Institute was the examination centre for a number of years but finally numbers and the need for an increasing number and range of glassware and instrumentation saw the change for Haematology, Immunohaematology and Microbiology to Massey University - a move encouraged by Massey who were keen to demonstrate their suitability not only as a practical examination centre but their acceptability as a provider of the education of medical technologists. By this time there was lots of discussion about a proposed Diploma and/or degree through Massey. Clinical Biochemistry Practical Examinations were held in Auckland and Histology and Cytology in either Auckland or Dunedin

Massey, however was not to remain as the practical centre. In December 1979 the idea of decentralized practicals was first mooted. Unfamiliarity with equipment, cost of travel and accommodation (Hospital Boards were paying for this) were some of the reasons why 'home practicals' were introduced. It may have reduced some pressures. It raised others. Examiners had to prepare cultures, reagents etc. and then ferry these around to the various laboratories where the practicals were being run. Examinees were aware who examiners were and watched their every move to try to get a clue on what was going to be asked. Many a wrong conclusion was drawn and reported on the laboratory 'tom-toms' much to the amusement of the examiners. Quite elaborate precautions had to be taken to ensure the confidentiality of the practical papers as some laboratories, to fit in with their work schedules ran the examinations at six in the morning.

The home practicals met a lot of the criticism that had been levelled at the single-site testing although many thought that the lost opportunity to meet other students from around New Zealand was a pity. But home practicals did not overcome the oft and increasingly stated objection that such practicals tested only a part of the syllabus. The day of the logbooks was at hand.

Log-Books

The Board actually started to use logbooks quite a few years before they were introduced for the final examinations. In 1966 a logbook containing 12 quite detailed exercises in each of the disciplines had been introduced for the Basic Training Certificate. Not only did the students have to complete these supervised exercises but the charge and principal technologists were expected to go over these exercises with them testing their knowledge of the basic principles as well as ensuring that the testing protocols had been followed correctly, and that the requisite hours had been done in each discipline. There was many a senior technologist who found a refresher reading on principles and chemical reactions was a must before their orals with their pupils. In December 1976 the Board had a copy of the Dental Technician's logbook presented by Dave Bolitho as a possible model for a log-book in medical technology.

As outlined above, home practicals were well under way in the laboratories, but in the virology and cytogenetics areas they were finding that running six hour examinations that were meaningful tests of the whole range of techniques was just not possible. They sought permission to run a series of moderated exercises stretching over the academic year. The results were positive and encouraging - so much so that the Board determined to run this sort of assessment in all the disciplines. Janet Marsland led a group of representatives from each of the disciplines in seminars where the format and the comparability between the subjects were thrashed out. These were the enthusiasts - easy to convince of the need for change and eager to implement it where it could be shown to be an improvement. The task was not an easy one, but it seemed easy compared to the next step of introduction. Seminars were held in all the main centres where Janet and her team cajoled and coaxed charge technologists, assuring them of all the advantages of the new system which was finally introduced in 1990. Interestingly, the greatest allies of the change were those who were TELARC registered who had by now become both convinced of and used to the systems where documentation was an essential part of all processes. The logbooks fitted the current education theories; they powerfully demonstrated that it was possible to ensure that all parts of the practical syllabus were covered. While the Board remained as an examining body the logbooks were here to stay. The question really was 'how long should the Board remain in the business of examining'?

Competency Documents

By the mid-80's the Chairman of the day was convinced that the Board was not, and never should have been, the examining body. Originally there had been no option, and even if the regulations had allowed it, there was no educational system that would have accommodated the training and examination of medical technologists. Now there was a different climate. Universities, Polytechnics (later Institutes of Technology with degree granting rights) were falling over themselves to attract the custom that the Board could offer. Gone were the days when we had spent long and fruitless hours trying to convince the Hospital Boards' Association that we should be allowed to have a Diploma course through Massey. Gone were the days when endless figures were totalled up and impossible equations were proposed to show that savings in 'Vote Health' could equal the amount required by 'Vote Education' to run the courses. Now the courses were there. Now the funds could come from a different source.

The Chairman persuaded the Board to agree that it set a definitive date to opt out of examinations. The appropriate circular was sent out. Some gentle breezes of opposition had been anticipated. The whirlwind that it reaped was not!! Letters to the Board; letters to the Minister; letters from the Minister. The timing was wrong - the direction was not. The Board realized that the process would have to be somewhat slower. Each 'i' needed a dot and every 't' a cross. We needed to be able to assure everyone that a system was in place that would allow the training and examination of adequate numbers of medical laboratory technologists.

As a Registration Board we had to know with certainty that the courses being run by the Universities and the Institutes of Technology would produce technologists that the Board was prepared to register. Nearly 20 years after its inception the strength of registration was appreciated - we were able to 'call the shots' in the curricula of the trainers.

To do this we needed to produce **'Competency Documents'** against which the tertiary educationalists could plan and measure their courses.

Jan Parker gathered a team around her and produced what are probably the single best set of competency documents in medical laboratory technology produced anywhere in the world. The Competency Documents were developed at a time when there were very active approaches from educational bodies to provide the training and examination of medical laboratory technologists. This was both fortuitous and motivating as it provided a wonderful two-way dialogue between providers and users and there is no doubt that the courses which have materialised from Otago and Massey Universities and the Auckland Institute of Technology have emerged in their excellence with no small credit due to the clear direction that the competency documents gave. They are a credit to everyone involved and they have set the standard in the new climate of education where the Board can confidently step back and do the job for which it really exists - registration of appropriately trained medical laboratory technologists in New Zealand for the protection of the public. It has been a long road and much still lies ahead. But there can be confidence that the direction is right.

A large part of this history is memories - hopefully accurately recalled but no doubt flawed in at least some aspects. These have been supplemented by the Board's minutes and correspondence and thanks is given to the Registration Board and its staff for access to these documents and to their unfailing helpfulness. Helen Robertshawe, a long serving secretary to the Board, to whom the Institute gave honorary membership for all her efforts on behalf of medical technology in New Zealand has been a tower of strength and unfailing in her enthusiasm to dust off archives in search of information.

H1081

MEDICAL TECHNOLOGISTS BOARD NEW ZEALAND

The Medical and Dental Auxiliaries Act 1966

Certificate of Registration

This is to Certify that RODNEY TERENCE KENNEDY is registered as a Medical Technologist in New Zealand, his ~~her~~ name having been duly entered in the Register of Medical Technologists on the FIFTH day of JULY 19 SEVENTY FOUR

Qualifications: C.O.P. in M.L.T.; F.N.Z.I.M.L.T.

Number in Register: 389

Signature of holder: R. Kennedy

Dated this 31ST day of MAY 1978

Seal

J.B. Robertshawe

Secretary, Medical Technologists' Board

1997B—1500/10/77TC

APPENDIX 1
REPORT ON THE CONFERENCE WITH THE DIRECTOR GENERAL OF HEALTH WITH REFERENCE TO REGISTRATION

Messrs Peddie, Sutherland and Ellison waited on the Director General of Health on Thursday August 23rd 1945, and discussed the question of registration.

The deputation stressed the necessity of such a step for the following reasons:

(i) Protection of the Public
Unqualified Bacteriologists who may practice privately would be a danger.

(ii) The Certificate of the Department of Health does not appear to be recognized by such people as the Public Service Commissioner.

(iii) Registration raises the status of the profession and puts it on a footing with medical, dental, pharmaceutical and nursing professions

Following a complete discussion on the above the Director General's opinion could be summarized as follows:

(i) With the advent of laboratory benefits under the Social Security scheme private bacteriologists other than qualified pathologists would be unable to participate. This would eliminate them.

(ii) Steps will be taken by the Department of Health to ensure that only certified Bacteriologists would be appointed to senior positions in laboratories. Hospital Boards will be notified of this.

(iii) The Public Service Commissioner will be advised that the Certificate should be accepted as the highest qualification obtainable by bacteriologists in New Zealand

(iv) It is the intention of the Department of Health with the assistance of Pathologists to raise the standard of examination for the Certificate of Bacteriology and Clinical Pathology and at the same time bring the syllabus up to the present day standard. Enquiries would be made as to the possibility of the Certificate being issued under the name of the University of Otago.

(v) The chief objections to registration are as follows:

(a) It would have to go before Parliament in a special bill. As there are less than fifty certificated Bacteriologists in New Zealand the Minister would not be inclined to favour this.

(b) The name "bacteriologists" includes soil bacteriologists, dairy bacteriologists and so on. Hence it would be undesirable to register only one section and registration of all would be impossible. As the Constitution of the Association allows other than medical Bacteriologists to become members it would be anomalous to have part of the Association registered and others unregistered with equivalent qualifications

(c) Registration imposes certain penalties for infringement of the rigid rules that go with registration.

It is the considered opinion of the deputation that to further apply to the Minister would be undesirable and have little chance of success. We consider that if the Department of Health carries out its suggestion as above much will have been achieved and the necessity of registration will not arise.

APPENDIX 2
REGISTRATION AND MEDICAL LABORATORY TECHNOLOGISTS BOARD MEMBERSHIP - 1964 - 1995

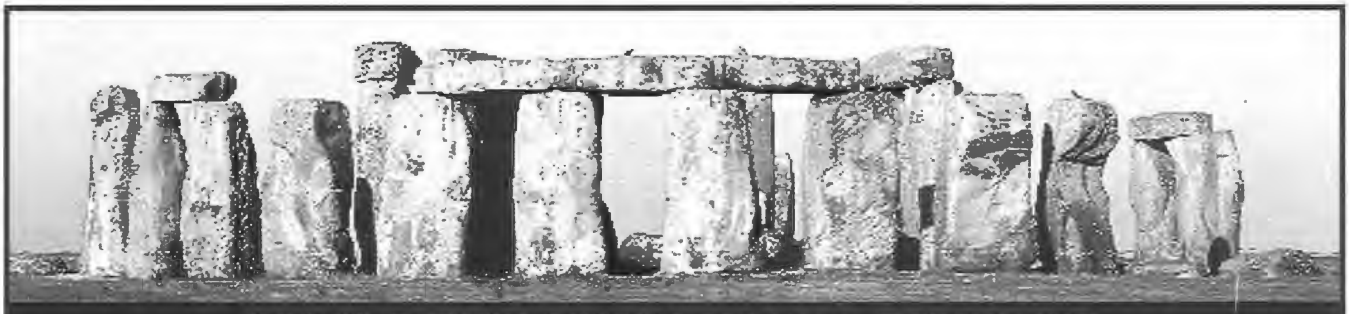
Dr J P Kennedy (Chairman 1964-66)	Director Division of Hospitals	1964 - 66
Dr T H Pullar	NZSP	1964 -66
Dr W S Alexander	NZSP	1964 - 70
Prof N P Markham *	NZSP Ministerial Appointment	1964 - 68 1977 - 82
Mr L Reynolds	NZIMLT	1964 - 66
Mr G W McKinley	NZIMLT	1964 - 65
Mr H G Bloore	NZIMLT	1964 - 70
Dr J D Manning	Director National Health Institute Ex Director Division Hospitals	1964 - 70
Dr C A Taylor (Chairman 1967-71)	Health Department	1966 - 71
Dr F H Sims	NZSP	1966 - 69
Mr M McL Donnell	NZIMLT	1965 - 73
Dr M McKellar *	NZSP	1968 - 74
Dr P H Palmer *	NZSP	1969 - 74
Mr D J Philip (Chairman 1976-91)*	NZIMLT Ministerial Appointment	1966 - 72 1973 - 91
Dr G Kemble Welch	NZSP	1970 - 73
Mr H E Hutchings (Chairman 1973-76) *	NZIMLT Minister of Education	1970 - 76 1977 - 84
Dr R Dickie (Chairman 1971-73) *	Division Hospitals Health Department	1971 - 76
Dr S E Williams *	NZSP Locum for Prof Markham NZSP	1965 1975

Note 1: Those names marked with an asterisk were on the MLTB immediately prior to its becoming a registration board and were appointed to the first registration board in 1973. Professor Markham and Dr Williams served again in subsequent years.

REGISTRATION BOARD MEMBERS SINCE 1973

Mr D A McArthur	Ministerial Appointment	1973 - 76
Mr C S Shepherd (Deputy Chairman 1976 - 85)	NZIMLT Ministerial Appointment	1973 - 76 1977 - 85
Dr J A Fowler	Minister of Education	1973 - 74
Mrs M Nolan (Cambridge)	Minister of Education	1974 - 76
Dr A J B Erenstrom	NZSP	1974 - 76
Dr R R Lycette	NZSP	1976
Dr D Bruton	NZSP	1977 - 82
Mr B W Main	NZIMLT	1976 - 85
Mr A F Harper	NZIMLT	1977 - 85
Dr A J Sinclair	Health Department Division Hospitals	1977 - 82
Mr B T Edwards (Deputy Chairman 1986 - 91)	NZIMLT	1979 - 91
Dr M B Gill Dr J S Mills	NZSP Health Department Division Hospitals	1979 - 85 1981 & 1986
Dr A E White	NZSP (Also qualified MLT)	1982 - 88
Dr K E Ridings	Health Department Division Hospitals	1982 - 86
Dr D G Bolitho	Minister of Education (Also qualified MLT)	1985
Dr A R Chang	NZSP	1986 - 91
MR A D Nixon	NZIMLT	1986 - 91
Mr K McLoughlin (Chairman since 1992)	NZIMLT/NZIMLS	1986 - current
Mr C H Campbell	NZIMLT	1986 - 88
Dr G H Preddey	Minister of Education	1986 - 87
Miss J Marsland	Minister of Education (also qualified MLT)	1987 - 89
Dr E R Dowden	Health Department Divison Hospitals	1987 - 88
Mrs J E Parker (Deputy Chairman since 1992)	NZIMLS	1989 - current
Dr D E M Taylor	NZSP	1989 - 95
Mr M J Chapman	Health Department	1989 - 90
Miss L M Askew	Health Department	1990 - current
Mr P R McLeod	NZIMLS	1992 - current
Mr D M Reilly	NZIMLS	1992 - current
Miss A M Buchanan	NZIMLS	1992 - current
Dr M R Jones	NZSP	1992 - 95
Dr D A Bremner	NZSP	1995 - current
Dr A B M Tie	NZSP	1995 - current

Note 2: The Minister of Education decided not to nominate anybody after 1989 - restructuring and definition in Regulations caused difficulties. Similar reasons created difficulties for the Department of Health after restructuring October 1988 as there was no longer a Division of Hospitals.



SOME OTHER VIEWS YOU'LL DISCOVER

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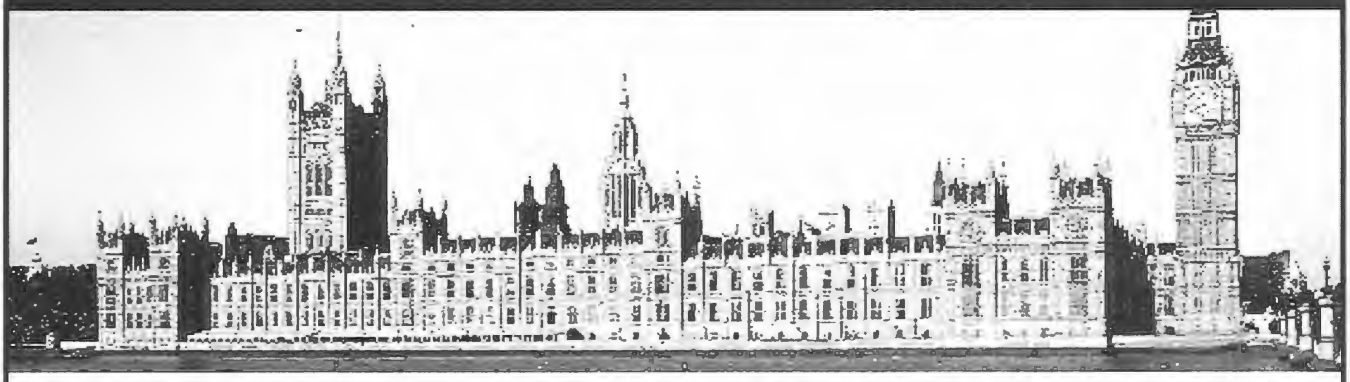

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THE PROFESSIONAL STAFFING AGENCY

The Auckland School of Medical Laboratory Technology

1961 - 1990

In the preface of Jeannette Grey's book, "The First 25 Years of the Auckland Hospital Board School of Medical Laboratory Technology", Dr Stephen Williams, Director of Laboratory Services and Founder of the School wrote:

"The formation of the School of Medical Laboratory Technology was a natural accompaniment to recognition by health services of the high professional role of medical laboratory technology in modern medical practice".

By 1960, the four Auckland Hospital Board laboratories , under Principal Technologist, Doug Whillans, had a growing demand for staff. Rod Kennedy as First Assistant was increasingly filling the role of tutor, in addition to his rostering, training and other duties. On 19th September 1961, the thirteen Laboratory Graded Officers (Auckland) were invited to a meeting to consider a formal Technologist training scheme. A steering committee was established which was later to become the School Council.

At the following meeting, Dr Williams proposed a two year training course in single subjects for laboratory assistants, complete with syllabi, examinations, certificates and badges. This laboratory assistant course was enormously successful. In 1968, the NZIMLT's 23rd Annual Report reported that the Institute had received Health Department approval for the Qualified Technical Assistant and Qualified Technical Officer scheme, which would commence from the beginning of 1969. Thus laboratory assistant training passed to the Institute. The courses were extended to include the whole country.

In 1962, a modest course of lectures for Trainee Technologists began and included:

- an introductory course for trainees
- reading lists and exams - 2nd year trainees
- four monthly programmes at Auckland Hospital - 3rd year trainees
- thesis type projects - 4th year trainees
- advanced lectures - 5th year trainees

Qualified laboratory staff gave most lectures. Trainees from both the hospital and private laboratories attended the School to study for, and sit, the Basic Training Certificate examination, followed by the 'O' level (Certificate) and 'A' level (Specialist) in the major disciplines - Haematology, Microbiology, Immunohaematology and Clinical Biochemistry. A correspondence course was available to those outside Auckland, from the beginning to the end of the school.

In these early years, the focus of the School was more on year I, II, III trainees. Fourth and fifth year lectures were held after work, for which lecturers were paid 14 shillings an hour.

First Introductory Course - 1961

In 1967, a day release system was trialled to allow first year trainees to attend their lectures at the Auckland Technical Institute (ATI). In 1970, the Basic Training Certificate (previously the Intermediate Certificate) was replaced by the NZCS (New Zealand Certificate in Science - Paramedical option). Consequently, trainees now enrolled at ATI for NZCS and the first 3 years of their education. The Senior Tutor of the MLT school, assisted by qualified technologists lectured one morning a week at ATI.

With the change to the nationally available NZCS course and the QTA/QTO moved to the Institute, the MLT School's focus shifted in 1972 to the formal tuition of fourth and fifth year trainees. The expertise within the school was recognised nationally when three tutor technologists were requested to write the paramedical options for NZCS. These were:

- Haematology - Jeannette Grey
- Clinical Biochemistry - Gabrielle Skeen (now Ryan)
- Microbiology - Graham Thorne

A total of seven disciplines were offered in 1972 - Histology, Cytology and Immunology had been added to the traditional four 'majors'.

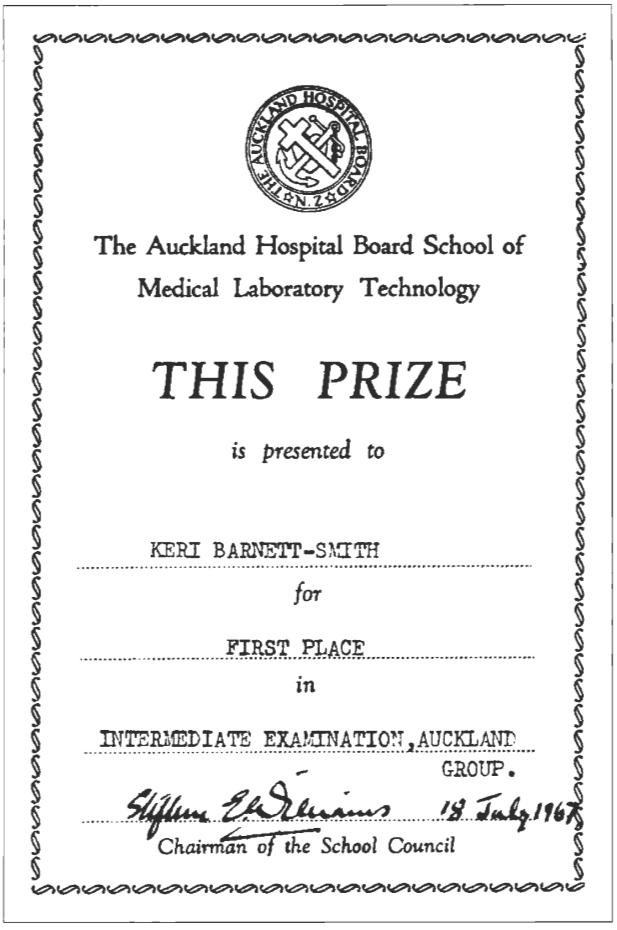
Many Pacific Island students came for short periods before the establishment of the Pacific Paramedical Training Centre (PPTC) in Wellington in 1981. Dr Williams helped to arrange the courses for these students, who were funded by various sponsors. The School issued its own Certificate of Training to these people.

Prior to 1971, lectures and practicals were held in various locations of the hospital laboratory, then the School was able to 'borrow' an old ward as a temporary lecture room in the now demolished Cartley Block. In February 1973, with an hour to spare, the School moved into its first permanent home - a Prefab building opposite the old mortuary. The new overhead projector was a first for Auckland Hospital. By 1987, the School was resettled in it's final home in the old Infectious Disease Block at Auckland Hospital. For the first time, School staff and the classrooms (one large, one small) were housed under the same roof.

Staff recruitment and vocational guidance were a large part of the School activities. The annual trainee - intake interviews involved many weeks of work. Great credit is due to the senior tutors, Rod Kennedy (1961-68), Jeannette Grey (1969-86) and Graham Thorne (1987-90) who provided the leadership and stability needed to develop and sustain the school over 29 years.

In 1988, a joint venture between the MLT School and ATI developed and launched in 1989, the four year National Diploma in Medical Laboratory Science (NDMLS). This was based heavily on the NZCS and MLTB syllabi and logbooks . The days of 'earn as you learn' courses, through being employed but released to attend lectures, were almost at an end.

By 1990, the transition to the NDMLS was complete, with the School closing in December 1990. The Auckland School of Medical Laboratory Technology was unique for it's time and served the Auckland area well, although it's benefits extended beyond provincial boundaries. One wonders if there had ever before been such active participation by a consumer industry in the operation of its education and training programme at a tertiary institution.



The Auckland Hospital Board School of Medical Laboratory Technology

THIS PRIZE

is presented to

KERI BARNETT-SMITH

for

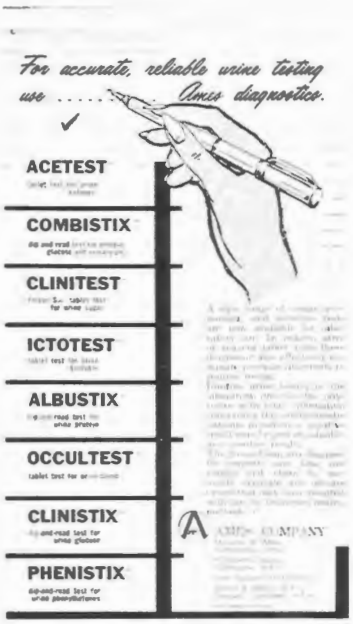
FIRST PLACE

in

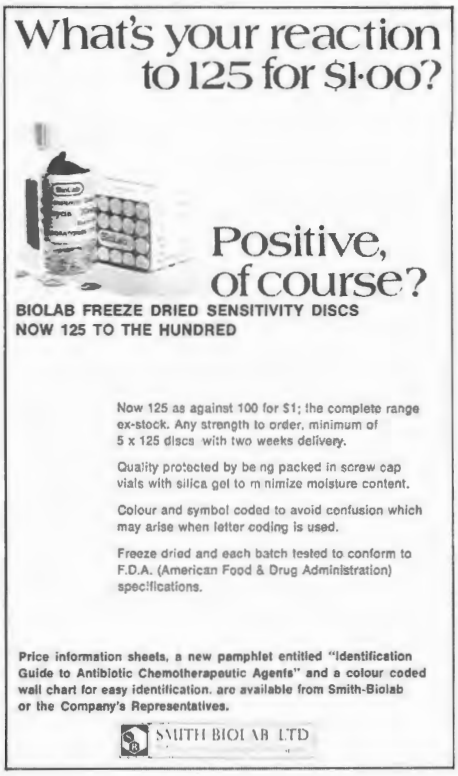
INTERMEDIATE EXAMINATION, AUCKLAND GROUP.

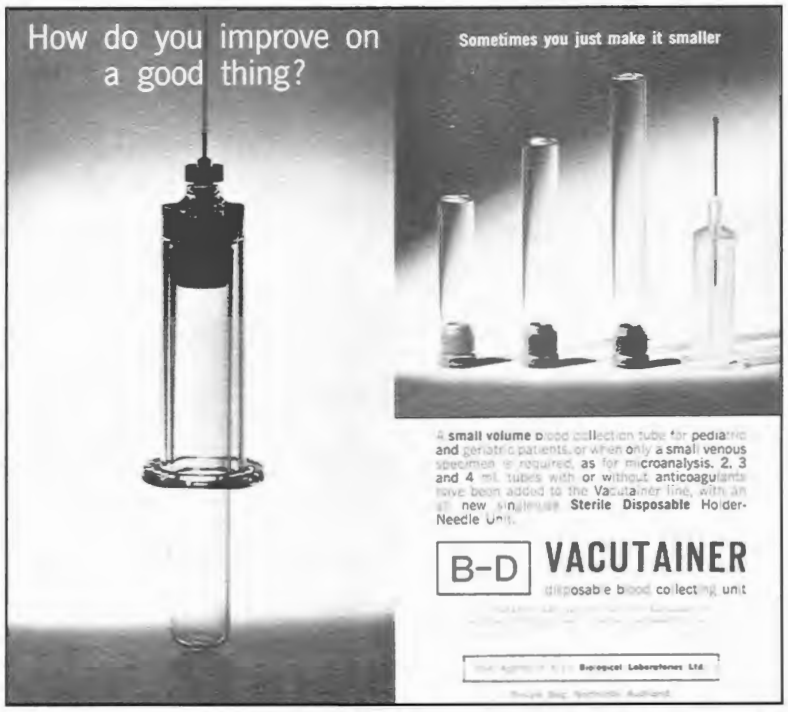
18 July 1967

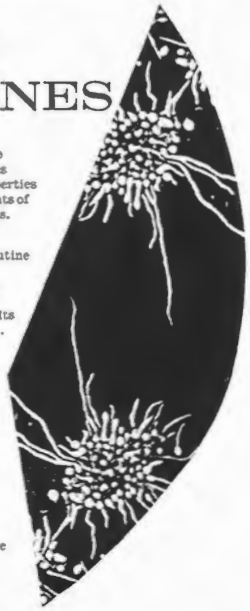
Chairman of the School Council



May & Baker Laboratory Chemicals







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JOURNAL ADVERTISEMENTS FROM THE 1960'S/70'S

Awards

In November 1946, the Council of the New Zealand Association of Bacteriologists allocated the sum of two guineas (£2/2/-) for an essay prize for junior members. This fulfilled the requirements of Rule 27 of the new association, that an annual prize fund be established to be awarded to, 'such Junior Member as shall be deemed fit to receive it', at the discretion of Council. This was the origin of the:

Junior Essay Competition

The winner of the first award, Mr Ron Bridger of Christchurch, wrote prophetically in 1947 on 'The Future of the Bacteriologist in New Zealand'. His essay is reproduced here. At the fourth annual conference in 1948, the award was subdivided into two sections - Technical and Essay. The awards were not conferred every year because of insufficient standard or lack of applicants. The value of the awards was increased to five guineas (£5/5/-) in 1956; $15 in 1966 and $40 in 1973. This award terminated in 1974.

Student Essay Award - 1975

For the best student essay published in the Journal annually. The only real change was that students were required to publish their material, rather than just submit it to Council for judging.

In 1972, the 'Prize Fund' section was deleted from the Rules. From this time to today, it was and still is, the responsibility of Council to 'make and administer awards to members of the profession'. The Procedural Guide for Awards set in 1972 still stands today. This is:

Title
Donor
Nature of Award
Eligibility
Method and Dates of Entry
Judges and Judging
All prize recipients are to be financial members of the Institute

JUNIOR PRIZE ESSAY, 1947
THE FUTURE OF THE BACTERIOLOGIST IN NEW ZEALAND

R. BRIDGER

(*From the Pathology Department, Public Hospital, Christchurch.*)

Laboratory medicine is as yet in its infancy—the foster child of mother Medicine, and as yet a problem child. Where will it end?

Its beginnings were a little less than one hundred years ago. The rise of scientific Bacteriology and Immunity was due to Pasteur between the years 1860 and 1885. Koch placed the science on a firm technical basis between the years 1878 and 1885. After these two monumental figures its development was rapid until its climax came in the evolution of the science of Immunity. Thus were the fundamentals of Bacteriology laid.

At first Bacteriology had difficulty in standing its ground against the prejudices of the medical profession who labelled it a fad. Time, however, showed them their error and the thinking men amongst them began to realise its potentialities. From a profession in which clinical experience was the criterion, Bacteriology showed the way to vast fields of diagnosis and later treatment, enabling them to grasp the intangible microscopic world in which lay the answers to the one-time insoluble riddle of the origins of disease.

Permanent laboratories in hospitals came at a later date and it was not until 1908 that the first one was set up in New Zealand. These were our beginnings.

Although in a state of flux the work of personnel in hospital laboratories is still strictly technical, not requiring any particular knowledge outside Bacteriology. The final word in all these matters is always referred to a Pathologist or in smaller establishments to a senior medical man. In larger hospitals Laboratory medicine is divided into departments each of which is staffed according to the amount of work done. This demands that in order to have sufficient technical training persons from a smaller hospital must spend a specified period in a larger one before sitting the qualifying examination. Even today it is a matter of difficulty for Hospital Boards to recognise unanimously this most important matter of interchange.

The examination system is also in a state of revision and, recognising the need for higher specialised educational training, a proposed Intermediate Examination should soon be appearing. This, coupled with a higher standard in the final examination, points to a larger and more comprehensive knowledge by the persons engaged in this work.

This is, however, merely the first of the steps which a Bacteriologist must take to fit into the expanding science of Laboratory Medicine. Medicine itself, had, like every other profession, a period of apprenticeship — a period in which men of lesser knowledge gave their inadequate but much-needed assistance to the peoples of the world. Its origins were humble, but its results, manifested around us every day, were great. It is only logical to conclude that this must apply also to Laboratory medicine in a modified degree.

The main expansion will, of need, consist mainly of the results of researches into preventive medicine and Immunity. Much of the purely technical side will be taken care of by mechanical means, *e.g.*, experiments on electronic machine for blood counts are even now showing good results in America.

It is in these new fields that the Bacteriologist will have to derive his learning and widen extensively his general medical knowledge so that his application may be more complete. This does not include an encroachment on the medical man's ground, as there is much scope for both Doctor and Bacteriologist in the Laboratory of the future. A new generation of medical men is arising, men who are realising the real need and correct use of Laboratory medicine without sacrificing in any way their clinical teachings.

The examination system will in time be altered radically. Registration will become a necessity, and as the need arises a wider examination system. Eventually a Diploma should be instituted with a representative number of smaller examinations leading up to final examinations as in other professions. Departmental examinations should come under this category, *e.g.*, papers in Bacteriology, Haematology, Biochemistry, etc.

Later these must be supervised by senior Bacteriologists who will also set them, and later still the eventual outcome—a Chair of Bacteriology in the Universities to cater for a Degree course in the Science. This should be the educational aim of the future.

Our Association will expand and with increased funds at their disposal should be able to advise and direct the work of its members and foster schemes of individual and group research and laboratory work. A travelling representative should be endowed with the power to keep a check on members' work and consult with the senior staff in every laboratory to arrange such things as interchange.

Increased meeting power is a nearer and more important issue and a central meeting place should be arranged as soon as funds and conditions allow, for it is only from these that interchange of ideas and study of new research methods can be disseminated.

As the world at large accepts new ideas in the science, men should be able to travel overseas and study in both technique and research at first hand in various international centres.

Hence from this brief resume it can be seen that with the expansion of laboratory medicine and the rise in its members' knowledge, the work will no longer be purely technical, and we can look forward to a new era when the Bacteriologist will become a respected, knowledgable, adequately-salaried and independent professional man, his technical attributes not submerged in any way, but supplemented and improved by newer methods. A member of a profession working side by side with the medical man and helping to keep a finger on the pulse of humanity's ills.

Rex Aitken Memorial Prize - 1961

Biological Laboratories offered, via Mr Jack Callaghan, a prize of ten guineas (£10/10/-) for the best article published in the Journal annually. This new award was in remembrance of his partner, Rex Aitken (43 years), of Auckland, who had died recently. Both men had left laboratory work in 1951 to set up in business selling primarily standardized antibiotic discs. This award was set up for a five year period, from 1961 - 1966, with no award granted in 1964. It had increased to £25 by 1964.

Hilder Memorial Prize - 1967

The 1966/67 Council instituted this prize in remembrance of Mr Fred Hilder, (55 years), who was the Christchurch Regional Representative on Council. $30 was awarded annually for the best Journal article published in the previous year. In 1974 it was modified and awarded biennially for the best Technical Communication. In 1995, its value is $200.

NZIMLT Journal Award

From 1976 this award was conferred for the Best Journal Publication. However in 1979 a major review of Journal Prizes, resulted in a series of Journal Awards in specialist disciplines. These were for the best article in that discipline published over the previous two years, with an award of $200 for each. The categories were for Clinical Biochemistry, Microbiology, Haematology/Immunohaematology and the existing awards of NZIMLT (for other disciplines), Hilder Memorial (for Best Technical Article) and NZIMLT Journal Student Award remained.

The key sponsors of these Journal awards:

Clinical Chemistry & Microbiology	- Roche Diagnostics Ltd
Haematology -	McGaw Dade, then Travenol-Dade, then Pacific Diagnostic, Now Baxter Diagnostic
Other Disciplines -	NZIMLT now NZIMLS
Student Award -	NZIMLT now NZIMLS

Med-Bio Journal Award

This was instituted in 1993 by Med-Bio Enterprises Ltd, Christchurch, to encourage and foster the submission of quality scientific or management papers to the Journal. There is an award of $150 for the most suitable paper in each issue of the Journal.

Smith Bio-Lab Travel Award

This award, which was only presented twice, 1971 and 1974, allowed the recipient (who had presented the best paper at the NZIMLT conference that year), to travel and be accommodated at the Triennial Conference of the Australian Institute of Medical Laboratory Technology.

Ames/Ebos Travel Award - (1977-81)

This award also allowed the best presenter at a NZIMLT conference to travel to the Australian conference. However, the dates of the conference were sometimes too close together and the award did not survive.

NZIMLT Travel Award - (see also IAMLT)

Having joined the International Association, the 1975/76 Council decided to initiate a travel award to allow an official representative of the NZIMLT to attend. This was awarded once in 1978 before it became the:

NZIMLT/Wellcome Travel Award

The criteria for this award required both scientific and professional contributions. In 1993 it became the **Murex Diagnostic Award** when Wellcome Diagnostic Ltd underwent a change of ownership.

Boehringer-Mannheim Biochemistry Travel Award

A $1000 Travel Grant, to attend an overseas Biochemistry conference is awarded annually by Boehringer-Mannheim NZ Ltd for the best biochemistry paper presented at the Annual Scientific Meeting of the NZIMLS. The paper must be published in the NZIMLS Journal. This award has been offered since 1992.

Examination Awards

In 1964, Watson Victor Ltd offered a £5/5/- prize to the top student for the final C.O.P examination, 'Certificate of Proficiency in Hospital Laboratory Practice.' This was accepted but the C.O.P was about to be changed and during 1965/66, further offers to sponsor prizes in specific examination disciplines were received and accepted.

In 1967, £3/3/- was presented to Mrs Pitman to mark her performance in the last (1966) C.O.P in H.L.P examination. For the examinations from 1967, the following sponsors initiated what is a complicated and burgeoning array of awards, for the many examinations at Certificate (Part II or 'O' level); Specialist (Part III or 'A' level) and Technical Assistant examinations.

1967	Watson Victor Ltd	-	Chemical Pathology
	G W Wilton & Co	-	Microbiology
	William R Warner Ltd	-	Haematology and Blood Bank Serology
1968	Johnstone & Johnstone	-	Histology and Cytology

By 1982 there were five QTA disciplines, prizes and sponsors, and thirteen Part II & III disciplines, prizes and sponsors. There were other awards outside the Institute, through the Polytechnics and Auckland School of Technology.

In 1995, with the degree courses just established and the Certificate and Specialists examinations no longer available, the Journal Awards, the Murex Travel Award, the Boehringer-Mannheim Travel Award and QTA Examination Awards are open to all members of the NZIMLS. The degree courses will probably produce their own array of awards for those who excel. To date the following is offered:

Jim Le Grice Award

is an annual award, in memory of Jim Le Grice, who was the Christchurch Council Member when he died in a mountaineering accident in 1993. This award sponsors any student who is a member of the NZIMLS and in full time tertiary education or any qualified technical assistant or staff technologist with less than five years total work experience to attend the Annual Scientific Meeting to present a paper. This award consists of travel to and from conference, accommodation and registration.

Fellowship

The idea of a higher qualification was first floated in 1949. At the annual conference in 1950, Council recommended that a higher qualification be pursued, e.g. Fellowship, to be taken in one discipline not less than three years after the final certificate exam. It was agreed that a higher qualification be pursued. A committee was set up to formulate the terms and conditions and their report was tabled at the 1951 conference, but after unanimously agreeing to the proposal earlier, the conference recommended that any decision be deferred until the pathological societies' decision (i.e. to support or reject the idea) was available, and that a referendum be held after that decision was known.

From positive beginnings the concept of fellowship foundered on indecision and failure to support Council during this time. During the early 1960's attempts made, via notices of motion at AGM's, to incorporate Fellows as a membership class of the Institute were defeated, as was an attempt to embody a grandfather clause into the rules. In the ensuing years there was intermittent discussion at annual meetings but no further progress. A remit to the 1967 annual meeting was successful however, which stated *"that Council be instructed to proceed immediately to elect Fellows of the Institute and to lay down guiding scales as to who is a fit and proper person to be elected as a Fellow"*.

At the November Council meeting a sub-committee composed of Messrs Main, Morgan, Case and Fletcher was appointed to draw up conditions under which fellowship examinations might be conducted. As decided in the past, the examination should be a truly specialist one, in that candidates would probably be expected to submit a thesis or dissertation on some specialised facet of medical laboratory technology. The sub-committee was also asked to investigate the question of Foundation Fellowships and *"these will be offered to qualified technologists of some standing on the basis of outstanding service to the profession but it is not intended that this qualification would be lightly acquired (e.g. on the basis of the length of time qualified)"*. Mr Main presented the sub-committees report to Council at their July meeting in 1968 where it was agreed that the plan be adopted and implemented without further delay. This was announced at the AGM held in Napier that year.

Immediately after the regulations were published, arguments broke out regarding the constitutional propriety of the election of Fellows by the Council. After seeking legal advice, Council resolved at their next meeting that the regulations as published should stand, and in accordance with the rules of the Institute, the Life Members, Messrs Buxton, Ellison, Whillans and McKinley were elected as Fellows. Upon the recommendation of the sub-committee, 47 Founder Fellowships were also approved. The sub-committee further recommended that a number of members be invited to take an oral examination and the 4 successful candidates were also awarded Foundation Fellowships.

At the 1969 AGM, attempts to change the rules, allowing the Institute to hold its own examinations was lost. This had implications for Fellowship but Council decided to proceed with the acceptance of theses already offered with a view to establishing the high standard necessary before asking the Director General of Health to recognise the Institute's exam. To this end, it was agreed to use approved distinguished members of the medical profession specialising in particular subjects, to act as assessors for Fellowship.

The first Fellowship to be awarded by thesis was to Mr T E Millar in 1970 for his thesis on "The Immune Response of Pyelonephritis and Lower Urinary Tract Infection".

In 1978 the rules were changed to include the submission of published work as a route to gaining fellowship. The first recipient, Mr R Douglas, was awarded his fellowship in May 1978.

In an attempt to encourage more members to gain fellowship, the rules were changed in 1982 to include examination as another way to gain fellowship.

The examination included three written papers, some eight hours of examinations, plus the submission of a treatise of approximately 3000 words. The first recipients of fellowship by this route were Mr H C Potter in Biochemistry and Miss C M Hickton in Haematology. They were awarded fellowship in 1983.

Routes to fellowship are:

- by submission of a thesis (original route)
- by exemption (original option)
- by submission of published works (introduced 1978)
- by examination (introduced 1982)

Routes to Fellowship were:

- Foundation Fellow (limited period 1968)
- Life Membership (1969-73)

The number of members presenting for fellowship has fluctuated over the years. However, the foresight of those members in the early years to establish a higher qualification, despite the difficulties encountered along the way, has been worthwhile. Fellowship remains the highest award recognising professional excellence given by the Institute.

This is to certify that

Glenne Findon

was admitted as

fellow

of the New Zealand Institute of Medical Laboratory Science

this 15th day of May 1992

and in accordance with the Registered Rules of the Institute, has satisfied the Certifying Committee of eligibility by

Exemption

'The Pathology of Urinary Tract and Related Infections'

Given under the common seal of the New Zealand Institute of Medical Laboratory Science

PRESIDENT

SECRETARY

DIPLOMA No. 2757

FELLOWSHIP REGISTRAR

1968 - 1969

Bloore, Hugh*	Blenheim
Buxton, E L F	Palmerston North
Donnell, Malcolm*	Auckland
Eales, Marilyn*	Auckland
Jones, Rees*	Auckland
Main, Brian*	Dunedin
McKinley, Gordon	Waipukarua
Ronald, Keith	Whangarei
Rush-Munro, Fredrick*	Auckland
Adamson, D H	Christchurch
Barry, Brian	Hamilton
Beattie, John	Wellington
Bridger, Ronald	Christchurch
Callaghan, John	Auckland
Cannon, John	Christchurch
Clarkson, Kenneth	Lower Hutt
Cole, Ian	Auckland
Corey, F L M	Christchurch
Crawley, William	Hamilton
Curtis, Peter	Auckland
Davis, Graeme	Auckland
Dixon, F C	Nelson
Eccersall, Leon	Hamilton
Ellison, Norman	Wellington
Felmingham, Carlyle	Greymouth
Fischman, Andor	Auckland
George, Gordon	Rotorua
Grey, Mary	Auckland
Harper, Murton	Hamilton
Holland, John	Hamilton
Hutchings, Harry	Palmerston Nth
Jarratt, S O	Palmerston Nth
Jenner, Maurice	Masterton
Johnston, Noel	Auckland
Jones, Vincent	Auckland
Killian, Mary	Auckland
Lyon, Ian	Lower Hutt
Mann, Jim	Palmerston Nth
McDiarmid, Heather	Hamilton
MacKenzie, Ron	Wellington
Meads, Graham	New Plymouth
Morgan, John,	Dunedin
Parker, Rani	Wellington
Paula, M	Auckland
Pearman, George	Hastings
Perry-Johnston, John	Auckland
Saxby, Cara	Napier
Schwass, Alex	Wellington
Shott, Henry	Dunedin
Smail, Robert*	Invercargill
Taylor, Mavis	Christchurch
Wales, Robin	Whangarei
Walker, James	Christchurch
Walsh, John	Auckland
Whillans, Douglas	Auckland

1970 - 1995

Miller, Tom	Auckland
Olive, Hugh*	Wellington
Dawkins, Bruce	Auckland
Johnston, P	
Morris, M R	
Reynolds, L R	Wellington
White, Albert*	New Plymouth
Lockwood, Bruce	Palmerston Nth
Philip, Des*	Auckland
Kennedy, Rodney*	Auckland
Speed, John*	Hamilton
Douglas, Roy	Brisbane
Legge, Michael	Christchurch
Killip, Melville	Auckland
Romain, Dennis	Wellington
Milligan, Les*	Dunedin
Verkaaik, Gerard*	Blenheim
Gratten, Michael*	Papua, New Guinea
Hickton, Christine*	Christchurch
Potter, Howard*	Christchurch
Case, John*	Dunedin
Harper, Alan*	Wanganui
Johns, Allan*	Auckland
McKay, E J*	Hamilton
Nelson, Jan*	Auckland
Rose, Gilbert*	Christchurch
Montgomery, Janet	Papua, New Guinea
Milne, Alexander*	Whakatane
Hattersley, Helen	
Henry, Stephen*	Auckland
Siebers, Rob*	Wellington
Wright, Jackie*	Whakatane
Findon, Glenne*	Auckland
Smith, Margaret*	Auckland

** Current Fellows of the Institute*

Life Membership

Life membership is the ultimate accolade which recognises and acclaims the commitment of a professional to their profession. It was not considered at the formation of the Society in 1945. Perhaps because those worthy of it and indeed the first recipients were more concerned with the recognition and establishment of their profession. Life Membership, Honorary Membership and the election of Fellows of the Institute has not always been consistently applied, with different Councils awarding both Fellowship and Honorary member status to members of our profession where by definition Life Membership was more correct.

1948 The First Life Member

MR E.L.F. (Laurie) BUXTON (Palmerston North) is simply recorded as "in appreciation of his many services to the Institute".

The formation of the N.Z. Association of Bacteriologists was in a large part due to the efforts of Laurie Buxton. He was elected first President 1945. He served on the Salary Advisory Committee, sought the introduction of the Intermediate examination and was appointed the first Bacteriologist examiner for it. He carried out a national sickness and salary survey which contributed to the improvement and consistency of conditions for laboratory staff around New Zealand. His last official duty was as Chairman of the 1954 Conference Committee in Wanganui.

1951 **MR NORMAN ELLISON (Wellington).** A foundation executive member and President (1948-50).

Mr Ellison was primarily responsible for the 1945 draft constitution. Subsequently, much of his work was connected with legal proceedings. In 1949, Mr Justice Hutchison found that *"in my opinion, the operation of hospitals is not a related industry to the operation of hotels, restaurants and the like"*. His honour found that male nurses and laboratory technicians should not be included in the 'Hotel, Hospital, Restaurant and Related Trade Unions' and the word Hospital should never have been added to the title of the Union. This was the outcome sought by the Association.

1954 **MR DOUGLAS WHILLANS (Auckland)** was a 'tower of strength' to the Association.

A foundation member and the Journals' first editor, printer and publisher for five years. Mr Whillans also held various offices on the executive, ultimately serving as President (1951-53).

1958 **MR GORDON McKINLEY (Waipukarau)** served on Council for twelve years and was the Institute's 4th President (1954-56).

A strong advocate and supporter of the profession, he was for many years the senior examiner and moderator for the Certificate of Proficiency examinations.

The AGM of 1968 resolved that *"all Life Members shall be automatically elected 'Fellows'"* and the rules (ref. 8(e)) so altered. Without the option of higher qualification at that time, it appears this was a way of recognising scientific prowess within the profession. The earliest definition of a Life Member was minuted in 1963 (14/12/63) Council Meeting, Wellington. *"The admission of life members be regularly reviewed by Council on the basis of long and meritorious service"*. In 1974 the rules stated Life Members be as being *"any member whom the Council considers has given outstanding service to the Institute and profession of Medical Laboratory Technology."* This definition still stands (1994 rules). Fellowship had become a higher qualification and was no longer automatically conferred on Life Members.

1970 **MR LES REYNOLDS (Upper Hutt),** 5th President (1957 - 1959) and staunch supporter of the work of the Institute.

1973 **MR D H (Stalky) ADAMSON (Christchurch).** Foundation member, he served on Council as both Secretary and Treasurer.

MR HUGH T.G. OLIVE (Wellington). President (1960-62) and political lobbyist in Wellington for affairs of the Institute and profession.

1977*# **MR DES PHILIP (Auckland).** President (1972-74). Professional representative MLTB (1965-92). A proactive leader and participant in all the affairs and issues of the profession. Des has worn bowties from the day in 1952 when he dragged a conventional long tie through a rack of slides covered with crystal violet. Even in retirement Des continues an active and supportive interest in his profession.

*# **MR HARRY HUTCHINGS (Palmerston North).** President (1969-71). Harry was active both with the negotiations arena, particularly CHEO, and professionally as a MLTB member. Within education he was very involved in the proposed Massey Diploma that was prevented by the Hospital Boards Association decision of 1983.

1979*# **MR BRIAN MAIN (Dunedin).** President (1975-77) Brian was fully committed to all work concerned with salary and working conditions for many years.

1980 **MR ALF SAMUEL (Dunedin).** Alf served on Council for five years (1948-54) and was an early technologist involved in the Pacific Islands.

*# **MR MALCOLM DONNELL (Auckland)** President (1966-68). Malcolm was a strong advocate for the profession increasing its recognition and independence.

1981* **MR R D (Bob) ALLAN (Dunedin).** Journal editor for ten years (1971-81), Bob was also involved in the Grading of Technologists.

***# MR F M RUSH-MUNRO (Auckland).**
Respected Microbiologist and Mycologist, deeply involved in the education of technologists. Rush-Munro also took every opportunity to promote the NZIMLT as its ambassador on his trips overseas.

1982*# MR HUGH G BLOORE (Blenheim).
President (1963-65). Hugh was active on the negotiation teams and involved in education for both the C.O.P. and Intermediate levels.

***# MR GILBERT ROSE (Christchurch).**
Journal Co-editor (1958-62). Gilbert was involved on the education scene. He actively promoted the involvement of the NZIMLT and NZIMLS in the Pacific and still does.

1983*# MR KEITH B. RONALD (Whangarei).
Keith was a reliable and strong supporter of the Institute in all its various affairs.

***# MR C. SYD SHEPHERD (Hamilton).**
President (1978-80) Syd was involved in all aspects of education. He was the 'young' member of Council chosen as its roving ambassador to 'sell' Registration to the membership. (1969).

1986*# MR ALAN HARPER (Wanganui).
President (1981-83) Alan was an educationalist, examiner and was a key liaison person with the T.C.A. (Technician Certificate Authority) over the 1980's.

In September 1986, a Life Membership badge was approved and designed. Twenty-five were ordered and distributed to each life member with a covering etter.

1987* MR BARRIE T. EDWARDS (Christchurch).
Secretary (1975-1990) Barrie served a total of 18 years on Council as well as representing the profession on the MLTB and NZ Science Trust.

***# MR RODNEY T. KENNEDY (Auckland).**
Secretary (1969-74). Rod was involved for most of the life of the Auckland School of Technology and was a prime mover for the Paramedical option being added to the N.Z.C.S. (NZ Certificate in Science). He was also an advocate for Laboratory Assistant qualifications.

1988* MR COLVIN CAMPBELL (Palmerston North).
President (1984-86). Colvin led the Institute through its first national strikes and the difficult negotiations of that period. He was also a representative on the MLTB and is current Chairman of the NZ Science Trust.

1989* MR FRANK SMITH (Napier).
A member of the negotiating team for many years, Frank was always a reliable and strong supporter of the Institute.

1990* MR WALTER WILSON (Auckland).
President (1987-89). Walter led the Institute through the splitting off of industrial affairs into a separate body (NZMLWU). He has served on the NZ Science Trust since its inception.

1993* MR A. (Bert) NIXON (Auckland).
Bert was involved in many aspects of education on both the Council (1969-74) and MLTB (1986-91). Over the years he developed and revised syllabi, was involved with Fellowship and co-ordinated the development of the MLTB logbook which replaced practical examinations.

*** MRS JANICE (Jan) PARKER (Dunedin).**
Council member, MLTB professional representative and key facilitator for instigation of BMLSc with Otago University.

***# DR RON MACKENZIE (Wellington).**
Ambassador and key liaison person for PPTC and the NZIMLS in the Pacific Islands.

1994 * MR KEVIN McLOUGHLIN (Christchurch)
Council member and Vice President, professional representative and current chairman MLTB.

As at December 1995, there are a total of 19 life members (*), 12 of whom also hold Fellowship (#)

Previous Journal Advertisements

Honorary Members

At the inaugural meeting in August 1945, it was proposed and carried that '*Friendly Pathologists*' be acknowledged and be given Honorary Membership of the Institute, without voting rights. The first rules do not define 'Honorary Members' let alone a friendly pathologist. However, over our 50 year history there have been many. The first Annual General Meeting in 1946 proposed 13 Honorary members to be elected, if they be willing:

- The Director General of Health
- **Professor C E Hercus** (Auckland)
- **Professor E F D'Ath** (Auckland)
- **Dr W Gilmour** (Auckland)
- **Dr E F Fowler** (Auckland)
- **Dr T H Pullar** (Palmerston North)
- **Dr P P Lynch** (Wellington)
- **Dr J O Mercer** (Wellington)
- **Dr A B Pearson** (Christchurch)
- **Dr M Fitchett** (Hamilton)
- **Dr D J A Doyle** (Napier)
- **Dr K F M Uttley** (Timaru)
- **Dr D N Allen** (Invercargill)

Some of these Pathologists were junior to the others but each was in charge of a laboratory in the Dominion of New Zealand. In about 1950, four more Pathologists were elected as Honorary members taking the number to 17:

- **Dr F J Cairns** (Auckland)
- **Dr S Hills** (Auckland)
- **Dr M G Sommerville** (Waikato)
- **Dr D T Stewart** (Christchurch)

In April 1953, the incoming Council moved that existing Honorary Members would be notified of their continuing membership and any new members would only be by appointment.

1960 • **Mr S Josland,** Chief Bacteriologist of the National Health Institute

1963 • **Dr C W Taylor** of the Department of Health

In 1965 the roll of Honorary Members was reviewed and the AGM resolved to restrict the number of Honorary members to sixteen. Surviving Honorary Members at this date were:

- Drs Cairns, Doyle, Hills, Fitchett, Allen, Sommerville, Pullar, Mercer, Lynch, Uttley, Stewart, D'Ath, Sir C E Hercus, Mr S Josland and Dr C W Taylor

1965 • **Dr Stephen Williams** (Auckland) was elected to Honorary Membership. Dr Williams was particularly a friend and champion of the laboratory assistant who he saw not as 'trained monkeys' but a category of the laboratory staff worthy of training with a qualification to fit them. He took a keen interest in the QTA and its candidates for many years. He was founder and Head of the Auckland School of Technology until his retirement in 1976.

1967 • **Professor N P Markham,** a member of the MLTB (Dunedin).

1973 • **Dr R Dickie,** member of MLTB (Drs Sommerville and Uttley died)

The Rules of 1974 and 1991 state *"Honorary members - any person not engaged in the profession of Medical Laboratory Technology who is considered to have given outstanding service to the Institute or profession".*

"Life members - any member whom the Council considers has given outstanding service to the Institute and profession of Medical Laboratory Science".

However, from 1975, the line and reasoning behind the awarding of Life or Honorary Membership is somewhat blurred. It remains unclear, after multiple references to the minutes, as to why some members, both active or retired, were awarded one or the other. The tendency was for Life membership to those active on the Institute's Council or its subcommittees and Honorary Membership to those who were involved in other areas of the profession.

Technologists (*) recognised by Honorary status tend to be senior members with many years service in the profession.

1975 • **Miss Cara Saxby*** (Napier)
Mr Andor Fischman* (Auckland)
Mr Leon Eccersall* (Hamilton)

1976 • **Dr Peter Booth,** Immunohaematologist (Christchurch)
Mr Jack Callaghan*, Co-founder Biological Laboratories (Auckland)

1977 • **Mr Jim Montgomery*** (Auckland)

1978 • **Ass. Professor Jack W. Hamer** (Christchurch)
Dr Mike Gill (Auckland)
Miss Helen Robertshawe, MLTB Secretary 1972-84 (always and still a true friend to our profession)

1984 • **Miss Joan Byres*** (Auckland) - foundation member
Mr Ian M Cole* (Auckland) - foundation member

1986 • **Mr John Beattie,** Brierley Investments representative on the NZ Science Trust
Dr A G Webber (Australia) AIMLT
Mr J Whitely (Australia) AIMLT
Ms J Martin (Australia) Executive Officer AIMLT

1987 • **Miss Noeline R Davis*** (Hamilton) foundation member
Sister Mary McKeever* (Auckland)
Carl Felmingham* (Greymouth) foundation member
John Holland* (Auckland)
Sir John Stavely, Immunohaematologist, made opportunities for technologists to advance themselves academically (Auckland).
Mr Graeme D C Mead* (New Plymouth)
Miss June Gray* (Invercargill)
Miss Jeanette Grey* (Auckland)
Mr Jim Mann* (Palmerston North) - Executive Officer, NZ Science Trust

1988 • **Mr Brian Barry*** (Hamilton)
Mr John Harper* (Ashburton/Tauranga)
Mr John Morgan* - Council Secretary (1962-69) and Vice President (1969-75) (Dunedin)
Mr D McColl (President Elect AIMLS)
Mr Jack Walsh* (Auckland) - Council Treasurer (1955-59)

1989 • **Mr Alf Johnson*** (Thames)
Miss Janet Marsland* (Wellington)

1994 • **Mr Ian Buxton*** (New Plymouth)

Laboratory Assistants

Laboratory assistants were first employed in Auckland Hospital laboratories in the mid to late 1950's. The late Dr Selwyn Hills, Director of Laboratory Services, believed that they would provide a stable group of workers at economy rates, allowing technologist trainees to be released to attend a formal training programme at the Auckland Hospital Board School of Medical Laboratory Technology. For example, at National Women's Hospital in 1957/58, 10-12 assistants were taken on, replacing that number of trainees.

In 1961 it was decided that a qualification should be offered to laboratory assistants in recognition of the high standard of work done by them. Dr Stephen Williams, Director of Laboratory Services, Auckland, proposed that the School of Medical Laboratory Technology begin a laboratory assistant two year training scheme, with syllabi in single subjects, formal examinations, badges and certificates. Thus the Certificates of Qualified Technical Assistant (QTA) and Qualified Technical Officer (QTO) were introduced. To sit the QTA examination, laboratory assistants must have completed two years practical experience in the subject they wished to sit the examination in. In March and November 1962, the first QTA written (3 hours) and oral examinations were held. 12 candidates sat the first examination in March in the following subjects: Histology, Serology, Blood Bank and Medical Cytology.

To gain the Certificate of Qualified Technical Officer, laboratory assistants must have had 5 years laboratory experience, including 2 years experience post QTA, must prepare a Technical Project and sit an examination consisting of 2 written papers, each of 2 hours duration.

In 1967, the NZIMLT prepared to take over the QTA and QTO certificates from the Auckland School of Technology. Rod Kennedy, an NZIMLT Council member wrote to 190 laboratory assistants throughout New Zealand, 100 of whom appeared to qualify for the QTA training and examination system. $100 was put into a Technical Assistants Examination account to start the scheme. In 1968 the QTA and QTO certificates were approved by the Health Department, and badges and certificates were designed and approved. In 1969, the first QTA examination to be run by the NZIMLT had 35 candidates, including candidates from outside Auckland. The examination consisted of 2 written papers, each of 2 hours duration and the oral examination was dispensed with. The examinations continued to be run from Auckland until 1973 when the task was passed to a committee in Christchurch.

In 1973 there were 159 QTA candidates sitting 11 different examination subjects and 4 QTO candidates. Numbers for the QTA examination remained at 130 - 150 until 1983. In 1984 the number dropped to 115 and in 1985 to 91. In the late 1980's, and early 1990's, numbers dropped to about 80 candidates. In 1995 there were 62 candidates. Numbers for the QTO examination were small, reaching 7 in 1976 and 8 in 1975. In 1976 the Council of the NZIMLT decided to phase out the QTO certificate, and indicated to its members and to the Medical Laboratory Technologists Board that the Institute would not conduct QTO examinations after 1980. This seems to have been a controversial decision, as minutes of the next few Council meetings record the decision as being reaffirmed.

There was no initial requirement to belong to the NZIMLT to sit the examinations but from 1984 only laboratory assistants who belonged to the NZIMLT got a badge and certificate. From 1990 no one can sit any NZIMLS examinations unless they are a current financial member.

Over the years examination subjects have varied, to include subjects such as Animal Husbandry and Intravenous Solutions plus the established subjects. As well as the established subjects, assistants employed in a narrow field could train for a QTA special certificate if their charge technologist prepared a syllabus which was approved by the Examinations Committee. A General Certificate syllabus was written for assistants in small laboratories who could not work solely in a specialist subject but who worked in several or all departments. From 1975 the QTA examination was held once a year, and in that year there were 13 different QTA subject examinations. Following a major review of laboratory assistants in 1992, the NZIMLS restricted the examination to 9 subjects, these being Clinical Microbiology, Haematology, Medical Cytology, Histology, Clinical Biochemistry, Serology, Transfusion Science, Mortuary Hygiene and Practice and Blood Bank. The NZIMLS had found it increasingly difficult to review syllabi and find examiners for examination subjects that had only one or two candidates.

The Medical Laboratory Technologists Board regulations (1989), define a laboratory assistant as "a person who, being responsible to and under the supervision of a medical laboratory technologist, scientific officer, or registered medical laboratory practitioner, is employed in a medical pathology laboratory and engaged in manual or technical work ancillary to medical laboratory technology; but does not include a medical laboratory technologist or trainees." In some laboratories, technical assistants were given the opportunity to develop their skills and undertake all aspects of laboratory work within their department. In other laboratories they were permitted only to do the most mundane of activities. For example, laboratory assistants became an extremely important part of the Auckland Blood Transfusion Service when the 24 hour blood bank service was introduced in 1968. Of the 98 laboratory staff in the department at the time, 64 were laboratory assistants. After 3 months training these laboratory assistants were rostered to be the sole laboratory worker, cross matching and issuing blood in one of the blood banks of the four Auckland Hospitals. Over the years laboratory assistants have been allowed to perform duties far in excess of what they were originally employed to do, resulting in discontent amongst many of them.

In 1986 the results of a questionnaire were published in the NZIMLT Journal. 335 replies to the questionnaire were received from 900 laboratory assistants employed in New Zealand. Only 129 said they belonged to the NZIMLT, with reasons for not joining including the inability of the NZIMLT

to negotiate salaries and conditions of employment for them, and the lack of interest by the NZIMLT in laboratory assistants. Many wanted the opportunity to gain further qualifications in order to gain entry to the Senior Laboratory Assistant scale.

In 1988 a report by Claire Patterson, of the Auckland Hospital Board titled 'Staff Retention and Recruitment in the Auckland Hospital Board Laboratories' stated that the rate of turnover of laboratory assistants in the Auckland Hospital Board was 50%. Reasons for dissatisfaction included lack of distinction between the work of assistants and technologists, low salary and lack of career path.

In 1990 Stephen Smith, a medical laboratory technologist from Waikato Hospital, conducted a survey of laboratory assistants. Many assistants said they worked without direct supervision, and performed shift or call work unsupervised. Most felt they performed the same work and had the same responsibilities as technologists but were not paid the same.

In the late 1980s Kathryn Schollum, Charge Technologist Haematology, Green Lane Hospital, proposed that laboratory assistants who had spent more than 10 years working in their subject should be able to sit the MLTB Certificate examination and if successful become a technologist. However, this proposal did not gain support.

As a result of the perceived discontent of laboratory assistants, the NZIMLS Council decided to address the role of laboratory assistants in laboratories, resulting in a report being written in 1992 by Shirley Gainsford for the Council on 'The role of medical laboratory assistants in clinical laboratories, their relationship with the NZIMLS and their concerns'. The Council hoped that, by defining the role of laboratory assistants in laboratories and addressing their concerns, future employees would be aware of their role and the limits it would place on a career in medical laboratory science. As a result of this report a remit was passed at the 1992 Annual General Meeting defining the role of a medical laboratory assistant as 'a Medical Laboratory Assistant is a person employed to perform routine tasks by following established protocols under the supervision of a Registered Medical Laboratory Technologist'. Consensus was that initially supervision would be direct but after suitable training and assessment it might be replaced with on site supervision by a Medical Laboratory Scientist.

In 1993 a workshop was held to produce a list of suitable tasks for laboratory assistants but the participants felt that this was best done by individual laboratories. Instead it was decided to review all the QTA syllabi with the role definition in mind and include some subjects which would be common to all. For example, safety, basic chemistry, anatomy and physiology and use and care of basic equipment. At the same time, the examination was reduced to one 3 hour paper with Medical Cytology having a practical examination as well.

In 1996 the turnover of laboratory assistants in laboratories is much lower, and they remain important members of the laboratory team in most laboratories.

The AUCKLAND HOSPITAL BOARD

Qualified Laboratory Technical Assistant's Certificate

This is to Certify that

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has completed a two year course of training as a Laboratory Technical Assistant and passed the Board's examination in .....

on ..... *19*.....

Chairman. Director of Laboratory Services.

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The New Zealand Institute of Medical Laboratory Technology

QUALIFIED TECHNICAL OFFICER'S CERTIFICATE

This is to Certify that
Ian Howard Barlow
has completed a five year course of training as a Laboratory Technical Officer and passed the Institute's examination in
Cytology
on October 1972

President

R. Kennedy
Secretary

The New Zealand Institute of Medical Laboratory Technology

QUALIFIED TECHNICAL ASSISTANT'S CERTIFICATE

This is to Certify that
Pamela Dorothy Donovan
has completed a two year course of training as a Laboratory Technical Assistant and passed the Institute's examination in
Immunology (Immunohaematology)
on the 11th day of May, 1985

President

Secretary

The New Zealand Institute of Medical Laboratory Technology

QUALIFIED TECHNICAL ASSISTANT'S CERTIFICATE

This is to Certify that
Alison Michelle Rhodes
has completed a two year course of training as a Medical Laboratory Assistant and passed the Institute's examination in
Haematology
on 9th day of May 1990

President

Secretary

The New Zealand Institute of Medical Laboratory Science

QUALIFIED TECHNICAL ASSISTANT'S CERTIFICATE

This is to Certify that
Rosa Mendes
has completed a two year course of training as a Medical Laboratory Assistant and passed the Institute's examination in
Haematology
on 19th December 1995

President

Secretary

Industrial Relations

Negotiations for Conditions of Employment and Salaries by the Profession

From salaries set by Hospital Boards to the Employment Contracts Act and the formation of the Laboratory Workers Union.

Salaries and conditions of employment for Laboratory Workers. No other single issue has evoked more dispute, conflict or concern amongst our profession than this topic.

Prominent events over the past fifty years include:

- The attempts by an Industrial Union to high-jack a section of our workers in 1949 and the subsequent court action.
- The division that developed between council and part of the membership. This very nearly destroyed the Institute.
- The role of SHEO (The Society of Hospital Employee Organisations) in the 1970's and 80's in our negotiations was critical.
- The Muldoon government wage freeze in 1981 halted all wage negotiations for three years.
- Subsequently this led to major industrial action by us for the first time in 1985/86 .
- The Labour Relations Act 1987 (private sector) and State Sector Act 1988 (public sector) led to the formation of the New Zealand Laboratory Workers Union.

  The Institute now was able to devote all its energies to education and professional matters unsullied or tainted by discussion about money. Perhaps this has led to less spirited and vocal annual general meetings.
- The Clinical Laboratories dispute of 1972 that led to a Special General meeting of the Institute in Hamilton.
- The attempted resolution of conflict between the technical staff and the Pathologist Dr Burkinshaw at Wanganui Hospital.

Prior to 1946 there was no formal structure which allowed for any health employee groups to negotiate formally with central Government. Each Hospital Board had autonomy which enabled it to pay its employees on a scale devised by that Board. Major inequalities arose between the salaries of Bacteriologists in different Boards who were performing substantially the same duties. Relativities between groups of hospital workers was also disparate.

There was a good deal of discussion about the formation of unions or similar groups that would be able to protect the members of the various employee groups.

It was in this climate that the New Zealand Association of Bacteriologists emerged in 1946. Two of the main objectives of the Association were the formulation of equitable and attractive salaries and conditions for members; the other [as indicated in the chapter on education] being the improvements in the education and qualifications of Hospital Laboratory Workers.

In 1946 a clause was written into the Finance Act which covered classes of Hospital Employees. Advisory Committees were set up with Government providing funds for their administration. The hospital service was divided into three groups.

- Industrial awards
- Specific Employee Regulations e.g. Nurses, Laboratory Workers, Radiographers
- Regulation 9 Groups covered by a set of general conditions

Each group had a Salaries Advisory Committee and there was a General Salaries Advisory Committee to review recommendations of the individual Committees.

The first formal regulations pertaining to laboratory workers was promulgated on 8 December 1948. This was The Hospital Employment Regulations 1948 Amendment No 2 and besides providing salary scales for hospital Bacteriologists, Trainees and Laboratory assistants, clauses also covered hours of work, uniforms, overtime and annual and sick leave entitlements.

Some indicative salary scales from 1948

		Per Annum
Hospital Bacteriologist Auckland/Wellington		£850
Sole Bacteriologist Hutt, Nelson, Waipukurau		£725
Bacteriological Trainee Third Year		£295
Laboratory Assistant Third Year		£220
Board and lodging at Hospital	Min	£ 88
	Max	£114
Consumer Price Index (CPI)*		44

** Note this will be used as a comparative indicator throughout.*

**CPI - measures changing cost over specified time of common and current goods and services purchased by private New Zealand Citizens, ie. living expense inflation.*

The Hospital Services Committee comprised the Chairman who was the Director General of Health (D.G.H.) or his nominee, one or two members of the Hospital Boards Association and one member each appointed by the DGH and the State Services Commission. This committee made recommendations to the Minister of Health who sent it to the State Services Commission and the Treasury for comment. Then it went to the Cabinet Committee on Government Administration and then to the Crown Law Office. This was a lengthy process with many months passing before any decision was approved. It was this procedure that frustrated employee groups for many years.

The arguments used for salary increases in the late 1940's have changed little over the years. They were the increased complexity and scope of work, retention and recruitment of staff and inflation reflected in the increase in the cost of living. Our representatives argued well and sometimes long.

Philip remembers that our representatives in the 1950's and 1960's would come home from the various meetings feeling that much had been achieved and that they had done well. However the long processes which then followed and especially the influence of Treasury often meant that although agreement on the original submissions were supported the end result was often unrecognisable. Any member of the profession who has been involved in salary negotiations at local or national level will recognise the enormous amount of work that has gone into submissions over the years.

It is interesting that in 1953 overtime payments for 'on call' work was first introduced. Brian Main indicates that this was regarded as part of the job when he started at Christchurch Hospital in 1951. In the 1960's, every year, conference remits indicate the frustration of what we felt were injustices in our conditions of employment. Special General meetings often became vindictive and argumentative as the Institute salary negotiations team were chastised for not gaining the hoped for and indeed expected improvements.

For Hospital workers at this time it was especially galling that people working in Private pathology laboratories were being paid 10-20% more than the Hospital scale rates. Also some Private laboratories were providing "perks" such as free or subsidised phones, full conference fees and in some cases the use of a motor vehicle.

A national Seminar on Wage Fixing Legislation in New Zealand in 1963 resulted in the then New Zealand Nurses Association actively pursuing the establishment of a wage fixing Tribunal as the alternative to the frustrations of the Salaries Advisory Committee system. Surprisingly the Institute Council in December 1963 decided to stick with the 'status quo' despite recognising the faults of the system.

Salary Scales from April 1, 1962:

	Per Annum
Medical Technologists Scale (a)	£1430 £1530 £1630 £1730
Special maximum for exceptional training, qualification or experience	£1930
CPI	76

The Government set up a committee in 1964 which later became referred to as the Lythgoe Committee . The role of this committee was to consider wage fixing machinery in the state sector. The Nurses' Association argued that establishing a Tribunal mechanism was the most satisfactory method of resolving the problems which health employees had been having in getting a rapid resolution of their pay claims. The Minister of Health was not prepared to institute this system for nurses alone and requested that the Nurses Association consult with the other health professions to gain their views and if possible support for a Health Sector Tribunal. It was also regarded as desirable to gain the support of the Hospital Boards Association.

This action resulted in the formation of an informal grouping of Hospital Employees **CHEO** (Combined Hospital Employee Organisations) with the Institute of Medical Laboratory Technology being a founder though not very enthusiastic member. The Institute President, (Hugh Bloore) suggested that the formation of a Tribunal system of wage fixing could hardly leave the profession worse off than that which currently existed. After over two years of discussion and again great frustration the Minister of Health agreed to the proposition that a change in wage fixing machinery was desirable and that the proposal for a Hospital's Tribunal was the most appropriate alternative.

In April 1966 the Minister stated that it was necessary to press ahead speedily to prepare legislation to establish the Tribunal. Des Philip suggests that future events made this a rather ironic statement.

By 1967 the Institute had enthusiastically endorsed the Tribunal concept with a tremendous amount of work being done. The Institute formed its own Industrial Committee and the Annual General Meeting in 1967 strongly recommended Council to actively pursue the formation of the Tribunal. Because of other Industrial problems, notably the 1967 Railways Strike, the Government set up a Royal Commission to examine Wage Fixing Machinery for all groups paid from central Government funds. *When in doubt or under pressure "set up a Royal Commission"* In 1967 the Institute salary negotiations were held with an Interim Conciliation Committee which really proved to be the first time we had met with a committee that had power to act. By July 1968 the draft Salary and Employment Regulations had been decided and it only remained for the Institute to accept them. The Council did this on behalf of the Institute but many members were not happy with the outcome.

The Annual General Meeting at Napier in 1968 was stormy and not because of the Hawkes Bay weather. As a result of this, the Institute withdrew its support of the negotiated regulations , very nearly self destructed , and formed a new negotiations committee. History does not record whether the 1969 outcome was any more advantageous.

In 1969 the new negotiation committee successfully concluded negotiations with the government committee. The Royal Commission on Wage Fixing reported and provision was made in legislation for a Hospital Service Tribunal.

In July 1970 the Institute resolved to join SHEO [Society of Hospital Employee Organisations.] This organisation commenced with the whole hearted and enthusiastic support of the Institute as it was believed that SHEO would take over all the negotiating and research of salary claims which previously members of the Institute's Industrial Committee had done in their own personal time and often at some personal financial expense but alas it was not to be.

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The SHEO Saga

In the July 1976 Newsletter a thorough discussion regarding subscriptions to SHEO was presented. Jim Turnbull, the first executive officer, described SHEO as an organisation of staff in the Hospital sector which had been set up to safeguard the interests of certain groups of hospital employees and required substantial support to be effective.

Jim Turnbull was well known and respected by the Health Department and in government circles. He gained a great deal of cooperation from the Department and the Hospital Boards Association. There is no doubt that the Government, the Health Department and the State Service Commission all had a desire for a strong, unified and effective hospital employee group with which to negotiate.

The first major success of SHEO was in negotiating Standard Conditions [D.G. 48] which applied across all the groups represented by the organisation. While this was not a great deal as far as the Institute was concerned it certainly helped to unify the smaller numerical groups such as Physiotherapists, Laundry Managers, Child therapists, Dietitians, Hospital Engineers and Psychologists who had not previously enjoyed some of the working conditions which already applied to nurses and laboratory staff. Conditions which were standardised included maternity leave, adult rates applying to both male and female workers, an increase in the 'on call' allowance and a provision for higher duties allowance when 'acting up' in a more senior position. Important conditions which applied in other state services but not to all of the health sector were sickness at home [i.e. paid leave to look after a sick child] jury service leave and a transport assistance allowance. As nursing, and many of the other health professions were a predominantly female orientated occupation these new conditions were regarded as a real gain. SHEO'S star was in the ascendancy.

Laboratory Workers Salary Scales 1971:
Top of scale in each case

	Per Annum
Grade V1	$6780
V	$6565
1V	$6018
111	$5557
11	$5046
1	$4649
Staff Technologist	$4159
Trainee	$3341
Laboratory Assistant	$2921
CPI	116

In 1974 the State Services Commission introduced a new technique for delaying the satisfactory negotiation of wage claims. This revolved around groups from one section of the state being benchmarked with a group in a different section of the state service. The difficulty for a long time was that we did not know who we were meant to be benchmarked with!!. The Nurses tried without success to establish a benchmark with Police. In our case it was admitted finally that we were benchmarked with the science technicians in DSIR, Agriculture etc. Our employers with the connivance of the State Services Commission annually decreed our claims "interservice" because any improvement in conditions or salaries for us could create a flow on effect which other groups could use to try and "ratchet up" their own salaries.

When looking back from the inflation controlled mid 1990's the wage increases which occurred in 1973/1974 are completely mind blowing.

11.1%	From April 1973
6.2%	From August 11, 1973
2.7%	From February 11, 1974

This represented an approximate 20% increase in about one year. In fact the across the board increase for Laboratory workers was 21.8%.

At that time senior scientists salaries increased by $3-5,000 with some significant backpays being collected. In retrospect our payment of 5cents per head per week to SHEO was the best investment most of us had made. In 1974/75 most of the major hospitals had local SHEO committees whose role was communication and to sort out local problems and anomalies. ***Between April 1970 and January 1976 Laboratory workers salaries*** DOUBLED

Telephone rentals for staff on call after hours and at weekends

This issue generated considerable discussion during the 1970's as the Institute tried to establish a common policy around the country. Those that had full telephone rental reimbursed were reluctant to see any change which might adversely affect them. The solution decided on at one major hospital was to reimburse the cost of two telephone rentals among those people who had been on call during the month. This resulted in the rather ridiculous situation of each person getting 36 cents per month. It was known of course that the pathologists whether engaged in clinical work or not had their full rentals paid.

Salary Scales 1975
Top of scale in each case

	Per Annum
Grade V1	$11173
V	$10503
V1	$9880
111	$9044
11	$8213
1	$7608
Staff Technologist	$6860
Trainee	$6111
Laboratory Assistant	$5610
CPI	169

By 1975 the President of SHEO was indicating that the negotiating machinery was too slow and there was a temptation to short circuit established procedures in favour of dramatic measures which appeared to serve other sections of the community so well. This was a reference to Traffic Officers and Prison Officers who had had major increases perhaps because of strike threats. This is important as it is the first indication of the possibility of labour withdrawal in the Health sector. The small groups were still getting great value from SHEO.

In the July 1976 Newsletter further doubts were expressed about the performance of SHEO and especially the payment of subscriptions based on membership numbers. In order to meet the objections of those members employed in the private sector a separate levy ($2.60) was imposed on hospital staff for SHEO subscriptions. In discussion it was agreed that private laboratory staff tended to gain improvements in salaries and conditions which had been negotiated by SHEO for hospital staff and therefore the selective levy was seen as unfair.

At this time the Institute through SHEO were pursuing the possibility of receiving ACC if they had contracted viral hepatitis. A deputation met with the Minister of Health who gave the delegation a sympathetic hearing but later stated that Hospital Boards already had the right to grant this.

By late 1976 SHEO was having difficulty meeting its budget responsibilities. The levy on members was still 5cents per week and council was not prepared to support an increase beyond $3 per annum. Many members had failed to pay the $2.60 levy. Negotiations were stalled by another wage freeze. Not the first in this Nation's history.

In 1977 a settlement was concluded of our salary claims which included two general wage orders of 7% and a general state wage adjustment of 12.6% i.e. a nearly 27% increase on base salary rates. In hindsight perhaps the 1970's were a great period to have been engaged in negotiations on behalf of the profession despite the many frustrations which occurred. We had all finally realised how important Treasury was in settling our claims. If the Government had money available to meet claims which matched inflation the claims were invariably able to be settled despite the posturing of our employers. Brian Main was our Chief negotiator through most of this period. Other members of the team were Des Philip, Colvin Campbell, David Bolitho, Frank Smith and John Elliot.

A change in the constitution of SHEO in 1978 saw NZNA and NZIMLT increase representation on the executive to 4 and 2 respectively. It was becoming obvious that the "wheels" were starting to come off the SHEO organisation. Salary claims reflected concerns about the 'benchmarking' with the Science Technicians occupational class. We were also upset by comparisons with the Radiographers who only worked a thirty five hour week. In support of our claims we reported attrition rates of 27.4% for Staff Technologists and 10.8% for Graded Officers.

By 1980 the seeds of future militancy were first indicated when a poll revealed over 80% of the membership, who responded, being in favour of some form of direct action over a salary claim.

The State Services delaying tactic in the early 80's was to appoint a review panel to travel around and investigate our 'benchmark' claims. Dr Jack Hamer was nominated to investigate the relationship between Radiographers and ourselves. We felt this was appropriate as Dr Hamer was a member of the Laboratory Officers grading committee.

The SHEO budget was insufficient to meet the projected outgoings. While it had earlier been envisaged that SHEO would be responsible for negotiating salaries and conditions of employment it had become obvious that in our case we had done nearly all the work. The negotiating team and council felt that the performance of the SHEO executive officer had fallen far short of our expectations. A decision was made by The NZ Association of Physiotherapists to withdraw from SHEO in 1980. The NZ Nurses Association and the NZIMLT also withdrew their membership in late 1980 which effectively terminated our association with SHEO and led to its collapse. We were no longer prepared to continue our support of the salary negotiations of the smaller groups in the Health sector. Despite being members and supporters of SHEO throughout its existence it was felt we had done most of the work ourselves. A real debt of gratitude is owed by the membership to Brian Main and his team through this period.

In December 1980 a new determination saw an increase in salaries of about 12% across the board. The Institute was communicating directly with the Combined State Unions to get action on some of the interservice problems. These included the minimum nine hour break, transport assistance and access to housing corporation loans. Loans were available to other state workers but not to those in the health sector. No doubt the government was concerned about a predominately female work force getting these benefits.

In 1982 the government led by Rob Muldoon imposed a twelve month wage, price and rent freeze. This was subsequently extended and not lifted until 1984. The 4th Labour government in 1984 devalued the NZ dollar by 20% then reimposed the price freeze. There were no negotiations throughout this period. State rates were adjusted by 7% in what Stan Roger euphemistically described as the 'breakout' from the wage freeze. The Higher Salaries Commission which fixes the salaries of politicians found it necessary to raise rates by 34% in April 1985 to bring State rates back in line with the private sector. It was obvious that during the freeze private sector rates had continued to rise.

The scene was set for Medical Laboratory Technology to enter centre stage.

The Strike of 1986

The first skirmish in this wage round occurred in September 1985. The wage round always seemed to occur in the period leading up to the festive season, probably a deliberate government ploy. There were over 300 determinations or awards in the State Sector to settle though many of them did not even enter the negotiating process. (We always did).

The NZIMLT team were Brian Main, Walter Wilson, Paul McLeod and Colvin Campbell. For the first time we had retained the services of an experienced advocate, John Beattie. He had been successful in settling the Nurses claim after taking them to the brink of industrial action and had gained significant salary increases.

In arguing our case John pointed out that the mood of the membership was quite different from the "subservience" that the profession had shown in the past. How right he was. However the Health Service Personnel Commission dismissed this as rhetoric coming from a professional advocate. The Nurses and Junior Doctors who had threatened strike action managed to settle their claims after the government backed down. A threat from us that we would also take our case for maintaining relativity with the other health professional groups to this level saw the commission ducking for cover. While salary improvements were the main issue a second very important claim was our request for our employers to provide free Hepatitis B vaccination to all laboratory staff. As this was a significant cost to Hospital Boards, they were reluctant to provide this in the interests of their employees. Our threat of going to Tribunal obviously concerned the commission as at the conclusion of the preliminary meeting Judith Scott, from the Commission stated "that when you see the generosity of the Commission's offer you will not need to sub poena anyone".

In hindsight it was obvious that the government did not believe that a relatively small group with no public profile or indeed public understanding of our work would follow up the threat of withdrawing their labour. It had never happened in the health sector before.

A meeting with Hon David Caygill who was the duty minister during the summer vacation proved interesting. The Institute was represented by John Beattie, Colvin Campbell and Walter Wilson. Caygill said at this meeting "When you take on the Government, you cannot win as the result would be anarchy". Many members of the Institute wrote to Ministers of the Crown and their own Members of the House of Representatives which helped to lift the profile of the profession. Reprinted, at the end of this article, is a letter in response to our concerns from Philip Burdon, the opposition spokesman on health.

The strike went ahead on 7th and 8th February 1986. All laboratories had informed the Institute Council Executive of their individual actions they were prepared to take. In most cases this consisted of only providing a limited range of tests on urgent cases. Requests were screened by either senior technologists or pathologists. The real emotional issue highlighted in the media was the provision and cross matching of blood for transfusion purposes. Some senior pathologists assisted in raising the public awareness. Notable was Dr Graeme Woodfield, Director of the Auckland Blood Transfusion centre who indicated that patients could die waiting for blood. Co-ordination in the lead up and during the early part of the strike was effective. There were difficulties for the President [Colvin Campbell] as he was spending most of his time in trains, planes and automobiles without the benefit of modern technology in the form of a cell phone. One day he travelled Palmerston North to Wellington to Auckland and back to Wellington. After an interview for the New Zealand Herald which concluded at midnight, the media made contact again at 5.30 am. It was all pretty hectic and tremendously stressful. Dr Bassett the Minister of Health was also under pressure, finally threatening severe government action if we did not abandon our action. In the event the strike was called off late on the night of the 8th February following advice from our advocate.

The State Services Commission then became fully involved in discussions with the Institute team and the Health Service Personnel Commission taking a back seat. Now we were effectively dealing directly with Cabinet through David Swallow, the Assistant Commissioner of the State Services Commission. He had power to act to settle our claims. On the 12 March he wrote stating "The Government has agreed to the Schedule of Salaries as set out in the Institutes letter." One of the salary scales we had fought hard to get raised was the staff technologist scale because of the retention problems we were having with this group. The top of the scale was set at $27000 (that was $1500 more than we could get from the Health Service Personnel Commission) and represented a further 6% increase.

There can be no doubt that the Institute had given its best and it is heartening to report that the membership was solidly behind the executive. A significant plus was the huge increase in membership that occurred. During this time the membership peaked at 1857. John Beattie's fee for the many hours of work he put in was less than $2000 representing about $1 for each member. This was money well spent when it is realised that most staff technologists gained in excess of $2000 per annum.

Media coverage

A few of the newspaper headlines from the national press are included to show the amount of support that was received. Much of this media exposure was generated by technologists in their own areas.

Hospitals face protest threat
Hospital Chief sees danger in Lab strike
Lab Workers Hold out Dominion 25/1/86

Action Risks Health Evening Post 22/1/86

Lab staff threaten to cripple Hospitals
Christchurch Press

Strike action ends
Some may die waiting for blood
'Tight rope' in Hospitals as Lab strike in second day
They were all good strong emotional words.

Salary Scales March 1986:	
	Per Annum
Grade VI	$43500
V	$41000
IV	$38000
III	$35000
II	$32000
I	$29800
Staff Technologist	$27000
Trainee	$20762
Laboratory Assistant Year Three	$11207
CPI	664

Industrial Relations in the late 1980's

When a review of the 'Principles and Procedures in the fixing of Pay and Associated Conditions Pay Fixing in the State Sector' was published by Hon Stan Roger Minister of State Services in October 1986 it became obvious that labour reform was going to occur in the State Sector. The State Sector Act forced organisations like ours to form themselves into industrial unions if they had over 1000 members. This was the catalyst for the Institute to review its role in industrial relations. It was becoming clear that the role of a professional body and an industrial body were fundamentally different and therefore potentially in conflict. At the NZIMLT conference in Rotorua (1988), the membership voted to establish the New Zealand Medical Laboratory Workers Union (NZMLWU). Since that time, the Institute has had no involvement with industrial issues which has allowed it to concentrate its efforts on education, standards and quality issues of the profession. The Employment Contracts Act (1991) resulted in Hospital employees no longer negotiating with the Health Service Personnel Commission but rather with the each Area Health Board's Chief Executive, who had become their employer.

In less than 50 years the wheel had gone full circle. In 1946 Bacteriologist's salaries were being set by Hospital Boards. In 1995 the employer has again become the Board.

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GRADING AND SALARIES OF SENIOR POSITIONS

The Salaries Advisory Committee, that was established in 1947, laid down maximum salaries for established positions. In addition, the principle was established for the salary grading of Bacteriologists by their Pathologist.

During the decade 1950-60, both Bacteriologists and Pathologists became increasingly frustrated within the systems of both individual and general salary gradings. In the 1960's there were major delays in releasing the results of grading review applications. In some cases delays of nearly two years occurred between application and the final result.

The first salary determination, DG19 (Laboratory Workers), was issued in April 1971. This determination saw the Salary Grading Committee being retained at the pleasure of the Minister of Health. The big plus was that the NZIMLT gained the right to nominate two persons to the new committee. These were a Pathologist and a Medical Laboratory Technologist. The five members of the grading committee were:

A registered Medical Practitioner who shall be a Pathologist.
Director General of Health or his nominee.
Member nominated by the Hospital Boards Ass.
Member from the Hospitals Division of the Health Department.
Nominee of the NZIMLT.

Provision was made for personal application by any Graded Laboratory Officer, who had been on the maximum of his scale for not less than one year. However, this provision was only allowed to apply every five years. The Grading committee was also able to fix a commencing salary above the maximum if there were special circumstances applying.

Progression through each salary grade was automatic. However, Grade 6 (the highest grade) was reserved for those with personal merit. For many years there were never more than about six technologists on Grade 6. These were the Principal Technologists at the following hospitals:
Auckland, Greenlane, Middlemore, Waikato, Hawkes Bay, Palmerston North and Wellington.

As the two major South Island hospitals at Dunedin and Christchurch did not have Principal Technologists, the Charge Technologists were Grade 5. Thus in practise, establishment of a Principal Technologist position determined that, the grading of the Charge Technologists was slightly lower, than where there was no Principal Technologist.

A proposal in 1970 suggested that each Hospital Board should have an establishment of graded positions. This was made by Dr Stewart from the North Canterbury Hospital Board. The proposal was accepted by the Grading Committee and as a result over 100 new graded positions were established throughout the country. This brought the number of positions to 230, with over thirty technologists being on Grade 5.

Two Pathologists who served on the Grading Committee for long periods were Dr D T Stewart and Dr J Hamer. Technologists were Mr Bob Allan and Bert Nixon. Individual employment contracts resulted in the Grading Committee no longer having a role to play so it was disbanded in 1988.

THE PALMERSTON NORTH AFFAIR - CLINICAL LABORATORIES 1972-73

In 1955, Samuel Oswald Jarratt [known to most as Oz or Ossie] was persuaded by some of the General Practitioners in the area to leave the Principal Technologist position at Palmerston North Hospital to set up Clinical Laboratories in Palmerston North. At the hospital he had run a national frog testing pregnancy testing service for a number of years. Former staff of the hospital laboratory can still recall being paid to catch frogs for this purpose after work and at weekends. Oz had also been secretary of the Association of Bacteriologists in the late 1940's so was a well-known member of the profession.

In setting up Clinical Laboratories he continued to provide a national pregnancy testing service and undertook laboratory tests on animals for the local veterinary surgeons. The local General Practitioners were keen for him to provide, at least, a limited laboratory service for their patients on a "user pays" basis. In providing this service Oz preempted political change in the 1980's by thirty-five years. As he was a Bacteriologist and not a "recognised Pathologist" under the Social Security Diagnostic Regulations he was unable to claim fees from the government for this work under the Laboratory Benefits scheme.

In 1957 Dr Ken Uttley a "recognised" Pathologist entered an agreement with Clinical Laboratories Ltd that enabled the Laboratory to receive moneys from the Laboratory Diagnostic Benefit for private General Practitioner testing. The agreement was that Ken Uttley employed Oz Jarratt and Clinical Laboratories to provide an efficient service for diagnostic tests able to be claimed from the Laboratory Benefit Fund . This service was free to local practitioners and their patients. The arrangement was different from those existing in other parts of the country where recognised Pathologists themselves established and ran the private laboratories. It is obvious that the arrangement between Oz and Ken Uttley was beneficial to both parties as it was successively renewed in 1962 and 1967. As part of the agreement Ken Uttley claimed the fees for work done. The fees were paid to his bank account and he then paid a portion to Clinical Laboratories. New equipment was to be financed equally by the two partners. Dr Uttley owed Mr Jarratt [Clinical Laboratories] some $80,000 for his share of the new equipment and maintenance expenditure by 1972.

In July 1972 the partnership was dissolved to take effect in November 1972. Dr Ash Corbett, Chemical Pathologist, at Palmerston North Hospital laboratory joined with Ken Uttley to set up Medical Laboratory in opposition. This effectively left Clinical Laboratories "up the creek" without a Pathologist and as a result they could no longer attract funding from the government for work done.

Although technologists in Public Hospitals had been envious and critical of the rewards being earned by their contemporaries in the private sector a rapid and general mobilisation of wide support occurred. Communications compared with today were relatively slow. No faxes, no telex or internet, coupled with a reluctance to pay for toll calls meant that letter writing was the main form of communication. The Institute reports and correspondence exceeded 500 pages.

This was the first major industrial fracas that mobilised the Institute on a nation-wide basis. It was also the first time that the Institute petitioned Members of the House of Representatives. This long running dispute proved difficult for council and especially the President (Des Philip).

Newspaper headlines had not previously featured the back room workers of the Laboratory. For example:

Lab's Battle For Profits screamed the N.Z. Truth in the April 3 1973 issue.

P.N. Lab promised Aid - Ombudsman to be called in. Manawatu Evening Standard March 22 1973.

Govt said to owe $40,000 to Laboratory. The Evening Star March 19. 1973

Like Clinical Laboratories, The Evening Star, has disappeared from the national scene.

At this time a senior Technologist from Hawkes Bay with origins in Yorkshire accused the then Minister of Health (Hon R.J.Tizzard) of hiding behind his grey faced advisers. As a relatively junior member of the profession at the time this author found the whole affair great fun though it is now recognised how stressful it was for the participants involved.

A stop work meeting was held in the Maori Battalion Hall in Palmerston North to discuss the collecting of donations from Hospital and other technologists to support the Clin Lab staff who were not being paid. This meeting was significant as it was held during working hours and was attended by more than one hundred people from the Southern part of the North Island. Later, the first "called" Special General Meeting of the NZIMLT was held in Hamilton. A bus load travelled to attend this meeting from the Manawatu area and stayed at a camping ground south of Hamilton. A very tired group returned south the next morning.

What had started as a local issue, rapidly escalated to one of national importance and generated a lot of emotion stirring invective and a storm of protest . It was the real beginning of a professional pride by Laboratory Technologists. A recognitition of worth rather than a subserviant service to health. Following a meeting with the Minister of Health, Mr Tizard sent an inspecting team of two Pathologists (Dr O'Brien and Professor Markham) to Palmerston North. They inspected only the new Medical Laboratory facility and declared it capable and competent to carry out all the private pathology for the area. The Institute President queried [respectfully] in a letter to the Ombudsman on 28 March the advisability of using an inspecting team that was in essence enquiring into the affairs of its peers. This was long before TELARC arrived with the principle of peer group review. It was felt that the inspecting Pathologists would have been unable to divorce their report from the bias they must have inevitably had. This was not intended to cast doubt on their integrity but to point out that without an independent chairman they faced an impossible task. The Minister then announced that the benefit would no longer be paid to Clinical Laboratory Ltd. While the local GP'S continued to support Clinical Laboratories the Institute organised a petition to the Minister that was supported by over 7000 signatures.

As a result the Minister backed off and agreed to pay two thirds of the benefit to Clinical Laboratory for one year. This precedent had some important strings attached:

- The Pathologist at New Plymouth Dr D.N.Allen to supervise on a four weekly basis
- Histology, abnormal Cytology and abnormal Haematology to be referred
- Continued efforts to be made to recruit Dr Alex McKenzie from the United Kingdom

In the interim, technologist's from throughout the country and other supporters along with Oz Jarratt continued to pay the staff albeit at reduced rates of pay. This announcement by the Minister enabled staff salaries to be made good, donors to be refunded and helped to make everyone involved feel as though they won the battle. It proved a pyrrhic victory. Dr Uttley died the night the Minister made this announcement. Dr McKenzie (Sandy) when he arrived soon became popular with staff. Although primarily a Haematologist, he was generally trained. He was keen to gain a 1/10th appointment at the hospital but this was denied, perhaps on financial grounds. After one year he returned to the United Kingdom. However, later when the Hospital could not obtain an alternative Haematologist Sandy was appointed. He was welcomed again with open arms to the Manawatu. Truth can be stranger than fiction. As Clinical Laboratories was unable to obtain the services of another Pathologist after Sandy McKenzie left, the laboratory had slowly wound down. Oz continued with some veterinary and industrial laboratory work. The buildings were sold in June 1982. The equipment and staff had gone. Most went to other jobs in the profession or those allied to Medical Technology. Oz Jarratt died in 1988, Ash Corbett retired to Blenheim in 1994.

This was a really important conflict between Pathologist and Technologist about who would have access to the gooses golden eggs but more importantly the value and standing of Medical Technologists.

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1977 THE WANGANUI SITUATION

Mr Brian Main in delivering the Presidential address at the thirty third annual conference in Queenstown commented that each of the recent Presidents had something of a crisis to overcome. 'Such are the slings and arrows of outrageous fortune that we who aspire to high office have to overcome'. In Brian's case it was pointing out the situation that had arisen at Wanganui Hospital. He suggested that this could have grave implications for the Institute and its members. The Institute took the initiative in appealing to the Society of Pathologists to use its good offices in effecting a reconciliation of the dispute between the pathologist and technical staff in the laboratory.

The crux of this matter was that the Director of Pathology [Dr Jim Burkinshaw] had requested the dismissal of the Principal Technologist [Alan Harper] by the Hospital Board on the grounds of 'administrative incompetence'. In turn the technical staff in the laboratory responded by asking the Board to dismiss Dr Burkinshaw on the same grounds. The technical staff were prepared to withdraw services [except

for 'on call'] if Alan was dismissed by the Board. The representatives of the Society of Pathologists and a representative of the NZIMLT visited Wanganui hospital but agreement was not forthcoming.

However the Medical Superintendent Dr W.J. Trezize recommended that no action be taken on either parties claim. Mr Harper enjoyed the full support of his staff throughout this conflict. It is pleasing to report in hindsight that despite an uneasy truce, Alan remained in charge of the laboratory until he retired in 1988. Burkinshaw retired in 1995 due to ill health after an investigation (which made national headlines) revealed misdiagnosis in a number of cases.

Brian Main suggested in 1977 that this conflict could ultimately lead to a running down of a very well run and efficient laboratory service. It is great to be able to report in 1995 that this has not in fact occurred. This dispute was really about who was in charge of the laboratory service Principal Technologist or Pathologist.

Parliament Buildings
WELLINGTON

28 January 1986

Mr C. Campbell
President
The New Zealand Institute
of Medical Laboratory
Technology (Inc.)
Pathology Department
Palmerston North Hospital
Private Bag
PALMERSTON NORTH

Dear Mr Campbell

Thank you for your copy letter to the Prime Minister of 23 January.

I am very aware that you have, in relative terms, been unfairly treated.

I appreciate that you first made a claim in April and that you have been leapfrogged by many other sectors in the health area and while I deplore the way in which so many essential services are now taking strike action I accept that you have been excessively provoked. While I do hope that the strike may not be necessary I understand your concerns and accept that as a last resort it is an option that you are legitimately entitled to take.

I hope it will not come to this but do accept that you have been unfairly treated.

With kind regards

Yours sincerely

Philip Burdon
Opposition Spokesman for Health

Health and Safety

The advent of the 50th Anniversary of Medical Laboratory Technology seems an appropriate time to reflect on the attitudinal, technical and safety changes encountered in the interim. Have we progressed since the days when one hospital lift attendant used to announce the Laboratory as "rats, mice, guinea pigs and eccentrics". Yes, probably, although sometimes as a result we now seem a little tame.

At our advent, the concept of laboratory worker safety had a long way to go. At the AGM of 1947 it is recorded that a survey of laboratory workers revealed 36 cases of work related illness, 26 of which had occurred in the last five years. Included were 17 cases of Tuberculosis (three fatal and two severe), 2 septicaemia's (one death), plus cases of typhoid fever, dysentery, diphtheria, and sepsis following a needle prick injury. Unsurprisingly, a remit was passed that year requesting the introduction of safeguards for the protection of laboratory worker's health. Of interest, through into the sixties, all work related illnesses were reported to the Council and a minute of silence observed in the event of death!

In the early days we mouth pipetted anything and everything, blood, cyanide (blow out first so you don't inhale and die), caustic soda, acids, alcohol etc. Nearly everyone caught either hepatitis or mononucleosis and many of us, unfortunate to stay healthy, envied the sick their paid leave. Little did we know that we were the lucky ones.

Tuberculosis was a very real problem for early laboratory workers with uncapped centrifugation of tuberculous concentrates, gloves and gowns worn, but no protection against aerosols when killing or dissecting tuberculous guinea pigs, and only an occasional Safety Cabinet in sight. However, a remit from 1959 does suggest that paid sick leave should be extended past the customary three months in cases where Tuberculosis was known to have been caught at work.

As late as 1986, a Council authorised safety survey showed the variation in attitudes to the health and safety of workers by different laboratories and employers. One site was identified which considered Biohazard Cabinets unnecessary for tuberculous work. In the same report other safety initiatives reported as being disallowed include hand-free wash basin, hepatitis vaccinations, showers, and fume extraction systems for histology. In the same report however, some laboratories specifically praised their safety conscious employers.

Safety was taught largely by recounting tales of what had gone wrong, and improving techniques accordingly. The story of the person (whether true or false), who wished to have sterile ether, so autoclaved it and blew the door off, succeeded in frightening generations of workers. We learnt more about disposal of reagents after hearing of the plumber who was welding at the bottom of a drain as the pure alcohol came down. We were never sure whether he was permanently or temporarily deafened, but we rapidly learnt about safe disposal of flammables.

Even so, in the early days, most lab. workers treated flammables and flame with a healthy contempt. You could often recognise a lab worker (many of them smoked) by his charred pipe, burnt from being lit at the bunsen burners. As a precaution, one always held one's cigarette behind one's back when using ether or hydrogen.

There were many reports of near misses with fire. It was customary in those days to flame sterilise microbiology slides which had been sitting in a pot of alcohol. Of course the alcohol pot regularly caught on fire, but all knew to put the lid back on to contain the fire. Except for the new trainee who panicked and threw the pot clear across the lab. Flames everywhere, and we didn't even think of calling the fire brigade. The practise of flaming slides went on for many years, until one poor unfortunate knocked over the alcohol, caught himself alight, and ended up with 3rd degree burns. The practice ceased.

Those fortunate (or unfortunate) enough to be employed in a laboratory attached to an animal house, sexed, inoculated, bled and ultimately killed numerous friendly furry little animals. Being attached to an animal house was useful, the facilities were there for private use as well. There was the day a pet cat was to be neutered. "Weigh yourself and then weigh yourself with the cat" was the instruction. The cat presumably weighed 3kg and the boss who was performing the operation decided, post some clever mental arithmetic, that 5.0 mls of anaesthetic was required. We will have to work fast he said, the cat will only be out for 17 minutes. This at 07.30am. Came 0900 hours the cat slept on, lunch time, still asleep, after work, still blissfully unaware. About 2100 his head came back to life and then slowly his legs. Next day the owner remarked to his boss "You know my cat weighed 3kg and you gave it 5 mls of anaesthetic. I am sure they don't give 60kg humans 100 ccs of anaesthetic". In terms of intellect the cat was never quite the same!

There was the occasion when the wife of one of the pathologists was expecting. He decided to teach the older children all about what was happening to Mummy via a guinea pig demonstration. Pregnant guinea pig borrowed from animal house, great excitement and interest in the house as all was explained. Came the day of delivery, all babies stillborn and two days later Mummy guinea pig succumbed to an inverted uterus!

Once a year there were the April Fool jokes. The cunningly contrived exotic leukaemia labelled Lirpa Loof (April Fool) confused and ultimately angered a Pathologist, who spent the entire morning looking for this excitingly new and different patient. When the fascinating vegetative growth from Mrs G Smith turned out to be the brown spot on a Granny Smith apple, again a singular lack of amusement (except amongst those who were in on the joke).

Numerous times we received orange juice for urine, and plasticine for faeces from the ward staff. Today we would probably write an incident report!

Even the scientific testing was a little chancy. We, the aged, well remember the Total Non Protein Nitrogen test as a art form. Boil the test over the bunsen until just before it spurts out then stop, otherwise you will get a low result. Many times we lost the entire sample and had to start again. Or thought we had not lost much and cheated. Pregnancy tests performed by catheterizing reluctant male frogs was exciting. The frogs longed to escape and did so at every opportunity. Petri dishes, test tubes, Pasteur pipettes, and even needles were recycled. Needles were resharpened to remove the barbs, placed in drinking straws cut to size, packed in tins and resterilised. No wonder the patients feared their blood tests.

Although many have happy memories of parties fuelled by laboratory ethanol, oranges injected with alcohol and eaten in front of the teetotal boss, and the 'Alcoholics' on staff who were reputed to replace the ethanol with water until ultimately it was rendered unusable, the practice stopped abruptly when Methanol was mistaken for Ethanol at one Lab party in the late 1960's, and a death ensued. Perhaps this was the point at which we started to grow up, take laboratory safety seriously, and begin the process of sanitation of the laboratories.

This process was given a gigantic boost in the 1980's with the arrival of AIDS. We were luckier than our overseas colleagues in that we had time to prepare ourselves. Probably the only 'good' to come from AIDS was the fact that we specifically focused on the spectre of blood-born diseases and improved our techniques accordingly. Never the less, we struggled for many years with the concept that good laboratory practice was all that was needed to protect ourselves and finally accepted that HIV and Hepatitis infected bloods need not be specifically identified.

All in all they were good and social days. Morning and afternoon tea taken at the bench along with sausage rolls, cakes and a cigarette, playing 500 to pass the time, cutting hair and sewing dresses during work time etc. Although it is nice to work in a safety conscious society, many workers look back with fondness on the good old days when men were men, science was an art form, and laboratory workers were expected to be a little eccentric.

How different today with Telarc Accreditation, Occupational Safety and Health Inspectors, and fiercely imposed safety regulations. Each of us can probably pinpoint the moment in our history where we made the startlingly irregular decision that we did not see why we should harm ourselves while improving the health of others. Biohazard cabinets, vaccinations and the concept of ergonomics were introduced, followed rapidly by many other improvements, until we come to the situation as it is today where, although current litigation still focuses on the concept that it is the messenger and the message rather than the recipient at fault when disaster strikes, legislation demands that workers protect both themselves and others from dangerous work practices.

Probably in 50 years time, current practices and experiences will seem as quaint and possibly as dangerous as those outlined seem to us today. It is hoped that today's workers look back as fondly on today, as those of us who were in at the beginning of Technology remember our early working years.

Habits of yesteryear

Evolution of Laboratory Services in New Zealand

The foundations of present day medical laboratory work were laid in the latter half of the nineteenth century. Technical developments in microscopy and the advent of paraffin embedding, provided the means for applying the concepts originally set out in 'Virchow's Cellular Pathology', to the clinical service of histopathology. The new microscopes with the apparatus and staining methods of Gower, Ehrlich, Sahli and Romanowsky opened up the subject of haematology. The discoveries of Pasteur, Koch, and others led to tremendous developments in microbiology. The blood groups were discovered and Duboscq's colorimeter provided the essential tool for simple tests in biochemistry.

It was the threat of bubonic plague, descending the Pacific Basin countries, that induced the New Zealand Government to set up a Department of Health in the last years of the nineteenth century. Dr J M Mason and Mr J A Gilruth were appointed as health commissioners. Mr Gilruth was a veterinary surgeon who had worked at the Pasteur Institute. He set up the first public health laboratory in Wellington and offered a free service, initially limited to the diagnosis and epidemiology of infectious diseases. Gradually this laboratory, at its Museum Street site, accepted more general diagnostic laboratory work for a variety of medical practitioners in differing types of practice.

In 1901 Gilruth reported the examination of '98 sputa for tubercle, 5 specimens and 150 rats for plague, 30 water analyses, 6 Widal tests and 49 tissues for section'. The remainder of the materials submitted was 'varied including suspected gonorrhoeal discharges, wound discharges, expectorations, a large filter and a sanitary coffin'.

During the late nineteenth and early twentieth century, clinicians were carrying out a slowly increasing amount and variety of 'laboratory tests' in side rooms of hospital wards.

In 1911 a conference of representatives from the recently created hospital boards, recommended the appointment of bacteriologists to Auckland, Wellington, Christchurch, and Dunedin hospitals. The recommendation was accepted and public health work was accepted by these bacteriologists as one function of their public hospital laboratories. In smaller centres, public health laboratories were established about 1920 and many of these became part of the hospital laboratory service about 1925.

The importance of the rapidly expanding and developing hospital laboratory service was recognised and given coherence by a 'Bacteriological Training Scheme' started in 1920 under the authority of the Department of Health. Recognition of this training programme and qualification of 'Certificate of Proficiency in Bacteriology and Clinical Pathology', was in itself, a significant event. Trainees were encouraged by the Department of Health to take university lectures in appropriate sciences, although hospital seniors did not always facilitate their trainees being able to attend them.

There were several early ventures into private pathology in the main centres between 1902 and 1932 but none of these laboratories survive today

In 1946, the 'Laboratory Benefit', the **Social Security (Laboratory Diagnostic Services) Regulations** was introduced. This provided general practitioners and specialists with facilities to obtain laboratory tests, outside the hospital laboratory service, at no cost to them or their patients. From 1946 - 1954, the Laboratory Diagnostic Service Benefit funded both hospital and private laboratories. Initially the fee bias was strongly in favour of private laboratoris. The demand for laboraory benefit services grew rapidly over 1950's/60's as did the number of privately owned laboratories, as they began to compete for the GP/outpatient laboratory work previously referred to hospital laboratories. The Laboratory Benefit, or Schedule as it is often known, lists the tests and their 'fee' negotiated with the government, for which claims can be made. This has always been, and still is, the primary source of income for private laboratories. The table on Community Laboratories shows the establishment and changes within the private or community laboratory service.

From 1955, the "Hospital Statistics of New Zealand" show a 'Vote Hospital' budget expenditure to Hospital Boards to fund hospital laboratory services. However, outpatient tests could still be claimed via the Schedule. This access to the Schedule was stopped in 1963, when the government perceived that some hospital boards were encouraging outpatient tests to gain extra income.

The 1950's to 1970's were the growth years for hospitals and their laboratories, both in numbers and complexity. The specialist disciplines were expanding and gaining formal recognition. Pathology services in larger centres were being divided into units and then departments of Biochemistry, Microbiology, Haematology, Histology and Blood Bank. Cytology was the 'new discipline' being explored and developed in some of the larger centres. All but the smallest hospitals had a laboratory. Automation was being rapidly utilised, antibiotic sensitivity testing was increasingly routine and the Blood Bank Service was developing rapidly. The technology 'boom' of the 1970's only increased the expansion of the laboratory service as doctors and their patients sought to benefit from this 'free' service. In 1971 there were 51 public hospital laboratories and 19 private laboratories.

From 1964 hospital laboratories have had to negotiate with their Hospital Boards (-30/6/89), Area Health Boards (1/7/89 - 30/6/93) and Crown Health Enterprises (CHE) (1/7/93 -) for the laboratory budget. Provincial hospitals such as Whakatane and Greymouth were the real losers, as hospital laboratory budgets had to meet the demands of both hospital and community laboratory tests, because their town did not have a private pathology service.

Meanwhile in the private sector, to qualify for recognition under the Social Security Regulations from 1964, a laboratory

had to be under the direct charge of a pathologist, recognised by the Minister of Health under the terms of the Laboratory Schedule Regulations. The Regulations do not prevent other pathologists or technologists from establishing a clinical laboratory. However, their income can not be derived from the Laboratory Benefit and they have to charge fees directly to the doctors or their patients. This has happened only once since Clinical Laboratories Limited (Palmerston North) challenged access to the Schedule. In November 1989, two medical laboratory technologists, Ngaire Monk and Diane Grimaldi set up business as 'MG Diagnostics'. They offer a national cytogenetics testing service, targeted to the pre-natal population. Either the patient pays for this service directly or the CHE who has referred the patient under its 'aged based criteria', pays the fee set by MG Diagnostics.

The health reforms of the 1990's have affected the private laboratory sector, as well as the hospital laboratory sector, as Regional Health Authorities investigate ways in which to curb the escalation of laboratory services costs - along with all the other areas of cost concern in health.

Expectations about 'rights to health care' have remained high as the economic down turn of the 1980's and the health reforms of the 1990's seek to rationalise the health services offered. There has been much 'belt-tightening' and uncertainty in the hospital laboratories sector. Some smaller laboratories have been closed, or down-sized to 'urgent services' and a sendaway centre or face these threats to their continued existence. Some hospital laboratories have been contracted to private laboratories or formed alliances with larger laboratories, while others remain within their CHE hospital board. Of note, the Canterbury Health Laboratories (Christchurch) and Auckland Healthcare Laboratories (Auckland) have moved into the niche market of specialised tests which are referred by both hospital and private laboratories in New Zealand. In 1995 there are 42 hospital laboratories and 22 private laboratories.

As the New Zealand Institute of Medical Laboratory Science celebrates 50 years, the effects of these health reforms are not yet complete, as community laboratories contract for or form alliances with hospital laboratories and hospital laboratories offer services outside their traditional geographic boundary.

Hospital Laboratories 1995
Ashburton Hospital
Auckland Hospital
Auckland Regional Blood Centre
Balclutha Hospital
Bay of Island Hospital (Kawakawa)
Canterbury Health Laboratories
Dargaville Hospital
Dunedin Hospital
Dunstan Hospital (Clyde)
Gisborne Hospital
Greenlane/National Womens Hospital (Auckland)
Grey Hospital (Greymouth)
Hastings Hospital
Hawera Hospital
Hutt Hospital (Lower Hutt)
Kaitaia Hospital
Kenepuru Hospital (Porirua)
Masterton Hospital
Middlemore Hospital (Auckland)
Napier Hospital
Nelson Hospital
Northland Hospital (Whangarei)
Northshore Hospital (Auckland)
Oamaru Hospital
Princess Margaret Hospital (Christchurch)
Palmerston North Hospital
Rotorua Hospital
Southland Hospital (Invercargill)
Taranaki Base Hospital (New Plymouth)
Taumarunui Hospital
Taupo Hospital
Tauranga Hospital
Te Kuiti Hospital
Thames Hospital
Timaru Hospital
Tokoroa Hospital
Waikato Hospital (Hamilton)
Waipukurau Hospital
Wairau Hospital (Blenheim)
Wanganui Hospital
Wellington Hospital
Whakatane Hospital

DO YOU REMEMBER .....

..... opening the tank of frogs to have them all leap out and escape

..... catching frog escapees, wearing a miniskirt and the boss arrives to find you under his desk

..... frog catching expeditions after work when the young men would try to lure the young ladies into the bushes

..... instructing children how to catch only male frogs !!

"Collect in the mating season and take only the one on top"

..... breeding flies to feed frogs

..... performing pregnancy tests by catheterising frothing, slimy reluctant male frogs

New Zealand Private/Community Laboratories		
1932	Wellington	Medical Laboratory
1937	Auckland	Laboratory Diagnostic Service
1947	Auckland	Pathological Laboratory
1950	Auckland	Medical Laboratory
	Christchurch	Pearson Laboratory
1951	Hamilton	Medical Laboratory
1955	Lower Hutt	Valley Diagnostic Laboratory
1957 - 82	Palmerston North	Clinical Laboratories Limited
1972	Palmerston North	Medical Diagnostic Laboratory Service
1957	Tauranga	Norfolk Laboratory ➧ Tauranga Medical Laboratory (1978) ➧ Medlab Tauranga (1986) ➧ Medlab Bay of Plenty (1995)
1958	Invercargill	Medical Laboratory
1959	Christchurch	Godfrey Laboratory
1960	Napier Hastings Nelson	Medical Laboratory Royston Laboratory Nelson Diagnostic Laboratory
1962	New Plymouth	Diagnostic Laboratory
1967	Gisborne	Gisborne Laboratories
1968	Whangarei	Northland Pathology
1972	Rotorua	Rotorua Medical Laboratory
1975	Auckland	Diagnostic Laboratory = merger of Pathological Laboratories (1947) Lab Diagnostic Service (1937)
1987	Wanganui	Diagnostic Laboratory
1990	Auckland Christchurch	* SGS purchase major shareholding in Medlab Auckland Limited Merger of Godfrey and Pearson's Laboratories ➧ Canterbury Pathology Limited (April) ➧ Med Lab South Ltd * SGS purchase major shareholding in Medlab South Limited (August)
1991	Lower Hutt	* SGS purchase major shareholding in Valley Diagnostic Laboratory
1992	Christchurch Hamilton	Cardinal Community Laboratories Waikato Pathology Limited
1994	Napier/Hastings Dunedin Christchurch	* SGS purchase major shareholding in Napier Medlab and Royston Laboratory to form Medlab Hawkes Bay Dunedin Medical Laboatory expands throughout Southern Regional Health area to form Southern Community Laboratories Southern Community Laboratories
1995	Whangarei Auckland Rotorua Palmerston North Invercargill Queenstown Ashburton	Diagnostic Laboratory Auckland contract Whangarei Hospital laboratory to form Diagnostic Northland Limited * SGS contract Northshore Hospital Laboratory to form Medlab Northshore Rotorua Medlab and Diagnostic Laboratory Auckland form a partnership to form Diagnostic Rotorua Limited * SGS purchase major shareholding in Medical Diagnostic Laboratory * SGS purchase major shareholding in Invercargill Medlab Southern Community Laboratories Southern Community Laboratories

* S.G.S. - Société Générale de Surveillance

Laboratory Benefit Tests - Selected Examples

	Hospital	Private	Hospital & Private	Recognised Private Laboratory Pathologists Only			
	1946	**1946**	**1960**	**1972**	**1983**	**1987**	**1993**
Full Blood Count	15s	£1	15s	$1.50	$5.50	$8.72	$11.80
ESR	5s	10s	5s	$0.50	$1.10	$1.74	$7.90
Prothrombin Time	15s	£1	15s	$1.50	$3.30	$5.23	$10.40
Bone Marrow examination	£1	£1	£2	$4	$21.95	$34.83	$290.33
Blood Groups	50s	10s	-	-	-	-	-
Rhesus	-	-	5s	$0.50	$0.55	$0.87	$3.62
ABO	-	-	5s	$0.50	$0.55	$0.87	$3.61
Antenatal antibodies	-	-	-	$2.00	$2.20	$3.50	$8.66
Wasserman Test	10s	£1	-	-	-	-	-
Syphilis - confirmatory test	-	-	10s	$1	$3.30	$5.23	$6.32
Blood Glucose	10s	10s	10s	$1.00	$2.00	$3.18	$5.68
Blood Cholesterol	£1	£1	£1	$2.00	$2.20	$3.50	$3.76
Blood Calcium	£1	£1	£1	$2.00	$2.20	$3.50	$3.60
Crestinine Clearance	-	-	£1	$2.00	$4.00	$6.33	$8.52
Liver Function Test	-	-	5s	$0.50	$10.50	$16.66	$21.79
Faecal Fat	£1	£1	£2	$4.00	$4.40	$6.99	$46.10
Blood Culture	10s	£1	£1	$4.00	$16.00	$25.38	$29.46
Urine	10s	10s	£1	$2.00	$9.50	$15.08	$17.85
Wound swab	-	-	£1	$2.00	$13.00	$20.62	$13.97
TB microscopy	10s	10s	10s	$2.00	$12.00	$19.04	$28.22
TB concentration and culture	£1	£1	15s	$4.00			
Parasite examination	10s	10s	10s	N.A.	$2.00	$3.18	$14.33
Histological examination	£1.10s	£1.10s	£1.10s	-	-	-	-
Histological single site	-	-	-	$4.00	$11.00	$17.45	$67.31
Frozen sections	-	-	-	$4.00	$32.95	$52.28	$123.69
Cervical Smear	-	-	£1.10s	$1.50	$4.40	$6.99	$16.50
Other sites - cytology	-	-	£1.10s	$3.00	$8.80	$13.96	$49.48

Note: from 1970's, group tests were at reduced rates in recognition of automation.

Computerisation and Laboratories

The 1970's saw the appearance of computers. Laboratories, especially Biochemistry departments, were quick to see the benefits that would accrue from processing the burgeoning amounts of data now being generated from automated analysers. However, capital purchases within hospitals were strictly controlled by the Department of Health and they were very concerned that there would be a blow-out in expenditure on these new toys. A co-ordinated approach was considered necessary. The Health Department set up committees under Dr John Jeffries to examine the possibilities relating to the use of computers in the Public Health Service.

The Health Departments' venture into nationwide computing - an expensive exercise.

Representatives were called together from various parts of the country. The laboratory committee comprised representatives from Dunedin, Christchurch and Auckland. The committees met regularly in Wellington and eventually were formed into the National EPD Committee. In respect of the laboratory, a project was approved for Dr Robin Carrell, Chemical Pathologist at Christchurch, to develop a biochemistry system with interfaces to Technicon analysers.

By the mid 1970's John Blakely was appointed within the Health department to guide the future. To assist, the consultancy firm Touche Ross was contracted to produce a national plan.

Their report was accepted and they were contracted to implement the plan. The basis to the plan was to implement nation wide systems for :

- Patient registration and admissions, discharges and transfers
- Payroll
- Laboratory (later to be called National Clinical Laboratory Computer System or NCLCS)

Touche Ross consultants started arriving from the USA and people were recruited from around the country to work on the systems. Computer sites were established at Christchurch and Auckland, and two large computers from the company Digital Equipment Corporation installed and linked to all main centres. The development of NCLCS involved a number of laboratory staff from around the country meeting in Wellington or Auckland for two or three days per week. Some members came and went. From time to time meetings of considerable size were held with attendees from all laboratories both large and small. Green Lane Hospital Laboratory was eventually selected as the pilot site, however NCLCS was never implemented largely due to the inadequacies of the selected technology. There had always been concern from the project team that a centralised approach to laboratory computing would not work because the technology was not up to it.

Ultimately the laboratory system was scrapped but the experience gained by people on the team was put to good use. Most of them became involved in developing their own systems, eg: The experience gained at Green Lane was channelled into the development of the ICS system (now Gaelen). Eventually the Health Departments computer division was sold to Paxus, one of the first Government privatisation efforts. The only survivor is the National Health Index. It is obviously a matter of opinion whether or not the expenditure of millions of dollars to achieve so little was worthwhile.

TODAY

Community laboratories and CHE's (ie Crown Health Enterprises of one to several hospitals; formerly Area Health Boards; formerly Hospital Board Associations) have purchased different systems from commercial companies including Gaelen (ICS), Detente, Delphic and Cardinal to computerise all aspects of their health data management.

There is automatic capture and transfer of data from analysers to patient files. Comprehensive reports can be produced in hard copy (ie printed) or electronically posted to a clinician's terminal hundreds of miles away. Production of statistics can be left to an overnight search and compiled by the computer, rather than hours of manual counting followed by many more of statistical analysis. The operator is still required to give the computer accurate clear instructions to produce sound results.

Computer literacy and keyboard skills have become as important as legible handwriting in the presentation of laboratory data.

Journal Advertisement 1968

The Changing Role Between Commerce and the Profession

Early commercial contact with laboratory personnel revolved around the supply of basic instrumentation, raw materials and glassware supplied by a few companies, often on an indent basis. The sales representative was almost non-existent and general contact with firms was restricted to the charge technologist and for others, the Christmas party.

In the earlier years, a number of laboratory technologists 'gave up' the profession in favour of the commercial world. These people were seen to be throwing away their hard gained qualifications, and a secure career path by most of their superiors and peers. Often thought of as being highly paid with a company car and expense account, the sales representative was always good for a lunch or buying the beers after work. Undaunted by the criticisms of their chosen path, representatives made considerable effort to maintain what they had learned and add to this the considerable knowledge that was forthcoming from a rapidly developing commercial sector.

The initial reaction to commercial kits was one of "we would never use those - they are over-priced and our own methods are just as reliable". This rejection was first overcome in the microbiology field when laboratories stopped making sensitivity disks and bought them from manufacturers. In the late 1960's, the advent of automation in the clinical chemistry field modified the attitude towards buying ready made reagents, and a major concern over needle stick injuries with the risk of hepatitis in the early 1970's, appeared to change the approach of many laboratory workers to test kits and the commercial sector.

Both the status and value of those representing an ever increasing number of commercial entities, improved rapidly through the 1970's, as laboratories became more aware of the costs involved in producing their own reagents and the service offered by companies improved rapidly.

(JNZAB Vol 6 No. 1 April 1957).

"Mr J R Callaghan 1st Assistant Bacteriologist, Auckland Hospital and Mr R T D Aitken, Bacteriologist in Charge, Middlemore Hospital, have recently resigned from their respective positions and formed a partnership as Consulting Bacteriologists in Auckland".

They founded Biological Laboratories in 1951. Their advertisements for products such as antibiotic discs featured in the journals in subsequent years.

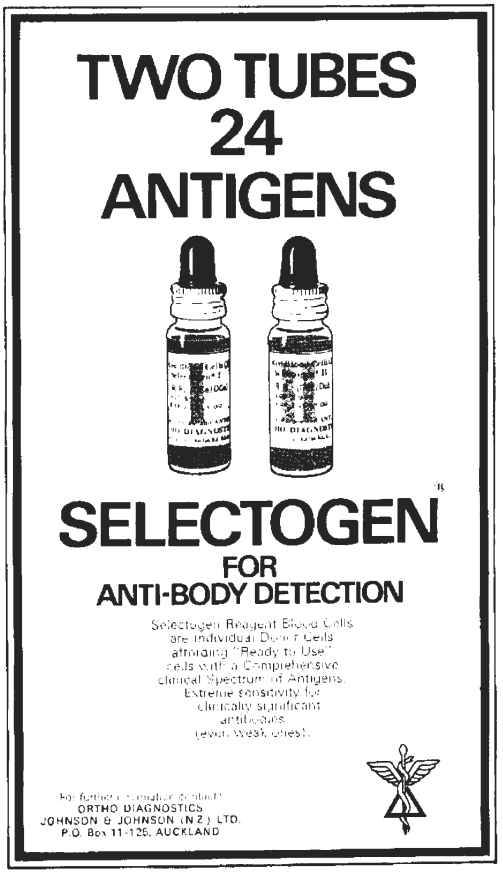
The 1970's hailed the beginning of the revolution/evolution of commercialization of Medical Laboratory Science. The earlier Auto Analysers were the first 'toe-hole' for diagnostic companies. As these became bigger and more dependent on service support, so the laboratory saw more ex Med Lab Techs being 'tainted by commercialism'. This was not only in Clinical Chemistry, but in all other disciplines as well.

The first discrete analysers such as the Abbott ABA-100, Roche Centrifichem and early LKB Kinetic system created the opportunity for the use of the first commercial kits.

The gradual change to kitsets were expedited with the first of the Random Access instruments, such as the Technician RA-1000, BM/Hitachi 705, Cobas Bio/Mira and Abbott Spectrum. At this time the early S.I. units were part of the analytical system with varied performance. In more recent times, the industry has become an integral part of Medical Laboratory Science, not only in Clinical Biochemistry but in all other aspects of Medical Science. This has been primarily due to the advances in technology and the laboratories' dependence on larger automated systems offering reduced turn-a-round time and broader menus. Outside the laboratory, more input and support is given from the industry, with regards to the Annual Scientific Meeting, company sponsored User Group meetings, regional meetings and Specialist Interest Groups.

The NZIMLS certainly recognises the contribution made by the industry and has clearly 'opened the door' with co-operative efforts with regard to the Annual Scientific Meeting, ensuring the needs of the industry are well catered for. Gone are the days of the 'trade' having the corridor to set up in.

In conclusion, the relationship between the industry and the laboratory has developed to one of a partnership. The industry can now offer an alternative and viable career path for Medical Laboratory Scientists.



Journal Advertisement 1971

Laboratory Accreditation
TELARC

The accreditation of medical laboratories was introduced to New Zealand seven years after the registration of Medical Laboratory Scientists. TELARC, was established by Act of Parliament in 1972, as a user funded statutory body, tasked with the promotion and recognition of laboratories meeting international standards of Quality Management and Technical Performance.

In 1979 Telarc introduced its accreditation programme for medical testing laboratories, under the direction and guidance of the first programme manager (Kevin Cooper), and the Medical Testing Registration Advisory Committee (MEDRAC) chaired by Dr Brian Linehan.

The MEDRAC committee of ten included three Medical Laboratory Technologists:

Wayne Chisnall, Biochemistry, Wellington Hospital
Frank Lowry, Endocrinology, Princess Margaret Hospital
Des Philip, Haematology, Middlemore Hospital

Provisional accreditation criteria were published, and by February 1981 twenty-three medical laboratories were working towards registration.

Those laboratories accredited by TELARC comply with stringent requirements in relation to the calibration of test equipment, the competence and training of laboratory staff, test method verification and practice, and a range of other functional and quality management criteria. The quality management criteria are currently defined in the NZ Code of Laboratory Management Practice:1993, a TELARC document embodying the requirements of the International Standards ISO 9002 and ISO Guide 25.

The first medical laboratory registration was granted to Waikato Hospital in October 1977 under the Biological Programme in the disciplines of Microbiology, Transfusion Science, Haematology, Biochemistry, Immunology and Histology. The strong growth in medical laboratory registrations since then, is demonstrated in the graph below.

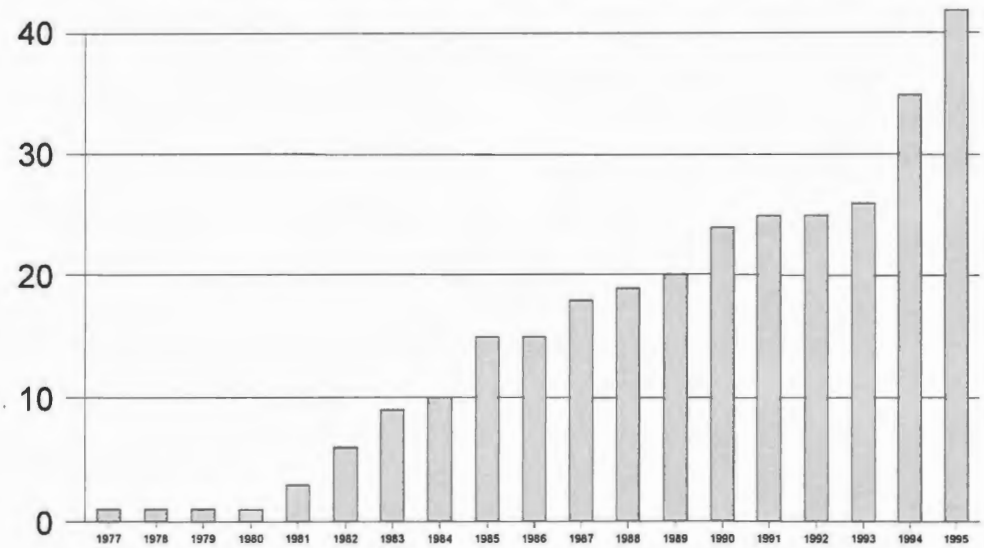
As at 31/12/95, under the direction of the current Programme Manager (Graham Walker), the TELARC Medical Laboratory Programme has 42 registered medical laboratories. (See Table.) The areas of accreditation may include Clinical Biochemistry, Cytology, Endocrinology, Extra Laboratory Testing, Haematology, Transfusion Science, Histology, Immunology, Microbiology, Mortuary, Near Patient Testing, Radioassay, Virology and Quality Management Systems.

Health reforms of the 1990's are making it increasingly important for laboratories to be accredited to meet a minimum standard of practice.

TELARC REGISTERED MEDICAL LABORATORIES - December 1995

Auckland Hospital Laboratory
Auckland Regional Blood Services Lab.
Canterbury Health Laboratories
Cardinal Community Laboratories Ltd
Christchurch Hospital - Endolab
Christchurch Hospital - Nuclear Lab.
Diagnostic Laboratory - Auckland
Diagnostic Rotorua
Dunedin Hospital Laboratory
Gisborne Hospital Laboratory
Wanganui Hospital - Pathology
Greenlane/National Womens Hospital Lab.
Hawera Public Hospital Laboratory
Healthcare Hawkes Bay Laboratory
Hutt Hospital Laboratory
Marlborough Medical Lab. - Wairau (Blenheim)
Medical Diagnostic Lab. Services - Palmerston North
Medical Laboratory Southland
Medlab Hamilton
Medlab Hawkes Bay
Medlab Ltd - Auckland
Medlab South Ltd - Christchurch
Medlab Bay of Plenty (Tauranga)
Middlemore Hospital Laboratory
Nelson Diagnostic Laboratory Ltd
Nelson Hospital Laboratory
Northland Pathology Laboratory
Palmerston North Hospital Laboratory
PathLab Waikato - Hamilton
Rotorua Hospital - Pathology Laboratory
Southern Community Lab. Ltd - Dunedin
Southern Community Lab. Ltd - Christchurch
Southland Hospital - Lab. Services - Invercargill
Taranaki Base Hospital Laboratory
Taranaki Medlab
Taumarunui Public Hospital Laboratory
Thames Hospital Laboratory
Valley Diagnostic Laboratories Ltd
Waikato Hospital Laboratory - Hamilton
Wanganui Diagnostic Laboratory
Wellington Hospital Laboratory
Wellington Pathology Ltd

Medical Laboratory Registrations (1977-1995)



Medical Laboratory Science Trust

"Working to save lives and promote good health by enhancing the standards of Medical Laboratory Science"

N.Z. MEDICAL LABORATORY SCIENCE TRUST

This Trust was formed in 1987. It was recognised by Council at that time that society was changing and the attitude of our employers was also changing.

This was the beginning of the change from state funding to 'user pays' and the 'self support' philosophy. Council recognised that there was not an organisation that had specific responsibility for supporting and funding the aims, objectives and especially the ambitions of Medical Laboratory Scientists in this country.

In retrospect and with hindsight, 1987 was not the greatest year to launch a venture like this. The share market took a nose-dive in October, while ever increasing pressure on laboratory budgets meant that laboratory supply houses were also struggling to "make a dollar". It was not the most opportune time to raise funds for the Trust. While the concept was great, the timing was wrong.

The Trust was launched with high expectations and ideals. It soon became obvious that the Trust was unlikely to attract its initial target of $250,000. In spite of the financial constraints that have existed, the Trust has continued to meet its objectives.

The objectives of the Trust are:

- To promote and assist research by NZIMLS members
- To enhance the education of Medical Laboratory Scientists and thus improve the standard of health care in this country.
- To assist in the provision of equipment, and travel grants to members to further their education and research.
- To assist in publishing important research findings.
- To assist with overseas study and thus keep New Zealand abreast with international developments.
- To liaise with associated organisations both within New Zealand and overseas to our mutual benefit.

The founding Trustees appointed by the Institute were:

- John Beattie, Brierley Investments, Wellington
- Colvin Campbell, Principal Technologist, Palmerston North
- Des Philip, Principal Technologist, Middlemore Auckland
- Walter Wilson, Principal Technologist, BTS Auckland

Barrie Edwards, Charge Technologist Christchurch Hospital later became a trustee. Jim Mann formerly Principal Technologist Palmerston North Hospital, has been the Executive Officer for the Trust since shortly after its inception. Dave Gordon has been Honorary Auditor for the past nine years. The Trust holds a teleconference each year to set direction., to approve the annual accounts, and to confer awards. The chairmanship has changed at regular intervals with Colvin Campbell being the current chairman.

A very professional and expensive public relations firm launched the Trust at the Nelson conference on the 18th August 1987. The Institute has continued to support the Trust with some of the conference profits being donated to the Trust from time to time.

Abbott Laboratory Award

The Trust would not have been able to meet its objectives without the generous support of Abbott Laboratories. For six years Abbott have donated a sum of $5,000 annually to the Trust to assist members to attend conferences and seminars within New Zealand and overseas. The Abbott award has been very valuable in enabling members to attend the National Immunohaematology Continuing Education (NICE) weekend..

It became obvious early in the Trust's existence that the hopes and plans were unrealistic so the direction has changed. It has slowly but steadily built up its funding base. The Trust is now viable and ongoing, with a stable financial base supported significantly by the annual Abbott award.

The Trust continues to investigate other sources of funding so that other branches of Medical Laboratory Science can also receive specialist support and funding. Since the Trusts inception twenty three awards have been made to a total value of $28,000, due largely to Abbotts support.

The Trust has made a significant contibution to the advancement of Medical Laboratory Science.

Pacific Paramedical Training Centre

Some of the more senior members of the Institute may recall the modest efforts made back in the 1950's to assist the emerging hospital laboratories of the Pacific Island Region. Few training opportunities existed for technical staff in the Pacific Islands at that time. An occasional Government scholarship was made available to attend the five year laboratory training programme in New Zealand, but this resulted in little improvement to the Pacific Laboratory Service overall. This situation continued throughout the 1960's and 1970's until Dr Ron Mackenzie and Professor Sandy Ford, both from the Department of Laboratory Services at Wellington Hospital, developed the concept of short term technical training courses for Pacific Island laboratory technicians. With the goodwill of the Wellington Area Health Board, NZ Ministry of Foreign Affairs, NZ Institute of Medical Laboratory Technology and The NZ Red Cross, the Pacific Paramedical Training Centre was established on the Wellington Hospital Campus in 1980. Thus began the short term technical training courses which have done so much to advance the Pacific Island Medical Laboratory Service.

The first courses provided by the PPTC were of three months duration and covered only medical microbiology and blood bank technology at a basic level.

Over time the scope and nature of the courses have changed to meet the developing needs of the Pacific Island medical laboratory service. The Centre consults with the Island Medical Authorities and the World Health Organisation on the major medical problems that are affecting the islands, and how the skills of the local laboratories can be upgraded to meet the challenges of reducing the morbidity and mortality, especially of infectious diseases. Thus in recent years courses have been held in the topics of: water and food microbiology, diarrhoea and acute respiratory disease microbiology; basic clinical chemistry; laboratory equipment maintenance and repair; sexually transmitted diseases; infectious disease serology; HBV/HIV; basic haematology and QA/QC. Courses planned for the future include laboratory management and up-skilling courses in various disciplines. The Centre also collaborates with the Health Ministry of Western Samoa in the organisation and conducting of a three year Medical Laboratory Technician Certification course for Western Samoa and Tokolau Islands. Two complete courses have been held to date and seven technicians have graduated.

Trainees at the P.P.T.C. 1988

The training philosophy of the PPTC established in 1980 remains the same today.... The transfer of Medical Laboratory Technology which is appropriate for the work setting in which it is employed, is reliable in the test results produced and is affordable and sustainable by the laboratory concerned.

By 1991 the PPTC had earned a reputation internationally as a Centre of Excellence and was invited to become a Collaborating Centre of the World Health Organisation. This status gave official responsibilities to the PPTC for a range of Medical Laboratory programmes in the Pacific Island Region. These include training and laboratory development, quality control, consultation and advisory services. From these tasks an extensive network has been developed throughout the Pacific Basin, and includes the Pacific Island Quality Assurance Programme which now serves twenty laboratories in eighteen different countries. This programme involves sending out samples for analysis on a monthly basis for eight months of the year. All individual replies to participating laboratories are designed to assist the laboratory to improve its standards and service.

To date some 500 laboratory workers from all areas of the Pacific have attended training courses and in addition there have been trainees from China, Korea, Indonesia, Africa, Philippines and the Lao Peoples Democratic Republic. The PPTC has made, and continues to make, a significant contribution to the New Zealand Overseas Development Aid Programme. The PPTC has succeeded as a unique training venture for a variety of reasons and enjoys the support of the New Zealand and Pacific Island Governments, NZ Institute of Medical Laboratory Science, NZ Red Cross and the World Health Organisation. But in large measure the success of the PPTC has been due to the goodwill and support of many NZIMLS members who have given so much voluntary teaching time over many years.

The role of Tutor Co-ordinator to the Centre has had three incumbents since it began in 1980. Andrea Hall was the foundation Tutor-Coordinator, followed by Mike Lynch in 1985. Gilbert Rose has served as relieving Tutor-Coordinator while Mike Lynch has been on overseas assignment with the World Health Organisation. Technical support for the training programmes has been provided by Christine Story on a part time basis over the past nine years.

A strong working relationship now exists between the NZIMLS and the PPTC, with the Centre serving as the Institute's vehicle for overseas aid projects. This partnership has proved rewarding for both organisations and has made a substantial contribution towards the development of the Pacific Island Medical Laboratory Service.

The Role of NZ Medical Laboratory Technologists in the New Zealand Colombo Plan Surgical Teams VIETNAM 1963 - 1975

The NZIMLS can take considerable pride in the part that its members have played overseas in time of war. It is perhaps fitting that on the occasion of the Institute's 50th Anniversary, before looking at the Vietnam saga, we first look back a full 50 years to the Second World War. The years 1941 - 1945 were in some way the genesis years of the Institute. It was during this time that some 33 technical staff served in the three New Zealand Army General Hospitals in the Middle East and Pacific War theatre. This group served with distinction, and following the war took up senior positions in New Zealand hospital laboratories. Many of their names are found in the foundation membership of the NZ Association of Bacteriologists.

..... Another time, another war, and another generation of medical laboratory workers. This time however, they were not to serve in the armed forces, but as members of civilian surgical teams based at the Province Hospital in Qui Nhon, Vietnam. This programme began in 1963 as part of New Zealand's Colombo Plan assistance to South East Asia, and continued for 12 years until the end of the Vietnam War in 1975. Each surgical team worked for a period of one year in Vietnam, and consisted of a surgeon/leader, anaesthetist, two nurses and a medical laboratory technologist. The composition of the teams and number of team members varied as the scope and workload of the teams increased over the years.

The role of the medical laboratory technologist in the early years was to provide basic laboratory tests and a blood bank facility for the surgical team. This sounds a simple task for a well trained New Zealand medical laboratory technologist. But to achieve this in Vietnam in the 1960's was difficult indeed with make-shift equipment and a population who were adverse to donating blood. With the expanding role of the teams in the late 1960's and improvement in the laboratory facilities, the laboratory became involved in additional work areas. These included public health investigations, blood transfusion service development, and the establishment of a laboratory at the Holy Family Hospital which was later to become the Qui Nhon City Hospital.

Some nine New Zealand Medical Laboratory Technologists served with the Colombo Plan Civilian Surgical Teams between 1963 and 1975 and for each one it was both an enriching and humbling experience. Contact with the laboratory at the Province Hospital in Qui Nhon has recently been re-established by former team members and a move to provide further assistance to the laboratory is presently under way. Medical Laboratory Technologists with the NZ Surgical Teams 1963 - 1975 :

- Ron Mackenzie
- Ian Orchard
- Gerard Verkaaik
- Bruce Dawkins
- Jim Mann
- Graeme Paltridge
- James Marr
- Martin Hampson
- Peter Skidmore

Letter from Vietnam

(AUCKLAND BRANCH NEWSLETTER, SEPTEMBER 1966)

Bruce Dawkins writes... "the laboratory consists of a room the size of the APH cafeteria, tiled floor, benches around walls, ceiling fan and window ventilation. About 5 - 6 months old but somewhat neglected in cleanliness. Dust problem - wind drives dust thru any crack or crevice - constantly wiping things. Large fridge, small centrifuge, Adam's serofuge, small water bath and hot-air oven, large 37°C incubator, Barnstead still, Spencer microscope (poor), masses of glassware, assorted unused chemicals - much gear left over from Ron MacKenzie and not used since. Unfortunately most is unusable. Most equipment and reagents can be ordered, but no firm delivery time can be given - it could be one month or two years! Everybody over here is in the same boat.

Tests: - Hb, WBC, diff, ESR, platelet count, RBC, VDRL, haematocrit (micro), bleeding and clotting, malaria, urinalysis, Widal, crossmatch, Mantoux, parasites in stools.

Staff: - 3 men. 2 trained for 2 years in school at Saigon, the other one a crash course for 6 months. Quality of work quite good, but they are not required to maintain a high standard and so controls have disappeared. This is one of my jobs - upgrading present standards.

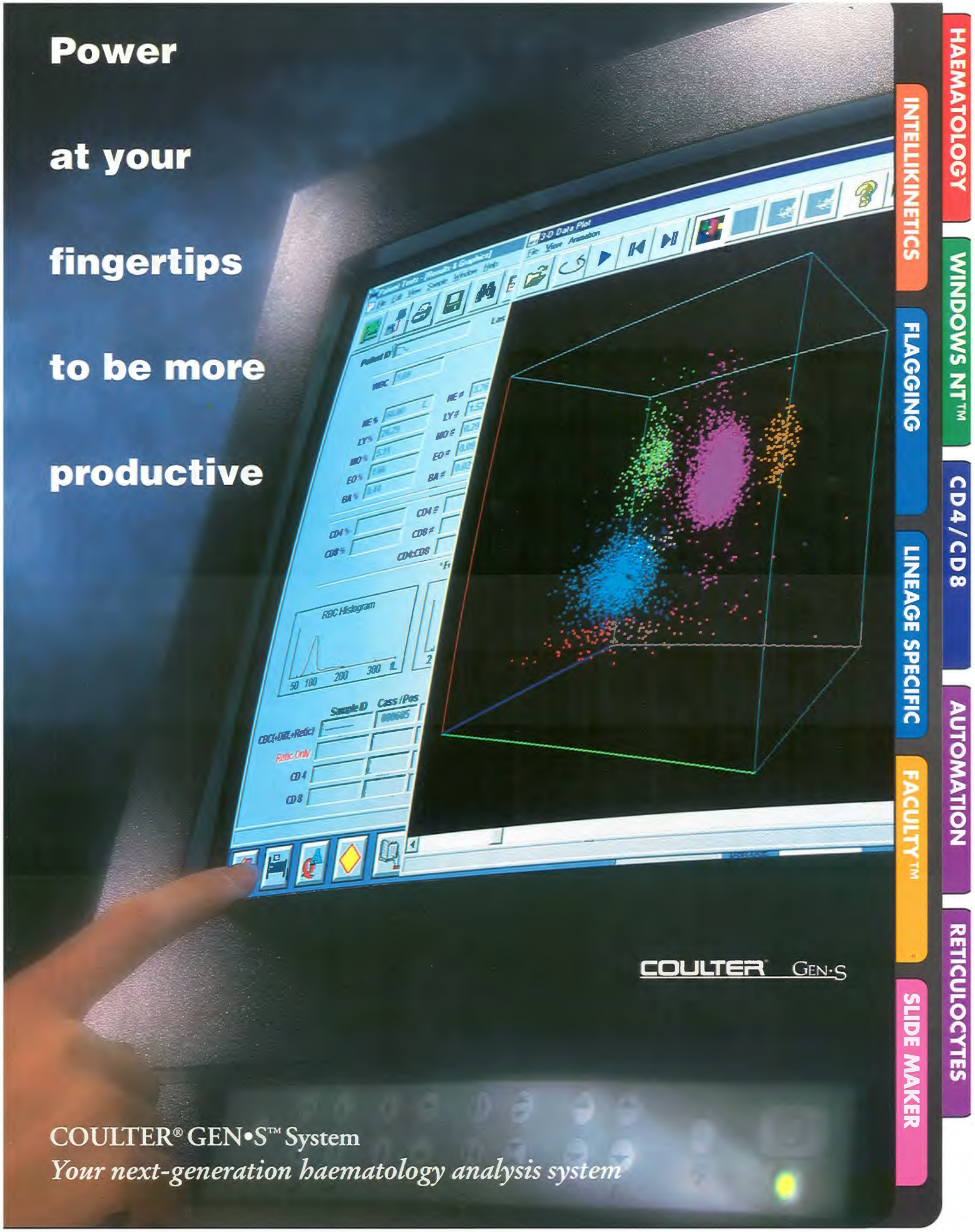
Range of tests will have to be increased - my other job is to set up and train the boys to do the work accurately. These lab technicians are intelligent and are quite capable of high standards but their doctors do not require the same. I have learnt as much as I have taught, so far.

Unfortunately the Lab School, like the Medical School, is based on French thought, which appears to be 2-3 decades behind our teaching - this teaching, together with the language barrier, could appear to be the greatest challenge.

A persuasive bending, rather than trampling down, is the most effective policy. This most important thing I have learnt - make haste slowly!"

For anyone wishing to write to Bruce, here is his address:-

- C/- NZ Surgical Team
  APO 96238
  San Francisco, US



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