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NEW ZEALAND JOURNAL OF

MEDICAL LABORATORY SCIENCE



OFFICIAL PUBLICATION OF THE
NEW ZEALAND INSTITUTE OF MEDICAL
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NEW ZEALAND JOURNAL OF MEDICAL LABORATORY SCIENCE

VOL. 47 No. 3 AUGUST 1993

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TABLE OF CONTENTS

Current Comment

Medical Laboratory Science — Towards the 21st Century	
Ann Cooke, Gillian McLeay	86

NZIMLS Continuing Education

— Special Interest Groups	93
---------------------------------	----

NZIMLS Annual Report, Balance Sheet and Annual Accounts	100
--	------------

The Pacific Way	121
------------------------------	------------

Book Reviews	88, 97	Letters to the Editor	119
--------------------	--------	-----------------------------	-----

Journal Abstracts	91	List of Advertisers in this Issue	119
-------------------------	----	---	-----

Institute Business	118	New Products and Services	122
--------------------------	-----	---------------------------------	-----

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DIRECTIONS FOR CONTRIBUTORS

From Vol. 36 No.1 all papers published will be in the form known as "Vancouver Style" or Uniform Requirements for Manuscripts submitted to Biomedical Journals. Full details may be found in the New Zealand Journal of Medical Laboratory Science, Vol. 45, No. 4, page 108 to 111 or from the Editor.

Intending contributors should submit their material to the Editor, M. Gillies, Microbiology Laboratory, Auckland Hospital, Auckland, New Zealand. Acceptance is at the discretion of

the Editor, and no undertaking is given that any article will be published in a particular issue. The copy deadline for each issue is the first of the month prior to the month of publication.

ADVERTISER INQUIRIES

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DATES OF PUBLICATION

The months of publication for 1993 are March, May, August and November.



CURRENT COMMENT

MEDICAL LABORATORY SCIENCE

— Towards The 21st Century

Ann Cooke, Gillian McLeay
Laboratory Training Officers, Central CHE.
“Skills New Zealand”

Many of you will have seen in recent months the television campaign promoting “Skills New Zealand — Lifelong Education and Training”. This promotes the concept that “education has a vital role to play in ensuring that workers have opportunities to retrain and learn new skills throughout their working lives”.

The NZ Qualifications Authority (NZQA) is promoting this concept for the improvement in the quality of education and training in NZ by the “development and maintenance of a comprehensive, accessible and flexible National Qualifications Framework”.

What is the Framework?

The Framework is a national qualifications system based on units, which integrates industry training (in our case clinical laboratory training), secondary and tertiary education.

Units of learning from different professions/industries are in the process of being placed on the Framework.

“The Framework has 8 levels of achievement, with level 8 being the most advanced. Each level is made up of units, which will vary in number, size and credit rating. Qualifications will consist of tailored packages of units.

* A National Certificate is gained by completing the required units in Levels 1 — 4 (Secondary School).

* A National Diploma is gained by completing required units in Levels 5 — 7.

* A degree is gained by completing required units up to Level 7.

* High qualifications are gained by completing required units up to Level 8.”

What this means?

The structure of the Framework will enable people to “study one unit or enough units to make up a qualification, study at their own pace, re-enter training at some later date and cross-credit units between qualifications and places of learning”.

The intention is for “all units and qualifications to have a purpose and relationship to one another that everyone can understand”.

The great advantage of the Framework is that it is an open-ended system.

This benefits people at either end of the spectrum of medical laboratory science in the following ways:

Laboratory assistants may complete some of the earlier units on the Framework to gain recognition of learning and competence; at any time they may proceed on to complete the Medical Laboratory Science qualifications and apply for registration.

At the moment the QTA qualification cannot be cross credited towards any of the other Medical Laboratory Science courses, or indeed any other existing qualification in New Zealand.

Opportunities will be created also, for technologists to pursue post-graduate study leading on to additional, nationally recognised qualifications.

Who is involved?

NZQA has the responsibility for the implementation of the Framework. The Authority will also ensure standards of

training are upheld and give national recognition to qualifications, courses and units of learning.

Currently, NZQA is inviting professional groups, (like our NZ Institute of Medical Laboratory Science and the Medical Laboratory Technologists’ Board), together with employers from all sections of industry (eg. Crown Health Enterprises and Community Laboratories), to identify the theoretical knowledge and work place skills that are required in their particular profession or type of service.

Many groups have already formed Industry Training Organisations (ITO’s), to represent all interested parties. Alternatively, National Standards Bodies may be formed to direct the unit writers and control the standards of the units.

NZQA will contract specialists in each field to write the units. The unit writers will “assess the performance standards in the area of learning and organise the knowledge, skills, attitudes and values required in units at the appropriate levels on the Framework”.

Who is paying?

The Government is providing funding for the writing of units and the Education and Training Support Agency (ETSA).

ETSA has the task of liaising with interested parties and promoting the Framework. It has set up offices nation-wide.

Who is the driving force?

Both major political parties have made a commitment to Skills New Zealand and the Framework. The present Ministers of Education and Health are actively behind this project; while the Opposition Labour Party has circulated a letter stating its intention to continue to support NZQA in the implementation of the Framework initiative, if elected to govern.

What does NZQA need from us?

The following information from our profession needs to be made available:

- the desired range and scope of knowledge to be attained, recognition of this by awarding diplomas, degrees, etc.
 - the level and skill required to perform work or tasks competently, which can be competency assessed and recorded in log books or competency records.
 - the theoretical knowledge and the level of practical competence to reach registration requirements, (ie. gain registration as a medical technologist); this is outlined in the new MLTB competency document as the minimum learning outcomes and performance criteria.
 - the steps or units to take to follow a particular career path like medical laboratory science.
- Some units may be available already on the Framework, having been written by other groups eg. management modules.

What do we need to do in the market place?

There is definitely a need for medical laboratories and medical technologists to have the ability to adapt and compete in a rapidly changing, technology-driven environment. We are no different from any of New Zealand’s other professions or service groups.

With the new degree courses of education now available, providing avenues for broader-based scientific learning,

parity with overseas qualifications and the possibility of post-graduate studies, we are on the right road.

In the market place there is a need for registration of laboratories to be able to compete for customers and RHA funding; this means providing evidence of quality management systems ie. documentation of staff competency and training programmes, etc.

This can be achieved in part through competency-based assessment using logbooks. Up-skilling and ongoing education programmes and individual staff records will provide evidence of continuous improvement or enhancement of skill levels and knowledge. This will enable the laboratory to meet the expected standards of a quality service.

What comes next?

To co-ordinate all the various requirements and existing programmes or pathways under one umbrella.

The National Qualifications Framework offers the opportunity to do this.

NZQA aims to ensure that units of learning on the Framework are relevant to employers' needs, and therefore must be profession and industry-driven rather than by tertiary institutions.

Once the Framework units for medical laboratory science have been outlined by the profession and industry (employers), the tertiary institutions will have the opportunity

to identify the units which they are teaching in their courses.

Clinical training undertaken by medical laboratories has a place on the National Framework.

While the tertiary institutions are educating future technologists, it is the sole responsibility of the industry to provide the necessary clinical training and work experience for students to achieve the desired learning outcomes and performance criteria for registration.

What is the final word?

As an industry we have been working towards this by:

- * the development, during clinical training, of logbooks for the assessment of practical competence in medical laboratories since 1989
- * the commencement of tertiary education programmes dedicated to Medical Laboratory Science ie. in 1989 the National Diploma and the University and Technical Institute degree courses in 1992 and 1993
- * the MLTB's launching of the competency document in 1993 "will be implemented as the standard for registration of medical laboratory technologists on 1 January 1994"
- * laboratory registration which demonstrates to customers the quality of the service and ensures a competitive edge in the market place.

The MLTB competency document sets the standards, the Framework provides the structure to achieve them.

AUCKLAND'S ANNUAL PRIZEGIVING

*Gillian McLeay
Laboratory Training Officer, Auckland Hospital.*

Twenty-nine years ago the first of the annual presentation ceremonies, hosted by the then Auckland Hospital Board, was held to honour the successful students in the Laboratory Services for the whole of the Auckland area.

On Thursday 22 April, 1993, we paid tribute to those who had gained their NZIMLS QTA Certificate, NZIMLS Specialist Certificate, MLTB Certificate of Attainment and MLTB Diploma in Medical Laboratory Technology. This year, for the first time, there were graduates from the National Diploma in Medical Laboratory Science (NDMLS). Prizes sponsored by various

companies were presented to the top students for Auckland.

The theme for the evening was "Changes in Health and Education". Guest speakers, the Hon Sonja Davies (MP for Pencarrow) and Dr the Hon Ian Shearer (Dean of the Faculty of Science and Engineering, Auckland Institute of Technology) had some pertinent comments on this topical subject.

Dr Shearer has kindly agreed to allow us to publish the outline of his address.

ADDRESS TO THE AUCKLAND AREA ANNUAL PRIZEGIVING

Dr Ian Shearer
Dean of the Faculty of Science and Engineering,
Auckland Institute of Technology

Recent newspaper advertising reveals the following:

CHE	MANAGERS	EMPLOY	BUDGET
Canterbury Central	4	3,500	160m
Composite	5	2,300	110m
Auckland Central	13	6,000	350m
Wanganui	7	1,200	60m
Manawatu	7	2,700	140m
Total of five CHE's	36	15,600	820m

The following quotations reflect the type of person being sought for the many Manager positions:

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"A commitment from all candidates to the Principles of the Treaty of Waitangi and Equal Employment Opportunities."

"Proven leadership capabilities, empathy with modern management methodologies and experience in initiating, developing and managing change."

STOP PRESS

The Auckland Institute of Technology has been granted approval by the New Zealand Qualifications Authority to offer a Degree in Applied Science. The B App Sci will be a three year full-time course for those students entering from the 7th form with passes in appropriate subjects. Students may also study part-time.

A full range of modules are available in Medical Laboratory Science.

For further information write to:

Information Centre
Auckland Institute of Technology
Private Bag 92006
Auckland 1001

or telephone Jim Clark, Programme Supervisor, Medical Laboratory Science,
phone 307-9999, extn 8771



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New Zealand Institute of Medical Laboratory Science (Inc.)

An award of two hundred dollars (\$200.00) will be made biennially to the author of the best original or review article published in the Journal of the NZIMLS concerning a medical Laboratory discipline other than related to the subject of Microbiology, Clinical Chemistry, Haematology and Immunohaematology or for another where a specific award or prize has been offered.

Eligibility

All financial Members of the New Zealand Institute of Medical Laboratory Science (Inc.)

Method of Entry

Publication of an original or review article in the Journal of the NZIMLS.

Date of Entry

All original and review articles on Medical Laboratory subjects other than those previously excluded which have been published during the two year period ending in December 1993 will be considered for the award.

Judging

The Judging panel shall consist of the Editor of the Journal, the President and one of the Vice-Presidents of the Institute. If, in the opinion of the Judging Panel, the standard of the articles does not merit an award, or if there are no eligible articles in any one judging period, then no award shall be made.

JOURNAL ABSTRACTS

Compiled by Michael McCarthy, Diagnostic Laboratory, Auckland

THE RESURGENCE of TUBERCULOSIS: Is your Laboratory Ready?

Fred C. Tenover, Jack T. Crawford, Robin E. Huebner, Larry J. Geiter, C. Robert Horsburgh Jr., and Robert C. Good. *J Clin Microbiol* 1993; 31 (4): 767-770.

The authors report on a resurgence of Tuberculosis in the United States. Several outbreaks have been noted involving both HIV infected and HIV non infected health care workers.

The laboratory has an important role in the definitive diagnosis of *M. tuberculosis* infection and the reporting of antituberculosis drug testing.

The laboratory should be able to screen specimens rapidly, identify isolates in a timely fashion and provide drug sensitivity data in a short period of time.

While his Guest Commentary addresses the problem in the U.S. there is a parallel in this country with an upsurge in the reporting of tuberculosis in the Pacific Island community and the HIV infected community.

Is your laboratory ready in the areas of safety and methodology?

Current Practices in Mycobacteriology: Results of a Survey of State Public Health Laboratories.

Robin E. Huebner, Robert C. Good and Jerome I. Tokars. *J Clin Microbiol* 1993; 31 (4): 771-775.

A continuation of the theme of the previous Abstract, the authors surveyed 57 State Public Health laboratories to determine whether available rapid methods for identification and sensitivity testing for M.Tb were being performed.

71% used fluorochrome rather than the conventional basic fuchsin stains.

29% used rapid radiometric culture methods.

23% used biochemical identifications, 72% used nucleic acid probes, high performance liquid chromatography or N.A.P. testing.

80% performed susceptibility testing on solid media.

20% used the rapid radiometric method.

Rapid methods allowed species identification in 22 days, and drug susceptibility testing in 31 days versus 43 and 44 days respectively for the manual methods.

Role of B-Haemolytic Group C Streptococci in Pharyngitis; Incidence and Biochemical Characteristics of *Streptococcus equisimilis* and *Streptococcus anginosus* in Patients and Healthy Controls.

Karen Fox, James Turner and Alvin Fox.

J Clin Microbiol 1993; 31 (4) : 804-807.

Cultures from 1480 patients with pharyngitis yielded 209 isolates of Group C streptococci and 227 control patients yielded 30 strains.

Biochemical characterisation showed that 83% of strains from patients and 78% of strains from controls were *Str. anginosus*, *Str. equisimilis* was isolated from 3% of patients and 2.2% of controls. The authors conclude that *Str. equisimilis* and *Str. anginosus* are both members of the normal flora of asymptomatic individuals.

Role of Group C B-haemolytic Streptococci in Pharyngitis: Epidemiologic Study of Clinical Features associated with Isolation of Group C Streptococci.

Bill Herron, Carol Brunson and Gaye Betcher.

J Clin Microbiol 1993; 31 (4) : 808-811.

Clinical features and colony counts were tabulated for each college student with clinical pharyngitis who had Group C b-haemolytic Streptococci isolated.

45/1480 patients (3%) yielded growths of *Str. equisimilis*

and 64/1480 (11.1%) yielded growths of *Str. anginosus*.

Patients from whom *Str. equisimilis* was isolated had clinical features more suggestive of pyogenic infections than did patients from whom *Str. anginosus* was isolated.

This study presents epidemiologic evidence supporting a role for *Str. equisimilis* in causing pharyngeal infection and for *Str. anginosus* as representing part of the normal flora.

Novel, Rapid Optical Immunoassay Technique for Detection of Group A Streptococci from Pharyngeal Specimens: Comparison with Standard Culture Methods.

Ronald J. Harbeck, Jeri Teague, Gretchner R. Crossen, Diana M. Maul and Patty Childers.

J Clin Microbiol 1993; 31 (4) : 839-844.

1275 throat swabs were tested for the presence of Group A streptococcal carbohydrate using an optical immunoassay — OIA — and compared with culture at the same time.

The OIA procedure takes 8 minutes involving an extraction, incubation of 2 minutes, neutralising step, addition of horseradish — peroxidase labelled GpA S antibody, 2 minute incubation wash step and substrate addition to develop the colour reaction.

The Strep A OIA demonstrated sensitivities of 97.4% and 98.9% in comparative studies versus the Todd Hewitt Broth enrichment and culture on trypticase soy agar plus 5% sheep blood agar respectively.

Strep A OIA was significantly more sensitive than standard culture and equivalent to the broth enrichment methods.

Group A Strep antigen remained detectable after 72 hours by Strep A OIA.

For laboratories who are currently offering this rapid assay the authors claim of "demonstrated performance combining excellent specificity equivalent to that of an enriched broth culture" may warrant closer inspection.

Improved Recovery of Mycobacteria from Respiratory Secretions of Patients with Cystic Fibrosis.

Susan Whittier, Roy L. Hopfer, Michael R. Knowles and Peter H. Gilligan.

J Clin Microbiol 1993; 31 (4) : 861-864.

Frequently respiratory secretions of patients suffering from cystic fibrosis are contaminated with *Pseudomonas aeruginosa*. Conventional decontamination procedures using NaLC-NaOH for both LJ slopes and BacTec vials plus PANTA have resulted in overgrown cultures.

The authors recommend an additional step of using 5% oxalic acid after the NaLC-NaOH procedure.

Rejection Criteria for Endotracheal Secretions from Adults.

Arthur J. Morris, David C. Tanner, L. Barth Reller.

J Clin Microbiol 1993; 31 (5) : 1027-1029.

Criteria have been developed for the quality of sputum specimens, but there is no criteria for the quality of endotracheal secretions (ETSA). The methods compared Gram stain and culture results for 504 ETSA. They recorded squamous epithelial cells (SEC) and polymorphonuclear leucocytes (PML) per low power field (LPF) and quantities and types of organisms per high power field (HPF) x 1000. 40 of the ETSA had no organisms visible in the Gram stain. Of these 40% were sterile and 48% grew normal oropharyngeal flora only.

The authors conclude the ETSA specimens showing no organisms by Gram stain be rejected along with those showing > 10SEC/LPF. These criteria resulted in the rejection of 41% of ETSA specimens over a six month period.

Chlamydia trachomatis Infection in a High Risk Population. Comparison of Polymerase Chain Reaction and Cell Culture for Diagnosis and Follow-up.

W.H.M. Vogels, P.C. van Vorst Vader, and F.P. Schroder.
J Clin Microbiol 1993; 31 (5) : 1103-1107.

The authors examined 497 patients in a study comparing PCR to cell culture for the diagnosis of urogenital *C. trachomatis* infections. Follow-up specimens were obtained from 70 positive patients for both PCR and cell culture following two weeks treatment with doxycycline.

The prevalence of positive results in the group tested was 12.9% by cell culture and 14.3% by PCR.

The authors suggest that PCR may replace cell culture as the "gold standard".

They also report that there have been no reported cases of resistance of *C. trachomatis* to tetracycline. If follow-up studies are necessary an interval of 14 days post treatment may sometimes be too short to demonstrate a successful eradication of the *C. trachomatis* antigen when using PCR.

Direct Detection of Chlamydia trachomatis in Urine Specimens from Symptomatic and Asymptomatic Men by Using the Polymerase Chain Reaction.

Graciela A. Jaschek, Charlotte A. Gaydos, Laura E. Walsh, and Thomas L. Quinn.

J Clin Microbiol 1993; 31 (5) : 1209-1212.

In males infected with *C. trachomatis* there is a significantly large reservoir of asymptomatic patients. Screening of male patients, especially asymptomatic ones, has been neglected due to the trauma and inconvenience of urethral sampling.

Other referenced papers have shown that the male urine is an excellent sample for detection of *C. trachomatis* and the specimen can be collected without trauma.

This paper looks at the performance of a PCR technique-Amplicor (Roche Diagnostic Systems) — and compares this with urethral swabs collected from the same group and analysed by cell culture.

Discrepant results were further analysed by staining the pellet of the deposit of the swab and urine specimens.

The authors conclude that "the PCR analysis of urine is a highly sensitive and specific non-invasive technique for the diagnosis of *C. trachomatis* and provides a unique opportunity for the early identification of both the symptomatic and asymptomatic infected patients".

This further supports the use of male early morning urine specimens as an excellent medium for screening for the antigen even though PCR may not be currently available for routine diagnostic use.

IAMLT SCHOLARSHIP 1994

ELIGIBILITY: The applicant must have evidence of active membership in a constituent member society of IAMLT.

APPLICATION: The candidate should submit their application in English and enclose a Curriculum Vitae, references and a recommendation from the constituent society of IAMLT of which he/she is a member. The application should explain the need for the scholarship.

4 copies of the manuscript must be sent to
IAMLT Executive Office
Östermalmsgatan 19
S-114 26 Stockholm
Sweden.

DEADLINE: Deadline for receipt of applications by the Executive Office is 1st of November 1993.

The prize consists of SFR 2,500 and may be divided.

The IAMLT Awards Committee will be responsible for choosing the recipient.

Applications will not be returned to applicants.

The prize will be presented at the IAMLT World Congress in Hong Kong, 25-29 July 1994 by the Chairperson of the Awards Committee and the IAMLT President.

The recipient of the Scholarship should submit an article to IAMLT for publication in *Med Tec International* after receipt of the Scholarship.

The prize is given by Baxter Diagnostics Inc. every two years on the occasion of the IAMLT Congress and consists of SFR 4,000. The Award will be presented at the IAMLT World Congress in Hong Kong, 25-29 July 1994, by a representative of Baxter Diagnostics Inc. in the presence of the IAMLT Awards Committee.

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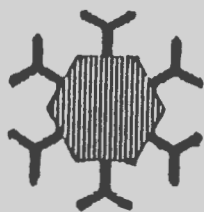
AUGUST 1993

NZIMLS CONTINUING EDUCATION

SPECIAL INTEREST GROUPS



Liftout



IMMUNOLOGY

SPECIAL INTEREST GROUP

Convenor: Gillian McLeay

Contact address: Laboratory Training Centre, Building 18, Auckland Hospital, Private Bag 92024, Auckland.

CONVENOR'S ANNUAL REPORT

BEHIND THE SCENES

Activities over the last few months have been directed towards the advisory part of ISIG's role; these have included two SIG Convenors' meetings with Council representatives, nominating moderators and examiners for NZIMLS and MLTB exams, creating (or trying to) future examination panels, submitting names to attend the two Examiners and Moderators Workshops, providing input into the survey on the range of work for Laboratory Assistants, and more recently the review of QTA syllabi.

There have also been requests for copies of syllabi, notes and old exam papers for QTA and DMLT students. These have been for Microbiology and Clinical Biochemistry as well as Immunology. My thanks to colleagues at Auckland Hospital and Diagnostic Laboratory for assisting in providing some of the information.

THE NETWORK

There has been a small increase in members over the last year. We have one from overseas.

The total now stands at 82:

Region 1. (Northland/Auckland)	38
Region 2. (Waikato/Bay of Plenty)	8
Region 3. (Hawke's Bay/Manawatu/ Nelson/Marlborough/ Taranaki/Nelson)	26
Region 4. (Canterbury/West Coast/Otago/Southland)	9
Overseas. (Australia)	1

Since I first divided the country up into regions when setting up ISIG, Regions 1 and 3 have continued to grow more rapidly than 2 and 4. We will discuss whether the uneven spread of members is a problem and see if the regional boundaries should be changed at our August meeting in Christchurch.

NETWORK NEWS

The *Network News* has been bimonthly this year. I am very grateful to all who have written articles, and to Lynley Henderson, who provides material for the Journal Club. Photocopies of the full Journal articles can be sent on request.

Please continue to send articles (technical or news from your lab, district or region which will be of interest to our readers), but preferably not material previously in or intended for the Journal.

A regular report to each edition from the regional reps would be appreciated to keep us all in touch. The deadlines for each issue are the first day of the even-numbered months.

The viability of the *News* is guaranteed while my department's photocopier continues, (in its dying days) to be able to copy the 90 newsletters for each run. A proposed change of format, from August onwards, should lessen the workload for both editor and machine.

SEMINARS AND WORKSHOPS

These are a very important part of the ISIG calendar. Since August last year, we have had the North Island Seminar and Flowcytometry Users Meeting. Many of our southern colleagues attended the multidisciplinary South Island Seminar in Timaru.

A pattern seems to be emerging, with the highlights of the year being the NZIMLS Annual Scientific Meeting, together with the ISIG workshop and AGM, and the two "miniconferences" — the North Island and South Island Seminars.

The trend towards "miniconferences" is fine at regional level, but regions cover large areas and incorporate small towns, other cities as well as the "four main centres". I should like to see centres, such as Napier or Wanganui, run local ISIG seminars for people in their areas. These do not have to be grand affairs requiring complicated organisation. Funding can be made available, and support and advice provided on request. A great idea would be to have the seminar on the Saturday morning of a Ranfurly Shield challenge. You would be surprised at the response. Of course, tickets for the game would have to be organised.

ISIG AGM

AGM in our case stands for the Annual Gathering of Members, which is usually held in a convivial manner over lunch rather than convening a formal meeting. We do have matters to discuss, but decisions are made by consensus rather than by ballot. (This year, because we are going to a public restaurant, we have to separate the two.)

There is a similar low key approach when it comes to the committee, who either volunteer or are "selected" by consensus. The members of the committee (Convenor, Secretary, Treasurer and Regional Representatives) stand down annually. Most are willing to serve another year. Sometimes another candidate is nominated and may be chosen instead — a very informal brand of democracy.

Sherryn Cepulis, from Waikato Hospital, regrets she will be unable to continue to represent Waikato/Bay of Plenty due to pressure of work. She is finding a "volunteer" to replace her. Sherryn was a foundation member of the Network. We are very grateful for her loyal support of ISIG and her work in her region. Thank you Sherryn.

At the time of writing this I am not aware of any other resignations. I should like to thank the committee for their efforts on behalf of ISIG over the last 12 months, especially Judith, Diane, Gerry and Mary-Ann.

If you have any nominations for the committee please send to the address at the beginning of this report.

THE 1992/93 COMMITTEE

Convenor: Gillian McLeay

Secretary: Mary-Ann White, Diagnostic Laboratory, PO Box 5728 AUCKLAND

Treasurer: Judith Hodgetts, Laboratory Services, Wellington, Private Bag, WELLINGTON SOUTH

Regional representatives:

Region 1.

(Northland) Jill Jones, Northland Pathology Laboratory, PO Box 349, WHANGAREI

Region 2. Sherryn Cepulis, Laboratory Services, Waikato Hospital, Private Bag 3200, HAMILTON (not available 1993/1994)

Region 3. Gerry Campbell, Medlab Wellington, 89 Courtenay Place WELLINGTON

Region 4. Diane Phillips, Medlab South, PO Box 25901, CHRISTCHURCH

FINANCES

The NZIMLS requires budget forecasts for 1994/1995. These must be ready for tabling at the November Council meeting. This will be on the agenda of the ISIG AGM in August when financial matters and next year's programme will be discussed.

VIROLOGY

Last year at one of the SIG Convenors' meetings with Council, it was suggested that other SIGs followed the example of ISIG and "adopt" one of the disciplines which did not have a special interest group. I am not aware that this has taken place with any group apart from Virology and ISIG.

ISIG has been very happy to look after Virology's interests until now, and is willing to continue. However, perhaps it is

timely to ask the virologists whether they wish to be represented by ISIG, and if so, whether we should be changing our name to one that represents the collective group.

Please send your replies to me in time for the ISIG AGM on Tuesday 24 August.

CHRISTCHURCH CONFERENCE

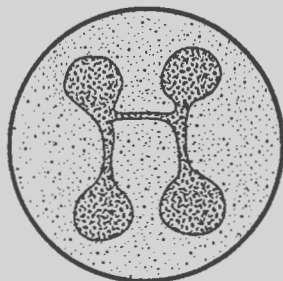
The Christchurch immunologists have made a significant contribution to the conference. Mike Southern is on the organising committee, and Joanne MacDonald and Deborah Willis have put together an impressive programme for the immunology fora.

Such is the efficiency of the team that Deborah managed to find the time in all this preparation to give birth to a daughter. Our best wishes go to Deborah, little Caitlin and family.

Those who are going to the DNA Antibody Workshop will find it invaluable in the way of information to be shared and the support and cooperation that results, if last year's ANA Workshop is anything to go by.

A final tribute to Diane Phillips, our hard working Southern representative who is organising the ISIG gathering on 24 August after the workshop.

I look forward to seeing as many of you as possible in Christchurch.



haematology

SPECIAL INTEREST GROUP

Convenor: Rennie Dix

Contact Address: C/- Anne Cooke, Laboratory Training Centre, Building 18, Auckland Hospital, Park Rd, Auckland. Fax (09) 307-4939

THE BLOOD FILM REVISITED

A successful one day seminar was held by the Haematology Special Interest group in Auckland recently. Although the seminar was primarily intended to be for the Auckland Region it was heartening to see the degree of support from outside the region and particularly from our southern colleagues, perhaps this was due to the topic, with about 100 people attending.

The programme covered a broad range of blood films, each session being presented by a different group of laboratories from within the Auckland region. Some blood films provoked a deal of discussion and sometimes healthy disagreement which is what it is all about.

Marilyn Eales perhaps summed up the reason for the days seminar when she put forward her views about the art of examining blood films being lost in this age of automated cell counters. Marilyn's presentation is printed below.

It is evident that there is a great deal of interest in blood film morphology and we are looking at the possibility of promoting several seminars or workshops a year on this topic. These could be on a regional level or be combined with a major meeting such as the Institute's Annual Scientific Meeting.

ADVANCE NOTICE:

An afternoon coagulation seminar will be held on the 11th November in the fourth floor lecture theatre at Auckland Hospital.

The guest speaker will be Dr Marilyn Manco-Johnson, Associate Professor of Paediatrics at the University of Colorado, supported by the Auckland Haemostasis Group.

Dr Manco-Johnson, a Paediatric Haematologist, will be visiting New Zealand sponsored by the Kirsty McDermott Trust and will speak on Paediatric coagulation which is her primary interest.

Further details pending.

STIRRING THE POT

Marilyn M. Eales, F.N.Z.I.M.L.S.

Charge Technologist, Haematology Dept., Middlemore Hospital.

It is haematological tradition that microscopic examination of a stained peripheral blood smear is an important adjunct to the blood count. That important diagnostic information resides in the morphological appearance of blood cells is not in dispute. It has been generally accepted that examination of a well-spread and well stained peripheral blood smear is one of the most important investigations in all haematology. Each day world-wide many millions of peripheral blood smears are examined (1) or should I say used to be.

The increasing complexity and expensive blood cell analysers add to the desirability of automation. In most haematology laboratories the workload continues to increase year by year, especially for routine blood counts and only by means of these automated systems can laboratories meet the demand. Over the last few years the reliability of automated instruments has been proven. The advent of automation together with the reduction in the numbers of medical and technical staff available to undertake blood film examination makes it timely to assess the need for blood film examination in the routine haematology service.

AUTOMATED INSTRUMENTS

Precision and Speed

Increased test throughput

Cost effective

The essential question to be considered is the reliability of the counters to identify abnormalities which would have been detected on the blood film. It is pertinent to remember that these instruments have limitations and that certain features will not be detected.

RED CELLS	WHITE CELLS	PLATELETS
Rouleaux Formation	Small number of primitive cells	Satellitism
Shape Change:	Cytoplasmic inclusions	Clumping
Elliptical	Toxic features	Morphological Abnormalities
Fragments	Dohle bodies	
Tear Drop	Abnormal granulation	
Inclusions:	Nuclear Abnormalities	
Nucleated red cells	Pelger-Huet	
Howell Jolly bodies	Hypersegmentation	
Pappenheimer Bodies	Auer rods	
Malaria parasites	Cleaved lymphocytic nuclei	
Basophilic Stippling	Plasma cells	

Some of the features not detected by automated instruments (2)

By judicious selection procedure it is possible to reduce the number of films examined per day with minimal risk of missing serious pathology. Selection procedures should be devised with specific problems of the laboratory in mind, for example,

- type and size of workload,
- cost per case
- staffing considerations

Studies done in England have concluded that, on average, district hospitals can reduce the number of films examined per day by 22-30%. Teaching hospitals, which have under their umbrella, renal patients, radiotherapy and other specialised units such as SCBU, ICU, are unlikely to reduce as much (3). Reliability depends on the selection procedure set for each laboratory. Of course the higher the percentage of films examined the less likely the laboratory is to miss significant pathology. No selection procedure is foolproof and I agree with the General Haematology Task Force set up by the British Committee for Standards in Haematology (3) that "it requires an intelligent balance between minimum risk and maximum laboratory efficiency". No matter how clever these machines are it still remains necessary for the human eye and brain to examine the blood films on patients when the instruments flag any unusual feature. However, the human eyes are not as experienced as they used to be when staff were regularly examining and reporting many films a day.

AUTOMATED INSTRUMENTS HAVE LIMITATIONS. THEY ARE NOT YET READY TO REPLACE THE HUMAN EYE ENTIRELY.

TECHNOLOGISTS ARE LOSING THE ABILITY TO EXAMINE A BLOOD FILM PROFESSIONALLY.

The Royal College of Pathologists of Australasia (R.C.P.A.) recognised the fall-off of skills after the advent of the automated 5 part diff around about 1989/90. A report issued with survey No. 9001 in 1990, stated "it is an unfortunate fact of life and in our view largely responsible for the deterioration in the standard of morphology reporting, that large laboratories report at least 50% of their blood films on the basis of automated printout alone. A film is made if sufficient abnormality is detected or if it is the first presentation of a patient". Then later in Survey 9004 a further report "it is very disturbing that a large number of laboratories have failed to observe the significant left shift (including occasional blasts) in this patient. It is suggested that you review the film".

1991, Survey 9012 "The most concerning part of this exercise was the laboratories who failed to recognise the incorrect platelet count."

1991, Survey No. 9105 "In general responses were acceptable although many subscribers failed to note the changes of iron deficiency".

1992 Survey No. 9204 "These films were from an absolutely normal male donor with no clinical evidence of a viral infection. It is still of concern that a significant number of laboratories still report some type of leukaemia in response to a normal film".

Could it be that some laboratory staff do not know what a normal blood film looks like because they equate examining a blood film with an abnormality?

National Committee for Clinical Laboratory Standards reports a similar decline in morphological skills on the American scene. Is it not time something was done about this deterioration in the reporting of blood films before the art is lost for ever? New graduates from Technical Institutes and Universities will have less practical training than any others have had in the past and will not get anything like the exposure to blood film morphology that the majority of people in this room have had the good fortune to experience.

In our efforts to produce more for less, as driven by your current environment, should we be establishing a National Protocol (TELARC approved) for viewing or not viewing a blood film, based on:

- automated results
- clinical particulars
- previous results (computerised data storage greatly assists this)
- first admission or whatever

A NATIONAL STANDARD PROTOCOL
TELARC APPROVED SHOULD BE
ESTABLISHED

Some laboratories I know are not making a blood film at all although they have not as yet come "out of the closet" and said so.

I could go even further and stir the pot a little more, and say as we step into "fairyland" on July 1st, when we become Community Laboratories and Crown Health Enterprises, should laboratories that do not look at blood films be charging as much as those who do?

As a responsible member of HSI, I feel the matter of a minimum National Standard Protocol for reviewing blood films in this country should be addressed. A second matter that should be addressed before we become too blasé about losing the art of blood film morphology in New Zealand is the question of whether blood film morphology workshops, seminars, call them what you will, become part of each National or Regional Conference, whatever the future holds, to ensure that once in a while some representatives from each laboratory get an opportunity to update their knowledge and ensure that blood film morphology skills are not lost forever. The R.A.C.P. in Australia has recognised the need to keep these skills, "on the boil", perhaps because of the disappointing returns of their very excellent survey and run 2-3 morphology workshops per year.

BLOOD FILM MORPHOLOGY SKILLS
ARE DESTINED FOR EXTINCTION

It is time we got our act together in New Zealand and faced this problem as the professionals we claim to be.

As professionals should we be aiming to be half right or right first time? Should we be just hiding our heads in the sand and pretending it is not all happening and allow automated machines to take over and never mind the problems that we miss?

QUESTIONS FOR CONSIDERATION

Can a normal automated count and differential be used as a means of exclusion for doing a blood film and what indicators or flags should be used for inclusion?

Should we be circularising laboratories to establish what is the general protocol for looking at films or not looking at films as the case may be?

Should laboratories be encouraged to make a blood film even if it is not looked at? In Australia the standard procedure is to make a blood film and in many instances the film is not stained but at least it is there for referral should a review be requested at a later stage.

The decision as to whether to examine a blood film or not would be much easier if the medical staff requesting a blood film provided more particulars?

Should we be pushing for a National Standard, as part of the big move towards Quality Assurance in New Zealand Laboratories?

Should we be ensuring blood film morphology skills are maintained?

SAVE THE WHALES
SAVE MORPHOLOGY SKILLS

ACKNOWLEDGEMENTS

1. Automation and Quality Assurance in Haematology, Edited by R.M. Rowan and J.M. England, Blackwell Scientific Publications, 1986.
2. Dr. Eva Raik, RCPA — AIMS Morphology Workshop, Westmead Hospital, May, 1993.
3. Standard Haematology Practice, Edited by Bryan Roberts on behalf of the British Committee for Standards in

- Haematology, Blackwell Scientific Publication, p. 34-41.
4. RCPA Quality Assurance Programmes, Haematology 1990-1992.

BOOK REVIEW

"ESSENTIAL HAEMATOLOGY", THIRD EDITION

BY A.V. HOFFBRAND AND J.E. PETTIT

BLACKWELL SCIENTIFIC PUBLICATIONS,
OXFORD, 1993, pp 437.

ISBN 0-632-01954-9 (soft cover)

The third edition of "Essential Haematology" is a welcome sight for medical technologists and medical laboratory science students, especially as it is now eight years since the second edition was published.

This latest edition which sports an attractive new cover, has grown slightly in overall dimensions and contains an additional 163 pages. On many of these pages the authors have chosen to use colour and colour photographs, to best present and highlight data in diagrams and charts, portray the diagnostic features of real clinical cases and illustrate cellular morphology in detail of blood film and bone marrow pictures. Some of the new coloured illustrations are from the Sandoz Atlas of Clinical Haematology also written by Hoffbrand and Pettit.

As the authors note in their preface, in the space of time between the second and third editions, 'there have been great advances in molecular biology' and this is reflected in the chapters dealing with haemopoiesis, genetic defects of haemoglobin, antenatal diagnosis, leucocytes, leukaemias, haemostasis, thrombosis and blood transfusion. Two chapters are now devoted to white cells and are divided between lymphocytes and granulocytes plus monocytes. Leukaemia has also been split into two chapters, acute and chronic plus myelodysplastic syndromes. New chapters discuss treatments for different disorders, notably bone marrow transplants and antithrombotic therapy. More space has also been allocated to topics which occur relatively frequently such as the blood in systematic disease, AIDS, myelodysplasia and thrombosis, as compared to the rarer diseases.

A new chapter on haematological malignancies describes chromosomal abnormalities, oncogenes and gene rearrangement of importance. The inclusion of a glossary giving the definitions for words and phrases used in the field of molecular genetics, will help those older readers to come to terms with the latest buzz words. The bibliography at the conclusion of each chapter is updated with recent articles. At the end of the text, two new appendices provide data on HLA specificities and features of known Cluster Differentiation (CD) molecules.

There are still some topics not covered in any detail. For example, the clinical effects and laboratory diagnosis of parasitic infections eg. malaria and microfilaria, are only scantily covered in a new chapter Haematological Changes in Systemic Disease. The various subtypes of von Willebrand's are only briefly noted in a single paragraph. Normal values for Haematology are listed in Appendix 1, the list of haematological values is very short with values for Haemoglobin, PCV and MCHC not reported in S.I. units. Also of note is the lack of reference to the new parameters or cytograms now available from Haematology Cell Analysers which aid in differential diagnosis of many clinical conditions.

The earlier editions were essentially written for the undergraduate student studying Haematology. In New Zealand it was appropriate for use at technical assistant and NZCS levels of study, and as such was widely used. In the last five years however, it was not sufficiently up to date, to be a recommended text. The third edition meets many of the expectations of a student text covering the clinical and

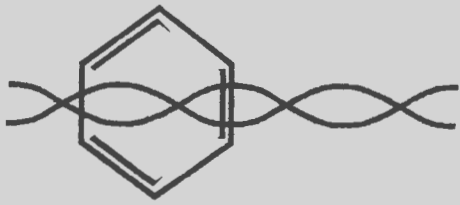
laboratory diagnosis of normal and abnormal Haematology. Indeed the explanations and detail covered now make this an acceptable summary text for students studying at higher levels, although it is necessary to refer to other texts for details of methodologies, instrumentation and quality assurance in Haematology and some additional specialist areas. The text as a whole now reflects present day knowledge of Haematology at a molecular level. While this is very necessary for more senior students, the use of many new terms and concepts may be daunting to the beginner. To read this book comfortably, now requires a prior knowledge of genetics and DNA at both the cellular and technological level.

The text is now available in New Zealand from medical

bookshops, I obtained this copy from McConnell & McConnell, PO Box 169 Manurewa, Auckland who supply direct from the medical publishers in Melbourne. The price which varies according to its place of purchase, is still well within the student pocket, being somewhere between NZ\$70 and \$85, including GST. There are certainly few quality Haematology texts available, providing up to date information for students and laboratories, at an affordable price and this is one of them.

A further plug of support must go to a "Kiwi" product, as one of the authors John Pettit, resides in Christchurch. Our thanks to Dr Pettit and his colleagues for this revised edition.

Reviewed by Ann Cooke, Laboratory Training Officer, Central Auckland CHE.



BIOCHEMISTRY

SPECIAL INTEREST GROUP

Convenor: Alison Buchanan

Contact Address: Clinical Chemistry Dept, Auckland Hospital, Park Road, Auckland.

EXCEL SEMINAR
Saturday October 2, 1993
0900 — 1600
Penrose High School
Auckland

\$45.00 Limited to 20 participants

NAME _____

Address _____

I would like to attend the Excel seminar on Saturday 2nd October. Please find enclosed a cheque for \$45.00.

Send to: — Alison Buchanan
 Clinical Chemistry
 3rd Floor Auckland Hospital
 Park Road
 Auckland



TRANSFUSION SCIENCE

SPECIAL INTEREST GROUP

Convenor: David Wilson

Contact Address: c/- Sheryl Khull, Transfusion Laboratory, Wellington Hospital, Wellington. Fax: 04-389-5608.

TSSIG members

Grant Storey has resigned from the Transfusion Science Special Interest Group. We all thank Grant for his participation in TSSIG activities in the past. I'm sure he will continue to contribute to transfusion science even though not active on the committee.

A new member of TSSIG is Susan Baird from the Blood Bank of Rotorua Public Hospital. We are delighted to have some fresh ideas and enthusiasm injected into the group. Sue's first article for the newsletter is a case history this month.

NICE news

Our warmest congratulations to go to Kathy Holder. Kathy is based in Palmerston North and studying for her Diploma

in Medical Laboratory Science through the Central Institute of Technology. Her presentation at the N.I.C.E. Weekend entitled 'Yersinia Again' won the Abbott award. Kathy will be sponsored to the NZIMLS Annual Scientific Meeting in Christchurch to present there an expanded version of her subject. Well done, Kathy!

Next year's N.I.C.E. Weekend will be the fifth, and to celebrate this milestone Abbott have generously offered to donate two awards. So there will be twice as much incentive for you all to participate in the event.

Abstracts from all of the 1993 N.I.C.E. Weekend presentations are published below. There are some very interesting topics, and we will be hearing more about some of them, I'm sure.

ORAL PRESENTATION ABSTRACTS

DRUG INDUCED IMMUNE HAEMOLYTIC ANAEMIA — A CASE STUDY

Geoff Herd, Blood Bank, Northland Base Hospital, Whangarei.

Haemolytic anaemia due to Nalidixic Acid is a well described complication of treatment in glucose-6-phosphate dehydrogenase deficient patients.

A case history of Drug Induced Immune Haemolytic Anaemia due to Nalidixic Acid including the laboratory investigation and literature review is presented.

PATIENT WITH D CATEGORY VI CELLS PLUS ANTI-D AND ANTI-V

Nicola Beamish, Blood Bank, Taranaki Base Hospital, New Plymouth.

An investigation of a patient's Rh D typing, -D category VI and the identification of his anti-D and anti-V.

A RARE PHENOTYPE IN ROUTINE ABO BLOOD GROUPING

Yvonne Choy, Waikato Regional Blood Centre, Hamilton.

Automated ABO blood grouping systems are designed to minimise operator workload. However, the need for vigilance is not entirely redundant. During automated ABO typing a donor was found to have the forward grouping reaction of a group A but lacked any reaction in the reverse grouping.

Upon further investigation it was found that the donor was of the rare AB₃ phenotype. This observation is extremely rare eg. the frequencies of B₃ and AB₃ among group B and group AB Chinese in Taiwan are about 1 in 900 and 1 in 1800 respectively. Although microprocessor controlled instrumentation is successful in routine analysis, anomalies still require knowledgeable operator interpretation.

FOLLOW THE YELLOW BRICK ROAD

Susan Duncan, Wanganui Diagnostic Laboratory, Wanganui

How intuition, perseverance, an open mind and cooperation led to the identification of immune anti-M.

HAEMOLYTIC DISEASE OF THE NEWBORN — A TWIST IN THE TALE

Kevin McLoughlin, Department of Transfusion Medicine, Christchurch Hospital, Christchurch.

A case study which is a mini labyrinth signposted by questions to be answered.

WE RECOMMEND YOU DON'T TRANSFUSE HER

Judith Palea'ae, Immunohaematology, Wanganui Hospital, Wanganui.

The dilemma the laboratory faces when confronted with a patient who has a past history of alcoholic hepatitis with associated liver damage and menorrhagia and has now been readmitted with continuing liver disease, ? systemic lupus erythromatosis and Oh No! it looks like a warm auto-immune haemolytic anaemia as well.

A DELAYED TRANSFUSION REACTION

Susan Baird, Blood Bank, Rotorua Hospital, Rotorua.

A delayed transfusion reaction involving anti-c is described illustrating the importance of the availability of a patient's complete transfusion history.

SEPTICEMIA EPISODE IN IMMUNOCOMPROMISED PATIENT

Grant Storey, Waikato Regional Blood Centre, Waikato Hospital, Hamilton.

Septicemia is a rare but potentially fatal complication following the transfusion of blood components. Because platelets are stored at 20-24°C for up to 5 days, contaminating bacteria initially present at very low levels may multiply to extremely high levels which creates the potential for overwhelming septicemia.

YERSINIA AGAIN

Kathy Holder, Central Institute of Technology, Trentham.

Yersinia enterocolitica has been implicated in a number of transfusion incidents in New Zealand over the last few years.

THE
NEW ZEALAND
INSTITUTE
OF
*MEDICAL
LABORATORY
SCIENCE*



1993 ANNUAL REPORT
BALANCE SHEET AND
ANNUAL ACCOUNTS

Lift out

MEMBERSHIP COMMITTEE

Fran van Til (Executive Officer)

In 1992, all membership records were transferred from Geoff Rimmer, Membership Convenor, to the Institute's Office. All membership enquiries are now dealt with by the Executive Officer.

Although membership for the 1992/93 period is up on the 1991/92 figures, a purge for non-payments is to be carried out which will remove approximately 120 from the files. Therefore, membership will remain at just over 1100.

As at 31 March 1993, the membership of the Institute was as follows:

	1992/93	91/92	90/91	89/90	88/89
Membership from previous year	1188	1331	1315	1709	1465
Less deletions	75	198	79	547	87
	1113	1133	1236	1162	1378
Plus applications	124	55	95	153	331
Membership as at 31 March	1237	1188	1331	1315	1709

Membership Composition:

Life Members	17	17	17	17	17
Fellows	20	21	22	23	29
Members	679	670	725	688	781
Associates	436	393	476	503	741
Complimentary	—	—	—	—	43
Non Practising	59	61	61	53	68
Honorary	26	26	30	31	30

AWARDS COMMITTEE

Ted Norman (Convenor)

Awards provide a tangible recognition of those Institute members who have performed outstandingly during their training and to those who have made a significant contribution to their profession. Congratulations to all those who have earned an award.

Thanks to all the companies who have sponsored awards — their support is valued and greatly appreciated.

Many of the basic functions of the awards committee are now being undertaken by the executive officer, Fran van Til, and her hard work is acknowledged with appreciation.

The most significant change during the year has been the welcome Travel Award which has in the past recognised outstanding contributions to both the scientific and professional aspects of medical laboratory science.

A change of company name has necessitated a renaming of the award to the Murex Award and with this there will now be a change in emphasis. In future more emphasis will be placed on professional and academic achievements and the award will assist the advancement of professional knowledge and skills.

This change will not decrease the prestige or monetary value of this award and it is anticipated that it will be offered again in 1994.

OVERSEAS AID COMMITTEE

Members of the Committee are: Ted Norman (Convenor), Marilyn Eales and John Elliot.

The Committee consider that support of the P.P.T.C. Quality Control Program for Pacific Island Laboratories is a priority and the Institute has continued to give that support. During the year the P.P.T.C. has also benefited from donations of surplus equipment and from many individual Institute members who have given freely of their time and expertise.

This ongoing support is greatly appreciated.

The Pacific Way section of the Journal continues to be interesting and informative and a real tribute to the hard work and dedication of Marilyn Eales.

Once again — Thanks Marilyn.

PUBLIC RELATIONS REPORT 1993

Committee: Chris Kendrick (Convenor), Geoff Rimmer, Maree Gillies, Anne Paterson

The advent of the development of the Medical Laboratory Science (MLS) degree training at Otago and Massey Universities has provided the profession with a boost in the public awareness of our profession and the kind of work that Medical Laboratory Scientists perform. While the degree training programmes are still in their infancy the publicity and the promotional activities of the courses are reasonably well developed. The MLS degree programmes not only fill the New Zealand need for trained technologists/scientists but also play an important role in the promotion of our profession.

The institute has been active in the promotion of the profession using a variety of media. This year it has produced a pamphlet that provides information on the activities, objectives and membership of the NZIMLS. It is entitled "Your NZIMLS, Working for you" and they are available through your regional representatives on council and/or through the executive officer of the NZIMLS.

In the last year the NZIMLS council were given permission to use a promotional video that the Australian Institute of Medical Scientists (AIMS) had produced. With their kind permission we were able to edit it slightly to make it less obviously Australian (although the Koalas and bananas may be a bit of a giveaway). It has been distributed to the Quest Rapuara (Career Development and Transition Education Service) offices in the main centres (Auckland, Wellington, Christchurch and Dunedin).

A rewrite of the material on MLS available on the Quest Rapuara (QR) database has been undertaken. This information is used by vocational guidance agencies requiring information on MLS. The data required modification to bring it up to date with the current training programmes and career opportunities for students in medical science. The QR offices produce a pamphlet on Medical Laboratory Science that is also available to anyone wishing to use it for career advice. Most of the larger centres have a QR office and this material can be accessed by calling the local office listed in the telephone directory.

PUBLICATIONS COMMITTEE

Maree Gillies (Convenor)

There were nine papers proffered for publication in 1992. Similar numbers as to the previous year.

This year an Editorial subcommittee was established, comprised of members in areas throughout the country, to assist those preparing articles for submission to the journal. It is apparent from their reports that the current climate in Laboratories throughout the country is limiting the amount of scientific research undertaken.

The publications committee continued to report on the activities of Council and of the Special Interest Groups.

Once again, I would like to thank Trish Reilly, the Advertising Manager, Maurice Sheppard of Institute Press, for producing our publications and Ab Post & Pack for their continued assistance and support.

CONTINUING EDUCATION COMMITTEE

Dennis Reilly (Convenor)

1992/1993 year has seen over 500 members attending Continuing Education Courses. This included the Annual Scientific Meeting, the workshop on Exotic Haematology, the Transfusion Science NICE weekend, the Immunology day Seminar on Infectious Serology, and the Inaugural Meeting of BISIG and the NZ Branch of the AACB which covered aspects of Environmental Health, Drug Monitoring and Infertility testing.

Other SIG activities included Computer Workshops and Regional Meetings, Journal Clubs and review of QTA and Specialist Level Syllabi.

This broad range of activities represent a large amount of work by the SIG members during the past 12 months and is certainly a feature of the NZIMLS.

EDUCATION COMMITTEE

Shirley Gainsford, Les Milligan, Jim Le Grice

The courses at the Auckland Institute of Technology, Massey and Otago Universities have made significant and steady progress during the year. The placement of students in laboratories for 1994 has not yet been finalised and will possibly not be resolved until the CHE's become active in July. Under consideration at present are the placement of students in the laboratories, levels of competencies to be expected, appointment of tutors, the need for contracts between the laboratories and education centres, the status of students and the likelihood of fees to be paid. It has been reported that the students are highly motivated and are progressing well.

Auckland Institute of Technology

Twenty-six students graduated from the National Diploma in Medical Laboratory Science course in April. Students in the course in 1993:

- Year 4 — 31
- Year 3 — 20
- Year 2 — 10

The AIT is trying to get its Applied Science course credited degree status. At this stage the New Zealand Qualifications Authority has not given approval. Shirley Gainsford represents the N.Z.I.M.L.S. on the Course Advisory Committee.

Central Institute of Technology

The 1992 intake was the last for NDMLS at CIT. The year 2 students have joined year 2 at AIT. Students remaining in the course:

- Year 4 — 8
- Year 3 — 12

University of Otago

Les Milligan and Jim Le Grice are the N.Z.I.M.L.S. representatives on the Board of Studies and Examinations for the BMLSc course at Otago University.

Students in the course at the commencement of 1993:

- Year 2 — 31
- Year 3 — 25

Massey University

Chris Kendrick and Ted Norman are the N.Z.I.M.L.S. representatives on the BMLS Management Committee at Massey University.

Students in the course at the commencement of 1993:

- Year 2 — 30
- Year 3 — 20

Massey has also proposed a Diploma in Medical Laboratory Science course for registered Medical Laboratory Scientists to be offered extramurally on a part time basis.

N.Z.I.M.L.S. Specialist Level Examinations

In 1992 there were 45 candidates in the following subjects:

Discipline	No. of Candidates	No. of Passes
Clinical Biochemistry	7	5
Haematology	11	4
Histology	1	—
Immunology	4	3
Immunohaematology	5	4
Medical Cytology	2	—
Microbiology	15	9

N.Z.I.M.L.S. Qualified Technical Assistant Examination

This examination was held on July 1992 as an interim step to it being held annually in November.

The results of the 1992 QTA examinations are as follows:

Discipline	No. of Candidates	No. of Passes
Blood Products	4	4
Clinical Biochemistry	17	15
General Certificate	2	1
Haematology	18	17
Histology	6	6
Immunohaematology	9	7
Immunology	3	3
Medical Cytology	5	3
Microbiology	21	18
Mortuary Hygiene & Technique	2	2
Mycology	2	2
Radioisotopes & Radioassay	2	2

The QTA examination is being reviewed in regard to its content, format and the range of subjects offered. This is to better reflect the role of the laboratory assistant and changes in laboratory environment.

Fellowship

Margaret J Smith was awarded Fellowship of the N.Z.I.M.L.S. on the basis of her thesis entitled "Sialic Acid and Epithelial Differentiation in Colorectal Cancer Polyps and Cancer: A Morphological, Mucin and Lectin Histochemical Study".

Margaret worked as a Medical Laboratory Scientist in the Histology Department of Auckland Hospital. Alas her expertise has been lost to Australia.

Overview

Examinations, quite properly, use many of the N.Z.I.M.L.S. resources. As the degree courses come on track, registration and post registration options are going to change. As the Medical Laboratory Technologist Board considers not offering the Certificate Level examinations, pressure may be brought on the Institute to offer this examination. Frankly, the Institute and its Council in its present form does not have the resources to extend its examination menu. We are indebted to our members and other health professionals who support the Institution in its Educational capacity.

TREASURER'S REPORT

The past financial year has ended with a surplus of \$888.

This financial statement includes the income and expenditure of the Special Interest Groups who have been very active this year in holding seminars.

The Journal account continues to operate with a deficit although some of this is due to the Newsletter which is seen as an important means of communication.

A donation of \$5693 was made to the PPTC, mainly for their Quality Control programme.

S.A. Gainsford
HONORARY TREASURER

NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE INC. STATEMENT OF FINANCIAL POSITION AS AT 31 MARCH 1993

	1993 \$	1992 \$
ACCUMULATED FUNDS		
Opening Balance	105,898	85,236
Surplus/(Deficit) For The Year	888	20,662
Closing Balance	<u>106,786</u>	<u>105,898</u>
Represented by:		
CURRENT ASSETS		
Cash At Bank (Note 4)	36,454	96,184
Debtors	10,080	5,930
Prepaid Grants to Special Interest Group	—	10,225
Advance to Conference	2,500	1,500
GST	859	(7,667)
TOTAL CURRENT ASSETS	<u>49,893</u>	<u>106,172</u>
LESS CURRENT LIABILITIES		
Creditors	14,559	14,276
TOTAL CURRENT LIABILITIES	<u>14,559</u>	<u>14,276</u>
NET CURRENT ASSETS	35,334	91,896
INVESTMENTS (Note 2)	62,880	—
FIXED ASSETS (Note 3)	8,572	14,002
	<u>\$106,786</u>	<u>\$105,898</u>

TO UNDERSTAND
THE A_{xSYM}
PRINCIPLE, IMAGINE
READING
ANOTHER PAGE
WHILE YOU
FINISH THIS ONE.

That's continuous access.

It's the principle behind the all new AxSYM immunoassay analyzer from Abbott.

It means you no longer have to wait for a run to finish before obtaining assay results. You can also add assays and samples at any time. Now imagine reading every page in this entire magazine at the same time.

Because that's the kind of throughput AxSYM can offer. A capacity for 20 reagent packs and 60 bar-coded primary tubes allows AxSYM to process up to 120 tests per hour.

Third generation technology also includes a touchscreen display, keyboard and bi-directional interface for your host computer.

Very simply, it's the ultimate immunoassay analyzer.

AxSYM won't be available in New Zealand until later this year but you will have an opportunity to see the analyzer at conference in August.

If you want to make sure that your laboratory has the best, delay all decisions until you have seen AxSYM. It will be worth the wait.



ABBOTT DIAGNOSTICS

P.O. Box 58-611 Greenmount, Auckland. Ph. 0800-656-233

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED 31 MARCH 1993**

	1993 \$	1992 \$
INCOME FOR THE YEAR WAS DERIVED FROM:		
Examination surplus (as per statement)	4,850	5,279
Conference surplus (as per statement)	19,528	21,781
Interest income	4,465	8,846
Seminar registrations	8,793	—
Subscriptions and levy	53,375	53,405
Donations	100	—
Sponsorship and prizes	2,041	—
Miscellaneous income	5,732	6,718
	98,884	96,029
FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MET:		
Accommodation, etc	12,963	5,888
Accountancy and audit fee	3,000	3,000
Bank Fees	140	458
Catering	3,175	—
Depreciation	5,430	5,430
Fees — IAML T	2,996	2,925
Gifts and Donations	6,213	2,310
Journal Account Deficit (as per statement)	11,369	10,830
Postage and tolls	5,895	8,587
Printing stationery and typing	5,694	3,532
Prizes	1,600	2,400
Secretarial fee	10,568	8,432
Seminars/conferences (Note 5)	7,990	3,076
Sundry expenses	4,447	1,497
Travelling expenses	16,516	17,002
	97,996	75,367
TOTAL EXPENDITURE FOR YEAR	97,996	75,367
Excess of Income Over Expenditure	\$888	\$20,662

The attached notes form part of this statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
EXAMINATION ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1993**

	1993 \$	1992 \$
INCOME WAS DERIVED FROM:		
Examination enrolments	23,856	18,705
Interest	442	488
Other	—	20
	24,298	19,213
 FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MADE:		
Examiners' fees (gross)	10,374	4,308
Printing and stationery	400	414
Secretarial	8,028	8,928
Sundry expenses	646	284
	19,448	13,934
 Excess of income over expenditure transferred to the Statement of Income and Expenditure	 \$4,850	 \$5,279

The attached notes form part of this statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
WELLINGTON CONFERENCE ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1993**

	1993 \$
INCOME FOR THE YEAR WAS DERIVED FROM:	
Registration	23,011
Trade rentals, advertising and donations	15,236
Social functions and lunches	7,271
Bank interest	525
Other income	421
Sponsorship	2,089
	48,553
 FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MET:	
Advertising and printing	2,302
Travel, accommodation and meals	1,399
Social function costs	16,022
Rentals and venue hire	6,128
Postage, stationery and administration	1,361
Other expenditure	1,813
TOTAL EXPENDITURE	29,025
 Excess income over expenditure transferred to the Statement of Income and Expenditure	 \$19,528

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
JOURNAL ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1993**

	1993 \$
INCOME FOR THE YEAR WAS DERIVED FROM:	
Advertising Revenue	28,373
Subscriptions	961
	29,334
FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MET:	
Printing	31,532
Postage	5,937
Advertising Commissions	3,234
	40,703
TOTAL EXPENDITURE	40,703
Excess expenditure over income transferred to the Statement of Income and Expenditure	\$11,369

The attached notes form part of this statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 31 MARCH 1993**

	1993 \$	1992 \$
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash was provided from:		
Receipts from Members	53,375	53,405
Other Receipts	114,701	124,227
Cash was disbursed to:		
Payments to suppliers and employees	(170,358)	(177,977)
Net cash flows from operating activities	(2,282)	(345)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Cash was provided from:		
Proceeds from Sale of Investment Securities	—	20,000
Interest Income	2552	8388
Cash was disbursed to:		
Purchase of investments	(60,000)	—
Net cash flows from investing activities	(57,448)	28,388
NET INCREASE (DECREASE) IN CASH HELD	(59,730)	28,043
ADD OPENING CASH BROUGHT FORWARD	96,184	68,141
ENDING CASH CARRIED FORWARD	\$36,454	\$96,184

The attached notes form part of this statement.

NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE INC. NOTES TO THE 1993 FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES

The historical cost basis of accounting has been used in the preparation of the financial statements. Reliance is placed on the fact that the Institute is a going concern. Accrual accounting is used to match expenses and revenues.

Particular accounting policies:

a) Fixed assets and depreciation

Depreciation is calculated on a straight line basis to write off typewriters, computer and office furniture over their estimated useful lives of 5 years.

b) Investments

Investments are recorded at cost.

There have been no changes in accounting policies. All policies have been applied on bases consistent with those used in previous years.

Certain comparatives have been restated to accurately reflect the changes to the format of the financial statements.

2. INVESTMENTS

	Cost	Accrued Interest	Total
BNZ Finance - matures 27.4.93 - interest rate 8.0%	20,000	1,432	21,432
BNZ Finance - matures 23.2.94 - interest rate 7.1%	20,000	148	20,148
BNZ Term Deposit - on call	20,000	1,300	21,300
	<u>60,000</u>	<u>2,880</u>	<u>62,880</u>

There were no term investments as at 31 March 1992.

3. FIXED ASSETS

	Cost \$	Accumulated Depreciation \$	Net Book Value \$
Office Equipment	10,449	9,171	1,278
Computer Equipment	15,068	8,672	6,396
Office Furniture	1,632	734	898
31 March 1993	<u>27,149</u>	<u>18,577</u>	<u>8,572</u>
31 March 1992	<u>27,149</u>	<u>13,147</u>	<u>14,002</u>

4. CASH AT BANK

	1993 \$	1992 \$
#1 Main account (0251864-00)	8,428	41,430
#2 Main account (0600311-00)	(1,644)	14,278
Congress account (0251864-02)	—	4,665
#1 Autocall account (0251864-25)	8,553	25,403
#2 Autocall account (0600311-25)	10,006	—
Secretarial account (0677909)	—	4,558
Special Interest Groups' accounts	11,111	5,850
	<u>36,454</u>	<u>96,184</u>

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
NOTES TO THE 1993 FINANCIAL STATEMENTS (continued)**

The Secretarial and Congress accounts were closed during the year and funds transferred to the #1 Main account. Two conference accounts, 0266768-00 and 02566768-25, were opened and closed during the year to administer the Wellington 1992 conference. The funds were transferred to the #2 Main account.

5. SEMINARS/CONFERENCES

A late expense of \$4066 for the 1992 South Pacific congress has been included in this account for the current year.

6. CAPITAL COMMITMENTS/CONTINGENCIES

As at 31 March 1993 the Institute was committed to purchase a fax machine for \$2042.

There are no other commitments or contingencies.

**AUDITORS' REPORT
TO THE MEMBERS OF THE NEW ZEALAND INSTITUTE OF MEDICAL
LABORATORY SCIENCE INC.**

We have audited the financial statements on pages 1 to 9 in accordance with accepted auditing standards and have carried out such procedures as we considered necessary.

In common with other organisations of a similar nature, control over income prior to its being recorded is limited, and there are no practical audit procedures to determine the effect of this limited control.

Except for the possible effect of the limited control over income referred to in the preceding paragraph, in our opinion the financial statements give, using the historical cost method, a true and fair view of the financial position of the Institute as at 31 March 1993 and the results of its activities and cash flows for the year ended on that date.

23rd June 1993
WELLINGTON, NZ

Deloitte Touche Tohmatsu
CHARTERED ACCOUNTANTS

Yet another case is described. This time quick thinking averted more serious consequences.

PREVENTION IS THE BEST CURE — BUT HOW?

David Wilson, Manawatu Regional Blood Centre, Palmerston North Hospital, Palmerston North.

There have been many suggestions put forward over the years as to how we can prevent or detect the contamination of blood with the organism *Yersinia enterocolitica*.

Some of these, and a few more, will be presented for discussion.

D.I.O.D.I.R.

Eileen Chappell, Manawatu Regional Blood Centre, Palmerston North Hospital, Palmerston North.

TQM attempts to shift attitudes from "T.C.E." and "S.B.R." to getting it right the first time.

SOFTWARE QUALITY MANAGEMENT SYSTEM

Paul Clarke, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

A quality system is essential for the successful integration of hardware and software into a computerised system which meets user requirements. A means of implementing that system should be agreed on when signing a contract with a software developer.

A disciplined approach to software development management is outlined in standard NZS/AS 3563.1-1991.

TELARC: BOTH SIDES OF THE FENCE

Marie Willson, Blood Bank, Gisborne Hospital, Gisborne.

Accreditation is becoming very important as the era of RHA's looms closer. This presentation will endeavour to outline how it feels to undergo TELARC assessment and what it is like to be an assessor.

GOOD MANUFACTURING PRACTICE AND QUALITY MANAGEMENT: HOW DO THEY AFFECT US?

Will Perry, Salmond Smith Biolab, Auckland.

"We've been doing it like this for years so why should we change now?"

The way we have been doing things for years is not necessarily the best way and we are now required to demonstrate to increasingly-critical inspecting authorities that our manufacturing and testing procedures reach the highest standards.

This paper will address some of the requirements of new codes of Good Manufacturing Practice and ISO 9000 and how Manufacturing and Testing Laboratories have to respond to these in order to stay in business.

WHAT DO YOU WANT IN A SURVEY?

Roger Austin, Blood Bank, Taranaki Base Hospital, New Plymouth.

The NIPS programme has been in operation for fifteen years using the same format. This is an opportunity to discuss what you would like to have as your survey.

5 PLUS OIL CHANGES IN 24 HOURS

Peter Webster, Immunohaematology, Wairau Hospital, Blenheim.

How to cope under the present system.

Will the changes being planned allow us to keep the patient alive in the future?

Will the current flexibility within the system still be there for the benefit of the patient or will the rules and regulations lead to their demise?

CHE AND ME

Sheryl Khull, Wellington Regional Blood Centre, Wellington Hospital, Wellington.

Crown Health Enterprises are now a reality for New Zealand Blood Bankers. What will this mean to me? Will I notice? Will I turn into an unprincipled profit-monger? Can I work for a CHE and still live with myself?

WILL TRANSFUSIONS FINALLY BE LEGAL?

Ray Scott, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

The health reforms due for implementation by July 1993, should finally bring the production and distribution of blood and blood products within the laws and regulations which have supposedly governed these activities since the early 1980s. To achieve and maintain compliance with the regulations, personnel at all levels will not only be required to carry out the functions currently associated with their positions, but will also be required to embody the practices and philosophy required of other pharmaceutical manufacturers.

This paper briefly identifies some of the main areas which are likely to need attention if compliance is to be achieved.

BILLING THE BUYER

David Fisher, Laboratory, Masterton Hospital, Masterton.

All blood and Blood Transfusion Service costs are generated by someone. A brief description of the internal billing system in use in Masterton Hospital is presented.

TRANSFUSION SCIENCE IN THE CLASSROOM

Julie McLeod, Wellington Regional Blood Centre, Wellington Hospital, Wellington.

The CIT Diploma in Medical Laboratory Science is in its fourth year. Twenty one students have studied Introductory Immunohaematology with eight students choosing to go on to the MLTB certificate level syllabus for Transfusion Science.

THE DIPLOMA IN MEDICAL LABORATORY SCIENCE COURSE

Vanessa Lindop, Rochelle Stanton and Aaron Ferguson, Central Institute of Technology, Trentham.

A brief overview of what is involved in the Diploma in Medical Laboratory Science at the Central Institute of Technology, Trentham.

AN ABSORBING STORY

Robert Coleman, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

Anti-Chido and anti-Rodgers are directed against antigens of high frequency. While considered to be clinically insignificant, they can cause major delays in finding compatible units for transfusion. When first discovered they were described as nebulous antibodies because of their vague and indistinct reactions. Once specificity has been established, however, the serological problems they present may be readily overcome.

CONCEPTUAL FIBRINOGEN

Les Milligan, Department of Transfusion Medicine, Dunedin Public Hospital, Dunedin.

The aim of this exercise was to assess the yield of fibrinogen in cryoprecipitate prepared from plasma at 0°C to assist in making a decision in a treatment programme for a pregnant patient with afibrinogenaemia.

DNA TECHNOLOGY IN PATERNITY INVESTIGATIONS

Holly Perry, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

At the Auckland Regional Blood Centre, we now have 3 years experience with Restriction Fragment Length Polymorphism (RFLP) in paternity investigations. A review of the technique will be presented.

TRANSFUSION MEDICINE AUDIO UPDATES

A continuing education programme presented on audio tape
AVAILABLE THROUGH THE TRANSFUSION SCIENCE SPECIAL INTEREST GROUP.

Tape and transcript : \$6.00 per topic for NZIMLS members
Tape only : \$4.00 per topic for NZIMLS members
Transcript only : \$3.50 per topic for NZIMLS members
Surcharge of : \$2.00 per topic for non-members

Topics currently available:

1090 Solid Phase Immunohaematologic Testing — Red Cells & Platelets
0491 Monoclonal Reagents — What Should We Expect From Them?
0991 Total Quality Improvement — A Lifetime Goal
0592 An Update on Hepatitis C
0692 Quality Assurance in Hospital Transfusion Medicine
0792 Human T-Cell Lymphotropic Viruses
0892 Approaches To Bloodless Surgery
0992 Transfusion Errors — Causes and Prevention
1092 Transfusion Safety — Towards Eliminating Identification Errors

New topics:

1292 Current Status of Plasma Exchange and Cytapheresis
0193 What to Expect During an OSHA Inspection
0293 Prevention of Rh Immunization
0393 The 15th Edition of AABB Standards: Revisions & Implications
0493 Red Cell Crossmatch : Evolution, & Use of the Computer

Order from Sheryl Khull, Secretary, TSSIG, Transfusion Laboratory, Wellington Hospital.

NZIMLS member name: _____

Address: _____

Cheque enclosed / official order form attached

Tapes and transcripts / Tapes only / Transcripts only

Continuous subscription for issues

commencing with issue:

or specify topics: _____

Jk(a-b-) SCREENING OF BLOOD DONORS

Jenny Mills, Waikato Regional Blood Centre, Hamilton.

A method of screening for Jk(a-b-) donors using the Kontron Microgroupomatic is described.

PEG CROSSMATCH — REVIEW OF 20 MONTHS USE

Max Love, Immunohaematology, Hutt Hospital, Lower Hutt.

PEG crossmatch — 20 months on this lab is still happy with the change.

IS YOUR DONOR ON DRUGS?

Susan Robertson, Department of Transfusion Medicine, Christchurch Hospital, Christchurch.

The Department of Transfusion Medicine at Christchurch Hospital is heavily involved in the provision of platelet support for patients in the South Island Bone Marrow Unit. On occasion this demands urgent donor call-ins. A study is under way to determine if there is any group (group based on age/sex) of donors who are less likely to be suitable for urgent call-in due to their having taken medication such as Aspirin or non-steroidal anti-inflammatory drugs. Preliminary results show that of those donors taking medication, the majority are female.

AUTOLOGOUS TRANSFUSIONS — OUR EXPERIENCES

Tony Morgan, Blood Bank, Napier Hospital, Napier.

5 years of autologous transfusions at Napier Hospital ("The Autologous Capital of NZ") will be reviewed.

HOW TO LOSE BLOOD DONORS WITHOUT EVEN TRYING

Elizabeth Fisher, Masterton Hospital, Masterton.

Negative media publicity, autologous transfusions and the intimate questions on enrolment forms are upsetting donors. A brief survey of donors thoughts.

HLA-DR4 SUBTYPES IN NEW ZEALAND POLYNESIANS

Maurice Roberts, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

Using Polymerase Chain Reaction (PCR), DR4 group-specific primers and Sequence Specific Oligonucleotides (SSO) we examined DRB1*04 nucleotide polymorphisms in a population of 185 DR4-positive individuals (60 Caucasian and 65 Polynesian controls, 30 Caucasian and 30 Polynesian Rheumatoid Arthritis (RA) patients). We found that the distribution of DRB1*04 alleles on Dr4 haplotypes differs in the two ethnic groups. The frequency of DRB1*04 was increased in both Caucasian and Polynesian patients with RA compared with their race-matched controls. DRB1*0401 was detected in 15/30 Caucasians but only 2/30 Polynesian patients. In Polynesians, RA was associated with DRB1*0405 which was present in 11/30 patients and 3/65 controls. DRB1*0403 was the most frequent DR4 allele in healthy Polynesians but was not associated with RA.

THE FOLLOW-UP OF RECIPIENTS OF HCV POSITIVE BLOOD DONATIONS

Faye Martin, Blood Bank, Memorial Hospital, Hastings.

With the advent of HCV testing of donors, the Hawke's Bay Area Health Board made a policy to follow-up all the recipients who had received blood from HCV positive donors. This paper will outline the findings.

DOUBLE TROUBLE

Alison Dent, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

Analysis of Parentage Testing Results in cases where two putative fathers were involved.

THE NATIONAL TRANSFUSION ALERT REGISTER — SHOULD WE BE MORE ALERT?

Zandra Mitchell, Blood Bank, Napier Hospital, Napier.

A brief look at a patient case history highlights some of the problems encountered with notification of clinically significant red cell antibodies in transfusion. The question is raised as to whether we should be doing more to notify medical staff and the BTS of the presence of such antibodies.

HIV/AIDS SOUTHLAND AREA HEALTH BOARD POLICY

Lindsey Browning, Immunohaematology, Southland Hospital, Invercargill.

As part of its Business Plan in 1991 the Southland Area Health Board made a commitment to the formation of a HIV/AIDS coordinating committee. The goals of the committee were to ensure coordination of current services, establish new services and formulate a policy acceptable to provider groups, local support groups and the Area Health Board/Regional Health Authority. Aspects of the policy will be discussed.

MUD GLORIOUS MUD

Lisa Bate, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

In February this year, Kenneth Bishop and his family launched an appeal to find a Matched Unrelated bone marrow Donor of Maori descent. He has leukaemia and needs a bone marrow transplant to save his life. With his particular tissue type, his only hope is an unrelated Maori donor. I will be discussing what Auckland has been doing in establishing a MUD panel.

BONE BANKING

Stephen Silk, Immunohaematology, Hutt Hospital, Lower Hutt.

A brief look at the protocol used by Hutt Immunohaematology Department for using Femoral Head Allografts and Bone Bank storage.



Participants at the 1993 N.I.C.E. weekend.

POSTER ABSTRACTS

CRYOPRECIPITATE THE PAST AND PRESENT

Carole Watson, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

This poster reviews cryoprecipitate usage in New Zealand, the quality in recent years and outlines its direction and future.

PLATELETS MADE EASY

Jacqui Jones, Auckland Regional Blood Centre, Auckland Hospital, Auckland.

In 1991 access to and criteria for issue of platelets in the Auckland region were relaxed. This poster reviews the production, transfusion and expiry patterns associated with these changes.

MUREX SUDS HIV-1 TEST

Elizabeth Fox, Murex Diagnostics NZ, Auckland.

This poster describes some of the technical details of this single use diagnostic system.

FENWAL SAMPLING SYSTEMS

James Kenworthy, Baxter Healthcare Ltd, Auckland. Baxter Healthcare would like to introduce you to recent improvements to the Fenwal blood pack.

Undiluted sampling systems offer the advantage of collecting 34mL of undiluted whole blood for laboratory testing. They are available in a wide range of configurations which are displayed in our poster presentation.

COLUMN AGGLUTINATION TECHNOLOGY

Paul Balchin, Inter-Med Scientific, Auckland.

For antibody screening, identification and compatibility

testing Ortho Diagnostic Systems have improved the column agglutination technology and have developed the **Ortho BioVue System**. This system comprises cassettes, reagents and supplementary materials including a centrifuge, heating block and working rack.

A FAMILY ABO AND Rh(D) INHERITANCE STUDY IN ONE EASY GO

Jan McPherson, Waikato Regional Blood Centre, Hamilton.

A case study: Deducing a family's ABO and Rh(D) genotypes when the ABO and Rh(D) phenotypes of the mother and four siblings are known.

LITERATURE REVIEWS

Terminology for Weak D Antigens

The fifteenth edition of Standards for Blood Banks and Transfusion Services of the American Association of Blood Banks, effective May 1993, has dropped the term 'DU' in favour of the term 'weak D' to embody any of the various non-standard results that may be obtained in tests with anti-D reagents. Increasing understanding of Rh serology and biochemistry has illuminated the imprecision of the term 'DU' and the multiplicity of variations that Rh antigens can exhibit.

This is just another example of the fact that the term 'DU' is being gradually replaced in modern blood banking terminology with the more accurate term 'weak D'.

ARTICLES OF INTEREST

Anti-M — Refresh Your Memory

Susan Duncan

Wanganui Diagnostic Laboratory

A FAMILY ABO AND RH(D) INHERITANCE STUDY IN ONE EASY GO!

by Jan McPherson

Waikato Regional Blood Centre

A CASE STUDY;

Deducing a family's ABO and Rh(D) genotypes when the ABO and Rh(D) phenotypes of the mother and four siblings are known.

FAMILY STUDY

Known Groups; Mother B Rh(D) Negative

Quad I AB Rh(D) Positive

Quad II O Rh(D) Negative

Quad III O Rh(D) Positive

Quad IV B Rh(D) Positive

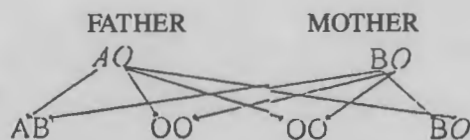


Fig. 1. ABO inheritance. Most probable genotypes in italics. The father's most probable genotype is *AO* as shown above. However, the rare *cis* AB allele cannot be excluded. i.e. *AB/O*.

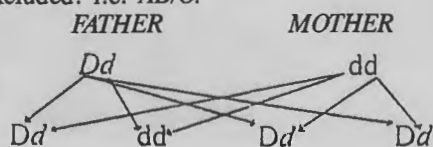
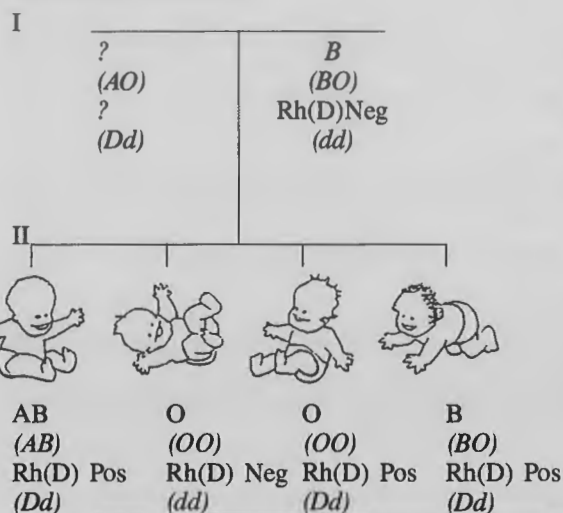


Fig. 2. Rh(D) inheritance. The symbol *d* indicates the absence of D.



- * Discovered 1927 — Landsteiner & Levine
- * Mostly occurs as a cold agglutinin acting best at 4°C and weakly or not at all at 37°C.
- * Naturally occurring anti-M may be IgG.
50 — 80% of anti-M reacting best at room temperature or below are IgG or contain an IgG component.
- * Anti-M not active at 37°C is clinically insignificant.
- * IgG anti-M active at 37°C reacts well in a high protein medium.
- * HDN caused by anti-M is rare.
- * HDN due to anti-M more closely resembles HDN due to ABO incompatibility rather than Rh — DAT may be weakly positive or even negative where exchange transfusion is necessary.
- * Determine the nature of anti-M by using:
 - (i) thermal amplitude tests
 - (ii) tests using 2-mercaptoethanol or dithiothreitol for reduction of IgM molecules.



Kathy Holder — winner of the Abbott award at the N.I.C.E. weekend.

DELAYED HAEMOLYTIC TRANSFUSION REACTION (DHTR) — A CASE HISTORY

Sue Baird, Rotorua Hospital

Mr X, a 72-year-old man was admitted with a fractured neck-of-femur for grafting, following a motorcycle accident. Mr X had a history of two Total Hip Replacements (THR) and one Prostrate Operation, and had been transfused on at least one occasion. Mr X was not from this area so very little of this information was available plus we were not told where these operations were performed. It was known that Mr X had donated blood for his last THR and he thought it may have been due to antibody problems, but was not sure.

Mr X grouped as B Rh D positive and his antibody screen was negative by LISS Coombs, LISS Papain & LISS 37°C immediate spin techniques. A three unit LISS crossmatch was then performed with no incompatibilities detected.

Mr X was taken to Theatre and due to complications while there a further three, four unit crossmatches were performed. In total Mr X received 8 units of blood — 5 group B, 3 group O.

Ten days later Mr X became jaundiced, passed dark urine, had chills and generally felt unwell. His serum was a dark brown/black colour and his Haemoglobin had dropped to 86 g/l from 124 g/l immediately post theatre. A transfusion reaction work-up was instigated and a crossmatch for two units of Resuspended red cells was requested.

Mr X's antibody screen was not positive and anti-c identified. A Direct Antiglobulin Test (DAT) was performed and this was weakly positive with anti-c eluted from the cells. Urine dipstick for bilirubin and haemoglobin were both +++ positive, Haptoglobins were <0.05 g/l (N Range 0.2-1.6 g/l) and Serum Urea and Creatinine levels were slightly raised.

Two c negative units were crossmatched and transfused with no apparent problems. When Mr X was discharged to his home region his DAT was negative and his serum and urine had returned to a normal colour.

A lookback to identify the genotypes of the transfused units was performed and seven of the eight could be typed, all were c positive. We also contacted the hospital where Mr X had his last THR and obtained his most recent transfusion history. In November 1988 anti-c and a moderately strong autoantibody reacting by LISS Coombs and Papain were detected, and in December 1988 he was transfused 3 Autologous units.

This incident highlights the problem's that can occur when patients with clinically significant antibodies require transfusions out of their home regions. The National At Risk Patient File is not being kept up to date and the PAXUS National Computer system, although it has a screen for Adverse Medical Reactions, is not satisfactory. Not all Hospitals in New Zealand use the system and lower case letters can not be entered and as we Blood Bankers know there is a big difference in Anti-C and Anti-c. Perhaps all that we can do is to ensure that all people with clinically significant antibodies know to carry some form of identification saying what antibodies they have.

Anti-c has been implicated in DHTRs on several occasions and in a review of three lookback studies by major transfusion centres Mollison et al found that 5 were due to anti-c and that approx 34% were due to Rhesus antibodies (Abs). This compares with 30% Kidd Abs, 14% Duffy Abs and 13% Kell Abs, however it must be recognised that the sample size was only 100 in this review.

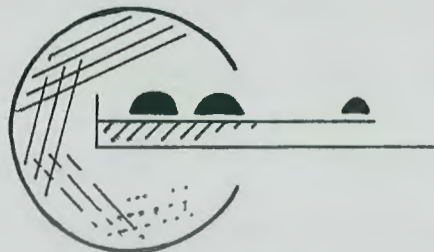
As a slight aside from DTHRs had we known that Mr X had an anti-c antibody below detectable levels it is possible that we would still have had to transfuse him c positive units. The complications that occurred during his operation caused an urgent and greater need for blood than was first expected and whether we could have found sufficient c negative units in the time required is highly unlikely. Approximately 18% of the Caucasian population is compatible with anti-c antibodies, however the decision to use incompatible units would have been made by the Clinician in charge of the patient.

References

- Mollison P, Engelfriet C, Contreas M: Blood Transfusion in Clinical Medicine.
- CSL Classification of Blood Group Antibodies wall chart.



Sue Duncan.



MICROBIOLOGY

SPECIAL INTEREST GROUP

Convenor: Shirley Gainsford
Contact Address: Valley Diagnostic Laboratories Ltd, P.O.
 Box 30-044, Lower Hutt.

The MSIG held their first 1993 committee meeting in Wellington on February 18th. This followed a memo sent out by Shirley Gainsford, to the Charge Technologists, requesting volunteers to act as regional MSIG representatives.

REGIONAL MSIG REPRESENTATIVES

David Riley, Diagnostic Laboratory, Auckland
 Janet Wilson (Treasurer), Medical Laboratory, Dunedin
 Sarah Thirlwall (Secretary), Waikato Hospital, Hamilton
 Mary Carr, Wellington Hospital, Wellington

MSIG Committee Meeting (Feb 18th) Discussion Topics

1. MSIG Journal Club
 Subscription fee will cover the cost of journal indexes and postage.
2. Selection of examiners and moderators for certificate and specialist examinations and Q.T.A. examination.
3. Examiners and moderators workshop for Q.T.A. and Specialist level.
 Examiners and moderators will be invited to attend a Christchurch or Auckland workshop.
4. New syllabi are available for microbiology specialist level and Q.T.A. examinations.
5. Guidelines "Tasks suitable for Medical Laboratory

Assistants". A workshop is to be held by the council in Auckland in April with representatives from each discipline to produce lists of tasks. David Riley and Shirley Gainsford are representing Microbiology.

6. A workshop/seminar is to be formulated for March/April 1994 in Rotorua. Possibilities for the theme include:
 - a) Seminal fluid investigation.
 - b) Whats New??? — new bugs
 — new methods
 — fluorogenics
 — molecular biology

Any other ideas? Feel free to contact your regional representative.

7. Waikato/Bay of Plenty have a regional MSIG. The first meeting was in Hamilton in February and was well attended by plenty of enthusiastic people. Four further gatherings have been planned for the year, each with their own theme topics, such as Q.C., new methods and NZIMLS conference report and will be hosted by varying centres.
8. We are compiling a list of people interested in MSIG activities. If you wish to be on the mailing list contact Sarah Thirlwall (see above address).



THE NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE (INC.)

Title Donor Nature

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To encourage the publication of new work and articles in the Journal by providing opportunity, guidance and incentive for students to attempt this task, and develop an interest and facility in performing it.

An award of two hundred dollars (\$200) will be made biennially to a student member (defined as a trainee technologist or pre QTA laboratory assistant) who is the author of an original review article or a technical paper describing work of an innovative nature or having a novel application. In the case of joint authorship both authors must be student members.

Eligibility Method of Entry

All financial Student Members of the NZIMLS (Inc)
 Publication in the Journal of the NZIMLS, an article of the nature previously defined, by a Student Member.

Date of Entry

All articles by Student members which have been published during the two year period ending in December 1993 will be considered for this award.

Judging

The judge shall be the Editor of the Journal who may also seek advice from the Awards Committee. If, in the opinion of the judge, the standard of papers submitted does not merit an award, then no award shall be made.



An important announcement to all health professionals who take cervical smear tests.

As from the 1st of July, enrolment on to the National Cervical Screening Register changes. Unless a woman requests otherwise, her cervical smear test results will automatically be sent from the laboratory to the Register.

Women will no longer need to sign on to the Register but it's important that they be well informed about it, and that its benefits are explained to them fully. And that's where you, the health professional, play a key role.

The Register acts as a safety net for women, reminding them if they have missed their regular smear test and to follow up as soon as possible on any abnormal results.

It's *your* safety net too, so it's important that all your women patients enrol.

Other changes include improved and simplified enrolment forms. Histology results will be included on the Register.

If you haven't already received information on the changes to the Register, please contact your local Cervical Screening Programme Manager.

Your help has already contributed to the success of the National Cervical Screening Programme. These changes will improve the effectiveness of the Programme. We thank you for your continuing support.

cervical SCREENING



INSTITUTE BUSINESS Office Bearers of the N.Z.I.M.L.S. 1992-1993

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Please address all correspondence to the Executive Officer, including Examination and Membership enquiries.

Editor

Maree Gillies
Microbiology Dept., Auckland Hospital or The Editor,
P.O. Box 9095, Newmarket, Auckland.

Membership Fees and Enquiries

Membership fees for the year beginning April 1, 1991 are:

For Fellows — \$88.40 GST inclusive

For Members — \$88.40 GST inclusive

For Associates — \$33.80 GST inclusive

For Non-practising members — \$33.00 GST inclusive

All membership fees, change of address or particulars, applications for membership or changes in status should be sent to the Executive Officer at the address given above.

Members wishing to receive their publications by airmail should contact the Editor to make the necessary arrangement.

Registered Medical Laboratory Technologist' Badge

At the 1984 Annual General Meeting Council was requested to investigate introducing a badge for Registered Medical Laboratory Technologists who are Fellows or Members of the Institute.

It was the view of Council that the badge should carry the logo of the Medical Laboratory Technologists Board rather than the Institute and subsequently approval was granted by the Board subject to the provision of the awarding of a badge being incorporated into the rules of the Institute.

This requirement was met at the recent General Meeting by amending Rule 7 as follows:—

- 7 (c) Every Fellow or Member who is registered with the Medical Laboratory Technologists Board, shall be entitled upon proof of registration and payment of the appropriate fee, to receive a Registered Medical Laboratory Technologists badge from the Institute.
- (d) Every diploma and badge shall be issued under the seal of the Institute and shall be in such form as the Council may from time to time determine, and shall be the property of the Institute, and upon the member ceasing to be a member shall be recoverable on demand.



A badge (above) has been approved by Council and is now available for purchase in accordance with the above rules. The badge is blue with gold print and measures 35 x 30mm. The cost of the badge is \$5.50 including postage and G.S.T.

If you wish to make application for a badge then please complete the form below:—

APPLICATION FOR REGISTERED MEDICAL LABORATORY TECHNOLOGIST BADGE

Name (Block letters):

MAIDEN NAME:

ADDRESS:

YEAR QUALIFIED:

"I certify that I am a) A Fellow or Member of the New Zealand Institute of Medical Laboratory Science and b) I am registered with the New Zealand Medical Laboratory Technologist Board"

SIGNED: DATE:

Fee enclosed: \$5.50 payable to the NZIMLS

Forward to Executive Officer, NZIMLS, P O Box 3270, Christchurch

Membership Sub-Committee Report — May 1993

Since the February meeting there have been the following changes:

	04.05.93	23.02.93	11.11.92	23.08.92
<i>Membership</i>	1237	1242	1244	1256
less resignations	6	3	7	27
less G.N.A.	2	8	19	19
less deletions	118	3	-	-
less deceased	1	-	-	-
less duplications	-	1	-	-
	1110	1227	1237	1210
plus applications	20	10	5	34
plus reinstatements	5	-	-	-
	1135	1237	1242	1244
<i>Composition</i>				
Life Member (Fellow)	12	12	12	12
Life Member (Member)	8	5	5	5
Fellow	20	20	20	20
Member	686	679	678	678
Associate	325	436	443	443
Non-practising	58	59	68	60
Honorary	26	26	26	26
Total	1135	1237	1242	1244

Applications for Membership

B. POSTLEWRIGHT, Northland Pathology; S. LALLU, Wellington; K. SPRAY, Green Lane; A. KEMPTHORNE, Auckland; L. PAEA, Christchurch; R. HENTON, Waikato; R. DAVIDSON, Auckland; G. SUTTON, Christchurch; L. BARRETT, Rotorua; F. HUTCHISON, Waikato; D. RAY, Royston; T. PHILLIPS, Waikato; Y. JENNINGS, Waikato; S. PALLISER, Taranaki; W. CHAMBERLAIN, Taranaki; K. DMITRIEFF; P. LLOYD, Wellington; J. BARNETT, Northland Pathology; R. GIBSON, Cardinal; C. PICKETT, Hamilton, Medlab.

Gone No Address

R.J. BARRY; N.TAUATI.

Resignations

P. PEDLOW; D. BROADLEY; K. BROWN; V. STIMPSON; R. ARCHER.

LETTERS TO THE EDITOR

We would like to respond to the letter from Siebers and Carter questioning whether our "findings of no racial differences in cord blood haematology parameters" could have been confounded by the weight of the babies"².

The mean weights of the babies increased through gestation from 2674 grams at 32-36 weeks, 3,104 grams at 37-38 weeks, 3,424 grams at 38-39-40 weeks to 3,715 grams at greater than 41 weeks. The average birth weights in grams (mean ± 2SD) for the four groups — Maori, European, Samoan and Polynesian (i.e., mixed Polynesian or Polynesian European Heritage) are listed below. The numbers in brackets represent the number of samples for each group.

Gestation per od (weeks)	32-36	36-37	38-40	41 +
Maori	2612 ± 582 (18)	3069 ± 412 (35)	3256 ± 488 (35)	3494 ± 441 (22)
European	2420 ± 473 (16)	2888 ± 488 (25)	3498 ± 465 (34)	3980 ± 310 (31)
Polynesian	2820 ± 330 (20)	3054 ± 516 (35)	3360 ± 568 (80)	3272 ± 513 (15)
Samoan	3008 ± 542 (13)	3372 ± 443 (22)	3577 ± 427 (32)	3719 ± 340 (14)

Using the Newman-Keuls multiple comparison test there is no statistical difference in weights. The Maori babies born from 32-37 weeks were larger than the European babies, but the reverse was true from 38-41 weeks. However the differences are small and not statistically significant.

When weight was regressed against platelet count for the entire population (n = 553) no linear trend was established (r = 0.07, p = 0.10). Our data suggests that platelet parameters at birth do not correlate with weight — unlike those in the adult population.

Yours sincerely,

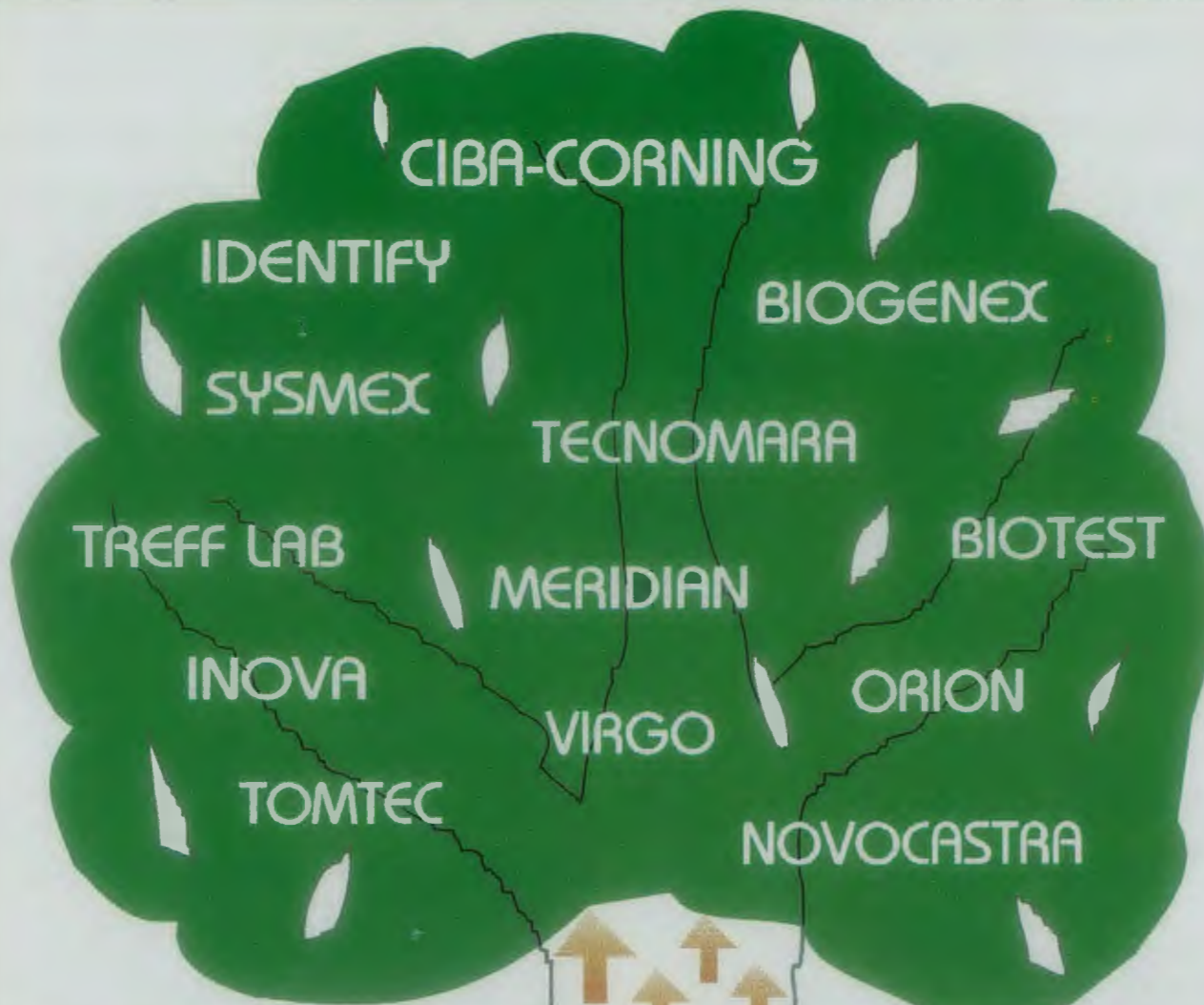
DR. HILARY BLACKLOCK

RAEWYN BLUCK

1. Bluck and Blacklock, Haematology values in cord blood samples from normal babies. NZJ Med Lab Science 1992; 46(4): 122-123.
2. Sieber and Carter, Letter to the Editor, NZJ Med Lab Science 1993;47 (1):36.

List of Advertisers in this Issue

ABBOTT Diagnostic Division	page 104-105
Biolab Scientific	inside back cover
Boehringer Mannheim NZ Ltd	back cover
Kodak	inside front cover
Labsupply Pierce (NZ) Ltd	page 124
Radiometer Pacific	page 92
SCIENZ Corporation Ltd	page 120



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The Pacific Way

HERE AND THERE IN THE PACIFIC

Western Samoa and Smoking

There is no accurate estimate of how many of Western Samoa's 160,000 people smoke cigarettes. Manager of the local Rothman's Tobacco Co. Ltd., branch, Mike Tamati, thinks about 40% of the total population smoke.

The Health Department thinks that more than half Samoan males smoke, and a smaller percentage of females but is not sure yet. A national health survey covering several areas including smoking, was carried out in 1987 and 1991, but the raw data has still not been analysed because of a lack of resources.

Last year the Department of Health and its non smoking Health Minister announced a sudden ban on smoking inside the buildings and compounds of all medical centres. The move, which applied to staff, patients and visitors, had some effect but was so rigid (no smokers zone was set aside) it could not be enforced.

Dr Harley Stanton, a World Health Organisation Consultant told a workshop in Apia that while some people might adapt better to smoke than others, "you cannot fool the statistics".

"Smoking is a death style disease, not a lifestyle disease," he said, adding that declining smoking rates in developed countries were being offset by increasing consumption in developing countries.

Such information means little without motivation to stop puffing. A group set up recently to pursue legislation against cigarette sales to children, and controls on advertising, noted that many adult role models smoked. These included politicians, teachers, medical staff and pastors of major religious denominations.

A story worth telling re Western Samoa is that in 1990 the Health Department staff placed a large "SMOKING RUINS YOUR PLAY" banner below the Rothman's donated score board at Apia park, resulting in a classic front page photograph in the Samoa Observer newspaper which helped anti-tobacco publicity. Pressure from the company shifted the banner to a less provocative position on the side of the field.

Papua New Guinea Problems in Childbirth

Over one thousand women in Papua New Guinea are reported to die annually from problems related to childhood but only about 1 in 10 maternal deaths are estimated to be reported.

Some studies say the most immediate cause is lack of care. Most emphasise that social and cultural factors usually underline biological and physical reasons. These include poverty, ignorance, isolation, poor nutrition, overwork or heavy workload, no family planning (many pregnancies, or closely spaced children), violence based on lack of respect between partners, inaccessibility of health services, cultural food taboos, and cultural attitudes to women and their role in childbearing. Studies revealed that many of these are related to the low status of women.

The Departments of Health, Home Affairs and Youth, Education, Finance and Planning and Donor Agencies have given their commitment to improving womens' health — stressing that it was very important — it was the key to the health of children and families. Some major improvements

in health indicators have been occurring e.g., infant and child mortality rates have been decreasing, but some issues of womens' health need to be addressed.

Papua New Guinea women today make up 47% of the country's population:

43% of them are in the child-bearing years of 15 — 44: and on average each will bear 5.4 children.

Each stands a lifetime chance of 1:26 of dying during a pregnancy;

Access to family planning is limited and less than 3% are using it.

The New Penicillin

Dr Mike Tyler, an internationally known expert on amphibians has recently caused a flurry of excitement in the scientific world with his medicinal research into frogs. He first became interested in the creatures in Papua New Guinea.

Professor Tyler and his scientific team at the University of Adelaide, found that unique compounds found in the skins of frogs may become part of an emerging generation of antibiotics hailed as "The New Penicillin".

A United States Company, Magainin Pharmaceuticals Inc, and the University of Adelaide scientists have entered into an agreement to develop several peptides found in the skin of secretions of frogs, and for research into other frog species for their medicinal potential.

Called "Magainins" these frog peptides have been called as revolutionary as penicillin, at a time when many bacteria strains resist existing antibiotics. Magainins have been shown to kill bacteria, fungi, a yeast that often infects AIDS patients and protozoans like those that cause malaria.

The problem of AIDS is a problem of language in the South Pacific

The battle against AIDS in the South Pacific requires not only doctors and nurses but linguists as well.

It is not easy, even for health professionals, to talk in an unoffensive yet understandable way about sexually transmitted diseases (STD) in their own languages; when the conversation moves into a new language, the difficulties multiply.

A partial answer to this linguistic problem can be seen in the publications produced and/or distributed by the South Pacific Commission (SPC) on the subject.

The Family Planning Federation of Australia has put together a booklet, distributed by SPC and others, called "South Pacific Reproductive Health Words and Phrases". It shows these words in English, Fijian, Hindi, Pidgin, Tongan and Samoan. There was apparently much consultation with authors and health professionals speaking the various languages before the book went to press. They wanted to get each word right in each language; where it is a swear word the writers have put it in brackets.

As a sample of the health words in the Australian produced dictionary take "condom". It is "rapa" in Fijian, "founga ta'ofi feltama" or "founga fakakaukau'i 'o e familli" in Tongan; and "pau faiusuga" in Samoan. It is "gumi bilong kok" in Pidgin.

SPC then took the AIDS education process one step further; it made use of a 16 page pamphlet, full of drawings, with headings like "What causes AIDS?", "Why AIDS is so dangerous?", and "How is HIV spread?"

The pamphlet had been written in English in Suva at a

WHO/UNESCO Workshop to meet the needs of the Pacific Islands. SPC is now part-way through its translation and distribution process.

So far it has produced copies of the booklet in English and in 20 other South Pacific languages, Bislama (Vanuatu), Chuuk (FSM), Cook Island Maori, Fijian, French, Hindi, Kiribati, Kunie (New Caledonia), Motu (PNG), Niuean, Pidgin, (PNG), Pijin (Solomon Islands), the Polynesian language of Uvea (New Caledonia), Samoan, Tahitian, Tokelau, Tongan, Tuvaluan, Wallisian, and Yap (FSM).

Steven Vete, the SPC Health Information Officer, is looking for volunteer translators who can render the basic pamphlet into other Island languages not listed above. He can be reached at SPC, Noumea, CEDX, New Caledonia, by mail or at (687) 2620-00 by phone, or (687) 2638-18 by fax.

SPC has also launched a small grants programme designed to help grass roots organisations, throughout the Pacific, to conduct local information programmes to help combat AIDS.

AIDS Education projects have been funded through these SPC grants. For example, in PNG the Eastern Highlands Provincial Council of Women provided AIDS information at a 5 day workshop for the women's leaders in the province, while in Vanuatu the Wan Smolbag Theatre produced four theatrical shows for the community and for the nations health care workers.

Similarly, condoms were distributed in Guam, radio programmes were produced in New Caledonia, and prison officials were trained in AIDS education in Fiji. Churches, Health Departments, Youth Groups and the Red Cross were among the awardees.

NEW PRODUCTS AND SERVICES

STORAGE COMPANY PROVIDES LABORATORY WORK STATION SOLUTION

Thanks to the keen eyes of a hearing instrument technician, the designer world of high-tech furniture could soon be shaken up by a New Lynn storage systems manufacturer, Hamilton Perry Industries Ltd.

From his North Shore office, Rex Lyes, Technical Manager for Phonak New Zealand Limited, looks along Takapuna Beach. A fitting locality for a company which helps the hearing impaired better enjoy such sounds of nature as sea water washing over sand.

Phonak AG, the Swiss parent of Phonak New Zealand, is recognised as one of the world's leading hearing instrument designers and manufacturers. Phonak has long had a brand presence in New Zealand but it was not until last year that the company established a permanent New Zealand service support and technical manufacturing subsidiary.

Rex Lyes was one of the first employees of Phonak New Zealand. Together with Managing Director, Dr Bill Keith, he has played a key role in establishing the company's technical manufacturing laboratory and stockroom facilities.

"Although we considered our request for technical laboratory work stations to be nothing out of the ordinary, recommendations from interior design consultants fell well short of the mark in terms of cost, appearance and functionality," explains Rex Lyes.

"It was a frustrating situation. Here we were starting from scratch, yet there didn't appear to be anything on the market close to our requirements."

Even a flight across the Tasman to Phonak AG's Australian subsidiary failed to resolve the problem. Then, just when Rex Lyes and Dr Keith had resigned themselves to accepting a fairly standard laboratory bench, everything fell into place.

As part of his brief to purchase a stationery and component storage system, Rex Lyes had requested product literature from various storage system suppliers. And there it was. The answer, Hamilton Perry Display Shelving.

"Looking at Hamilton Perry's Display Shelving brochure reminded me of a picture I had spotted in an overseas magazine. Sure enough it showed a desk which seemed to be constructed from components similar to shop display shelving," recalls Rex Lyes.

For Hamilton Perry Contracts Manager, Bert Niessen, involvement with Phonak New Zealand started with a photocopy of the magazine picture and the request to design and build a laboratory work station 'yesterday, if not before.'

Using standard display shelving posts, extra-long footings and specially lengthened shelf brackets, a prototype was ready within days of the initial brief. Once the basic concept had been approved, Hamilton Perry and Phonak worked as a team to develop the final product.

"To ensure an absolutely level and stable work platform we incorporated adjustable wide-base feet," explains Bert Niessen. "Another feature we developed together was the light bracket cantilevered from the top of the posts. This reduces shadows and glare for technicians working with microscopic components."

By using the cavity inside the slotted posts Bert Niessen and Rex Lyes were able to effectively and economically minimise wiring and other floor and bench clutter.

Electrical wiring, computer cables and compressed air hoses are taken from the posts into a utility services duct which spans the width of each of the four work stations. Fitted into each duct are various plugs and connections.

The bench top supports and ducting panels are attached by lugs which fit into the post slots. This allows almost limitless adjustability. The 2 metre height of the posts also provides ample room for extra shelves and attachments such as the backing bar which holds Dexion Maxi Bins used by technicians for storing components and tools.

Being able to adjust the bench top to an individual technician's most comfortable working height is viewed by Rex Lye as one of the major benefits of the Hamilton Perry work station. Stability, appearance and add-on shelving versatility tie for second.

Says Rex Lyes "In our industry, correct light and comfort equates with quality."

Production efficiency is further assured by a stationery and components storage system utilising Dexion Slotted Angle Steel Shelving. Hamilton Perry Industries is the New Zealand Dexion licensee.

Phonak New Zealand specialises in custom-made in-the-ear instruments using technology so advanced that distortion-free amplification of up to 130db is the norm rather than exception.

In less than 18 months the company's commitment to promoting professional dispensing of hearing instruments has drawn a consumer response that has seen staff levels increase from just three to 11. Many of these are young people receiving on-site training.

Contact: Bert Niessen, Hamilton Perry Contracts Manager, Fax: 09 828 6416, Ph: 09 828 1060, or, Tom Geoghegan, Hamilton Perry North Island Sales Manager, Ph & Fax as above.

LABSUPPLY PIERCE (NZ) LTD

Jim Turnbull has joined Labsupply Pierce (NZ) Ltd as Marketing Manager. Jim was formerly with Life Technologies Ltd where he held a number of senior marketing and managerial positions with responsibilities for New Zealand, Australia and beyond.

Phillippa Muir has joined Labsupply Pierce (NZ) Ltd in a customer services role for the Wellington office. Phillippa was formerly with Watson Victor and prior to that with Salmond Smith Biolab.

ELIMINATE TIRESOME REFOCUSING WITH THE NEW LEITZ DMR MICROSCOPE

LEITZ recently introduced the DMR microscope which eliminates refocussing after each objective change. The electronic scale overlay automatically adapts itself to the

microscope parameters allowing fast and precise classification of object sizes independent of magnification. The new microscope has been fitted with third generation infinity objectives for transmitted and incident light and the elimination of axial chromatic aberrations; and significant reduction or correction of residual lateral chromatic aberrations with the tube lens gives the new system excellent optical performance.

Variability of illumination with four lamp housings and a septuple objective nose piece are two more optical innovations fitted to the new DMR microscope. Ergonomic operation with telescopic stage controls and 110 degrees stage rotation make the DMR system flexible yet very easy to use.

The new Leitz DMR microscope is available in a number of configurations to suit applications in medicine, geology, material sciences, metallography and biological sciences.

Contact: Labsupply Pierce (NZ) Ltd, P.O. Box 34-234, Birkenhead, Auckland 10. Ph (09) 443 5867 Fax (09) 444 7314.

POLAROID RELEASES A NEW, FULLY AUTOMATIC INSTANT CAMERA FOR LIGHT MICROSCOPY

A new fully-automatic, single lens reflex (SLR) instant camera for photographing any specimen through a light microscope has been introduced recently by Polaroid. Called the MicroCam SLR, this new Polaroid microscope camera features a sophisticated exposure and filtration control system, to produce high quality instant colour and black and white hard copy prints, with push button ease. The MicroCam SLR simplifies the microphotographic process in applications ranging from the classroom to advanced research laboratories.

Weighing only 1kg and measuring 20 x 18 x 18cm, the portable MicroCam SLR can be readily moved from microscope to microscope, to serve as the "dedicated" imaging system for an entire laboratory.

The camera attaches to a microscope by sliding the Microcam SLR's 10x magnification lens directly into the microscope's eyepiece tube or phototube, allowing the camera to fit almost all light microscopes. MicroCam's multi-element glass lens produces sharp, clear Polaroid pictures and the bright, single lens reflex viewing system allows the microscopist to focus and frame the specimen easily.

The built-in digital light meter, microprocessor and colour correction filter, combine to produce correct exposure and filtration automatically for high quality colour and black and white prints. The advanced exposure control system adjusts exposure time to compensate for film speed lost in long exposures and controls the colour balance for the final print by adjusting the percentage of the total exposure made through the colour correction filter.

In addition to its automatic functions, MicroCam SLR offers a manual mode that lets the user time exposures precisely up to 10 hours.

MicroCam SLR produces instant 11.4 x 10.8cm Polaroid Type 339 colour or Type 331 black and white professional AutoFilm prints. At the end of each exposure, the camera ejects the film to develop automatically without the need to time or peel the print. Both Polaroid Autofilms are approved for use in class 100 clean rooms.

Contact: Labsupply Pierce (NZ) Ltd, P.O. Box 34-234, Birkenhead, Auckland 10. Ph. (09) 443 5867 Fax (09) 444 7314.

NEW TAYLOR-WHARTON DRY SHIPPERS FOR TRANSPORTATION OF BIOLOGICAL SAMPLES IN LIQUID NITROGEN

The Taylor-Wharton CryoPak series of biological shippers are designed for transporting small quantities of semen, embryos and other biological materials at cryogenic temperatures. They overcome the hazards of shipping such materials in conventional liquid nitrogen refrigerators where refrigerant can be lost by spillage.

Each biological shipper contains a unique absorbent filler that can hold several pounds of liquid nitrogen. When tipped over there is no liquid to spill and thus no drop off in holding times.

Shippers are available in three convenient sizes with optional hard shell shipping cases.

Contact: Labsupply Pierce NZ Ltd, P.O. Box 34-234, Birkenhead, Auckland 10. Ph (09) 443 5867, Fax (09) 444 7314.

NEW SERUM / URINE PREGNANCY TEST

The Interwell Company of USA has released a new urine/serum pregnancy test strip. This single step pregnancy test is rapid and features monoclonal antibody technology. The test has a built in control on each strip, may be stored at room temperature and has a long shelf life. Sensitivity is comparable with other pregnancy tests available.

The test comes in a Kit of 100 tests and is very competitively priced.

Further details available from: Ngaio Diagnostics Ltd, P.O. Box 4015, Nelson South.

NEW KIT SIZE FOR CRYPTOSPORIDIUM KIT

Alexon Biomedical's ProSpecT Cryptosporidium Microtiter assay is available now in a 24 test kit as well as the 96 test kit. This smaller size is ideal for labs doing lower volume testing. The assay is easy to perform with minimal hands on time and features a sensitivity of at least 97% and specificity of 100%. Reagents, with the exception of wash concentrate, are all ready to use and interpretation of results may be done visually or spectrophotometrically.

For reliable testing for Cryptosporidium in smaller laboratories this Kit is the test of choice.

Further information: Ngaio Diagnostics Ltd., P.O. Box 4015, Nelson South.

PROSPECT GIARDIA EZ MICROPLAT ASSAY

Alexon Biomedical have now released a new format to add to their range of Giardia Specific Antigen 65 Test Kits. This new kit, ProSpecT Giardia EZ Microplate Assay is currently the most streamlined and efficient method available for batch testing specimens. This new Kit uses a monoclonal antibody and has only two room temperature incubations, three reagent additions and one wash step. Reagents, with the exception of wash concentrate, are ready to use and sensitivity and specificity of the assay both exceed 98%. Kit size is 96 wells.

Microtiter wells are breakaway meaning any number of tests can be performed in a run, users are not confined to multiples of 8 tests. The test can easily be performed manually and is also suited to automation in those laboratories that have the necessary equipment. The final colour can be read visually or spectrophotometrically and negatives are clear making them easy to interpret.

For further information contact: Ngaio Diagnostics, P.O. Box 4015, Nelson South.

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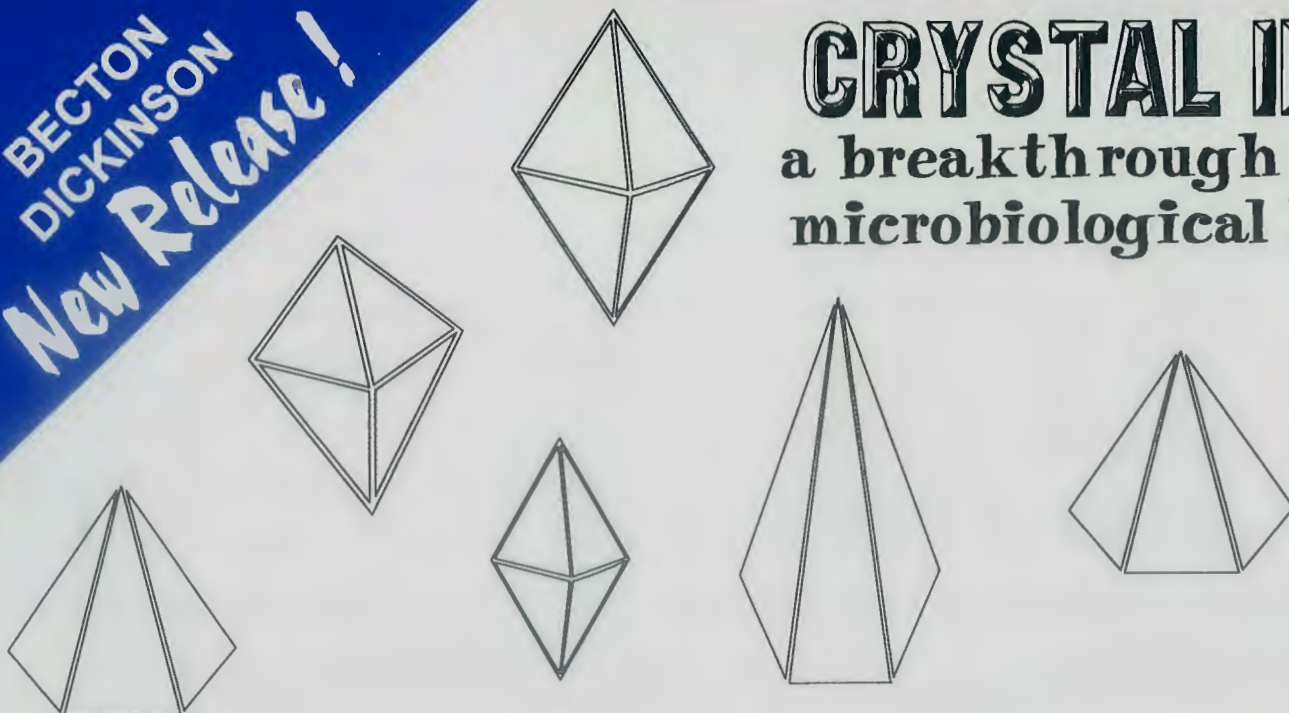
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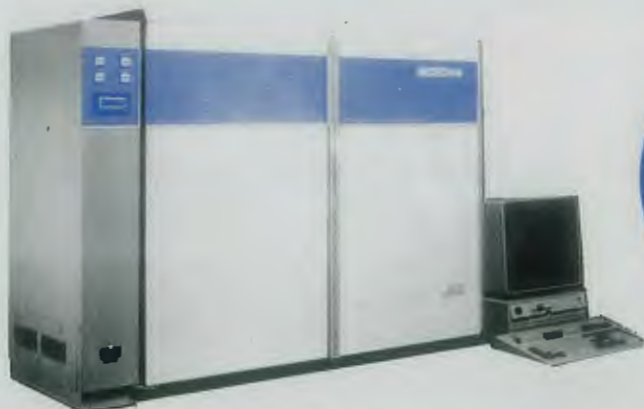
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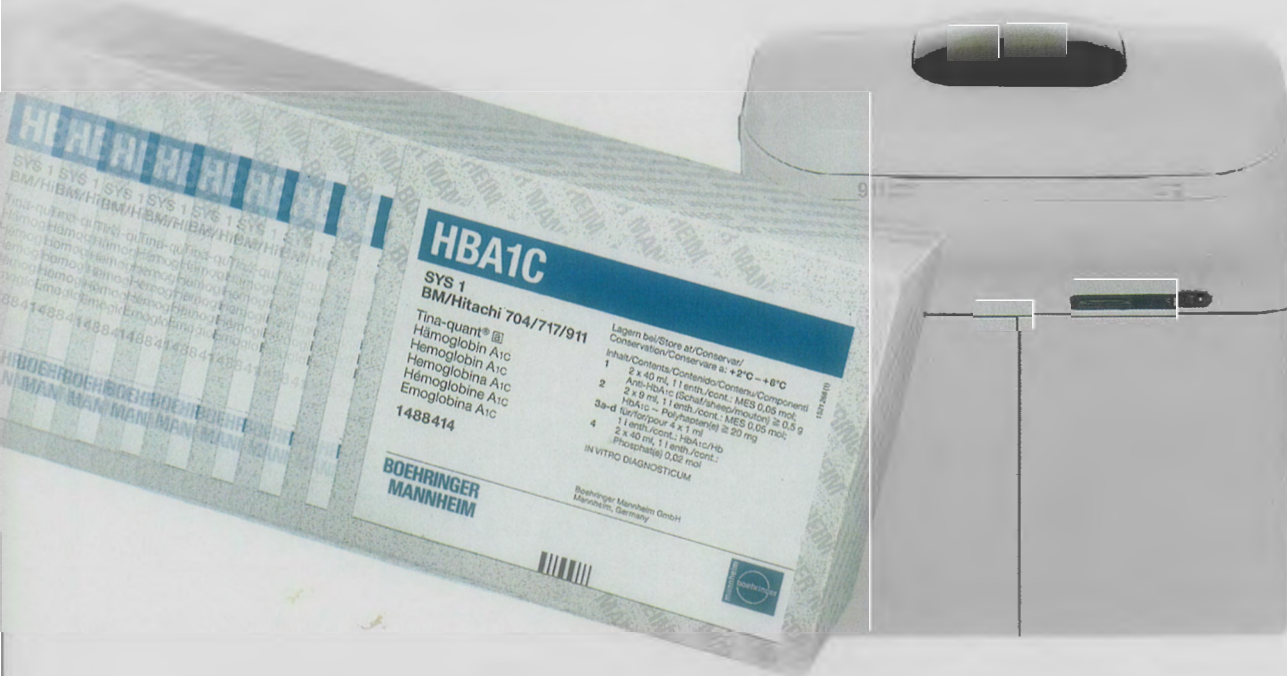


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