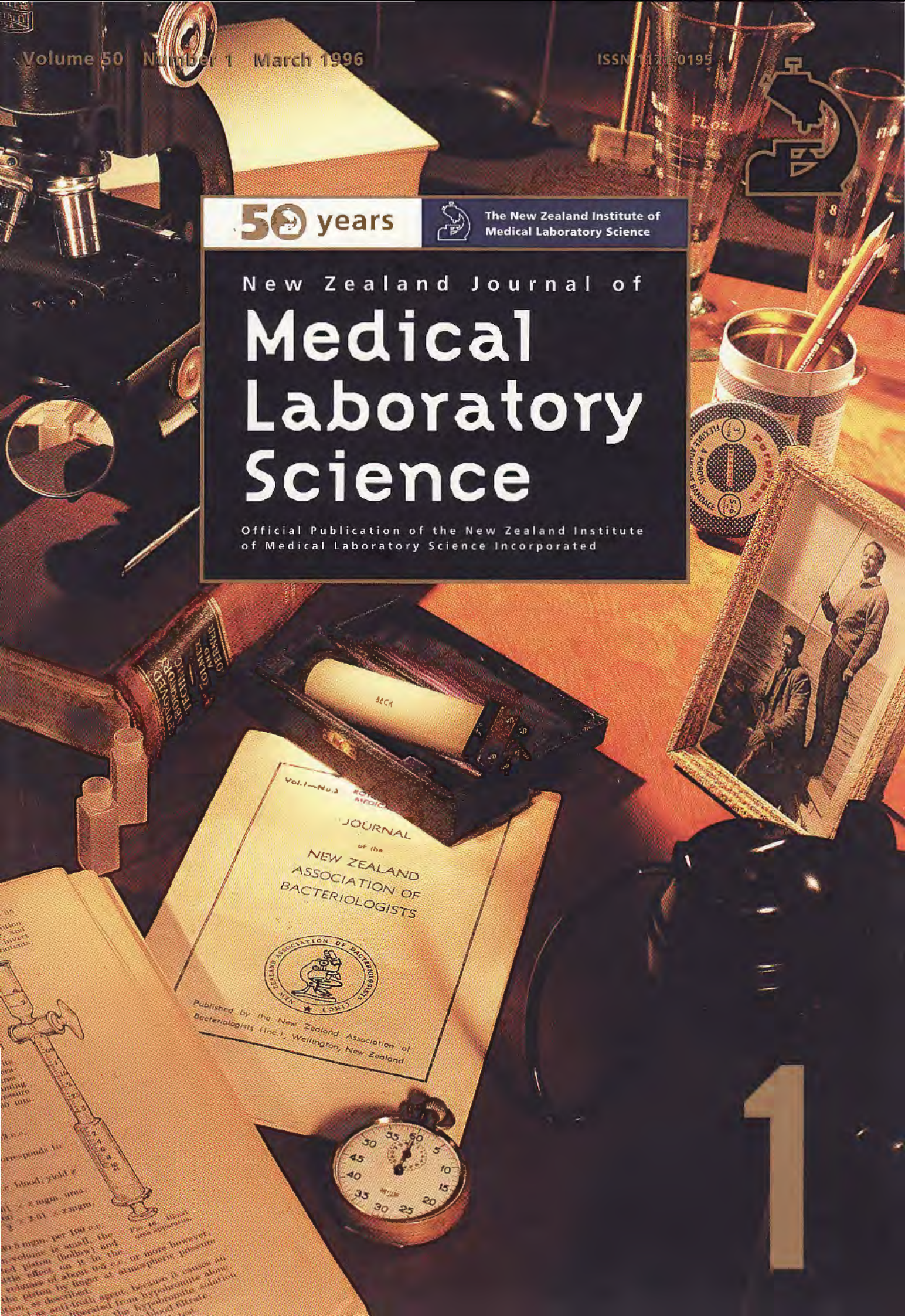
Volume 50 Number 1 March 1996 ISSN 1171-0195



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New Zealand Journal of

# Medical Laboratory Science

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New Zealand Journal of
# Medical Laboratory Science
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March 1996
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|---|---|---|---|
| Serology | Toxo G, Toxo M<br>Toxo Comp<br>Rub G, Rub M<br>CMV G, CMV M<br>Measles IgG<br>Mumps IgG<br>VZV IgG<br>Lyme Screen II | Immunochemistry | T3, T4, TSH<br>FT3, FT4<br>T Uptake<br>Estradiol (2), HCG<br>LH, FSH<br>IgE, Ferritin, Cortisol<br>B2-Microglobulin<br>Prolactin<br>D-Dimer |
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| Tumour Markers | PSA (mono/mono)<br>AFP<br>CEA | Industrial | E.coli O157<br>Listeria<br>L.monocytogenes<br>Salmonella<br>Staph. Enterotoxin |
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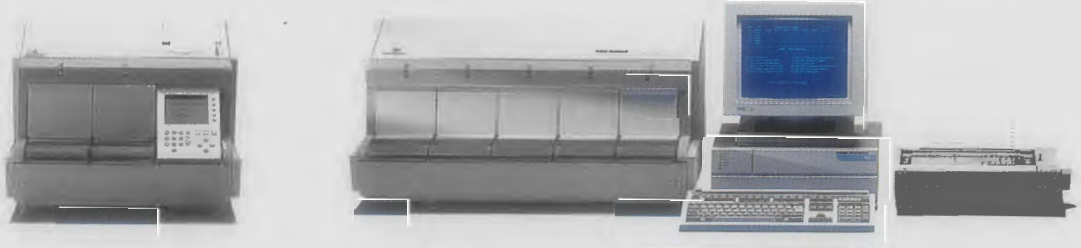

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# NEW ZEALAND JOURNAL OF MEDICAL LABORATORY SCIENCE




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The Journal publishes original, review, leading & technical articles, short communications, case reports and letters in all disciplines of Medical Laboratory Science as well as related areas of interest to Medical Laboratory Scientists (eg) epidemiology, public & community health, education, ethics, computer applications, management, etc. All papers published will be in the form known as the "Vancouver Style" or Uniform Requirements for Manuscripts Submitted to Biomedical Journals. Concise details are listed below while full details may be found in the *NZ J Med Lab Science* 1991; 45 (4): 108-11 or from the Editor.

Papers submitted to the Journal are refereed and acceptance is at the discretion of the Editor. Papers with substantive statistical analysis and data will be reviewed for appropriateness by the Statistical Adviser. No undertaking is given that any article will be published in a particular issue of the Journal. The copy deadline for each issue is the first of the month prior to the month of publication.

## Manuscripts:
Submitted papers (**in duplicate**) should be typewritten, in double spacing throughout on one side of A4 paper. Generally each component of the manuscript should begin on a new page in the following sequence.

*** Title of paper**, authors (including first name and qualifications), and institution(s) where the work was carried out. Address for the corresponding author should also be given.

*** Abstract and keywords**. Abstracts should be structured and contain concise and precise information regarding the study's **Objective(s)**, **Method(s)**, **Result(s)** and **Conclusion(s)**. List up to 4 keywords using *Index Medicus* medical subject headings.

*** Text**, in the order of **Introduction**, **Materials and Methods**, **Results**, **Discussion and Conclusion**.

*** References** should follow the style adopted by the US National Library of Medicine as used in *Index Medicus*. Refer to papers in recent issues of the Journal for guidance (or see *NZ J Med Lab Science* 1991; 45 (4): 108-11). Authors are responsible for accuracy of all references.

*** Illustrations** must be provided with a suitable legend typed on a separate sheet. Graphs should be 2-3 times larger than they would appear in the journal and contain a minimum of lettering. Legends for these should also be typed on a separate sheet. Photographs should be original sharp, glossy black & white prints. Authors wishing to submit colour photographs must contact the Editor in the first instance.

*** Tables** should be typed on a separate page complete with a title at the top and footnotes at the bottom. The tables should be numbered as they appear in the text and must *not* contain vertical lines.

*** Acknowledgements** should be made to people and/or organisations who have made substantial contributions to the study. Authors are responsible for obtaining consent from those acknowledged. Financial contributions towards the study from granting bodies or commercial organisations must be stated.

**Two** copies of the manuscript are to be addressed to the Editor NZ J Med Lab Science, c/- Department of Medicine, Wellington School of Medicine, PO Box 7343, Wellington South, together with a letter from the corresponding author stating that the work is original, is not under consideration for publication elsewhere, and in the case of multi-authorship that all authors have contributed directly to the planning, execution, analysis or to the writing of the paper.

# EDITORIAL

## The Journal – 50 Years On

*Rob Siebers, FNZIMLS*
*Wellington School of Medicine*

NZ J Med Lab Science 1996, 50:1) 4-5

This year marks the achievement of what is a remarkable effort by a modest sized professional organisation, n.m. 50 years of continuous publication of a scientific periodical. Only two other medical laboratory science organisations worldwide (Great Britain and the Netherlands) have continuously produced a scientific journal longer.

At the first AGM of the New Zealand Association of Bacteriologists, as the NZIMLS was then known, it was the unanimous opinion of all delegates present that a Journal was a necessity, to disseminate scientific knowledge and to keep Members up to date with the Association's affairs.

The first issue of the Journal was edited and printed in April 1946 by Mr Douglas Whillans of the Auckland Public Hospital Pathology Department. In it was an Editorial in which it was stated that the Journal's value depended on active support of both junior and senior Members of the Association. Four issues containing 11 scientific articles were published in the first year. In the second, third and fourth year the Journal contained 7, 10 and 11 scientific articles respectively.

On the surface it seemed that the profession had heeded the Editor's call for contributions to the Journal. Yet as early in October 1949 he wrote the following concerns in an Editorial. *"Not for the first time does it become necessary to remind Members of the Association that a Journal requires more than an Editor, a Printer and a Publisher. There must be Contributors, without whom the Editor, be he ever so resourceful, must finally give up in despair.*

*Your Editor, by giving up his own hobby and devoting his spare time to all offices in the production of the Journal, has managed to struggle as far as the end of Volume 4, but if more help in the way of contributions is not forthcoming, must inevitably consider the game not worth the candle.*

*At each Conference he is heartened by the flattering references to his ability and overwhelmed by offers of assistance; unfortunately, these are mere words and are rarely followed up by articles.*

*Writing a clear concise article requires much time and the elimination of much muddled thinking. In your Editor's experience at least five re-writes are necessary before an article is ready for publication. Recently it cost him eleven re-writes before an article was deemed ready for submission to a certain Journal.*

*Ask yourselves why you have not yet written an article, and set out forthwith to remedy the deficiency."*

Douglas Whillans relinquished the Editorship to Mr A Murphy, also from Auckland, in 1951 although he remained as Co-Editor for a further two years. In 1957 Mr J Cannon from Christchurch took over as Editor but resigned one year later citing immense difficulty in obtaining publishable articles for the Journal, although fifteen scientific articles were published in the Journal in 1957. In his Editorial in April 1956 J Cannon wrote *" – any publication must rely on its contributors for its excellence. A mystical approach to an abstruse subject cannot pass for quality. Matters which are everyday problems produce the most constructive materials for articles. Hand in hand with quality must come at least some quantity. This is where the greatest difficulty is encountered and it must be overcome if the Journal is to qualify for respect among periodicals of a similar nature."*

One year later serious consideration was being given to replace the Journal with a periodical newsletter. Council at that time rejected the proposal and asked Miss L Evans and Mr G Rose from Christchurch to assume joint Editorship of the Journal.

In 1963 the Dunedin Branch assumed responsibility to produce the Journal and appointed Mr John Case as Editor. The title of the Journal was changed to that of The New Zealand Journal of Medical Laboratory Technology, the layout rearranged and the cover colour changed from blue to green. In his Editorial "Our Journal – Some Changes" John Case wrote *"If the new colour or any of the other alterations result in a deluge of protesting letters on the head of the Editor, then at least the Committee will have fulfilled one important object – that of inspiring a little interest in the Institute's own publication; a commodity which has been singularly lacking in the past".*

In 1970 upon the resignation of John Case, Mr RD (Bob) Allan took over as Editor and remained in this role for a ten year period. He was invited to deliver the TH Pullar Memorial Address at the 1980 Annual Conference which he accepted and devoted his Address to the Journal. In addition to delivering a succinct history of the Journal, he gave a personal account of his many experiences in production of the Journal in his ten year period as Editor. Bob Allan reflected on the difficulties he experienced in attracting suitable material for the Journal. Below are some quotes from his TH Pullar Memorial Address.

*"It is a matter of concern that although more and more work is undertaken, commented upon, reviewed, modified and extended as shown by the deluge of papers presented at seminars and conferences, only a fraction of it finishes up permanently recorded in the Journal. I think that people are failing in their duties as technologists if they do not make the effort to present their work for publication".* He writes further *" – many articles are related to situations in New Zealand. Eleven such papers were read at the last Conference. None of them were presented for publication. This causes me grave concern and mystification. Surely after the major effort of writing a paper has been accomplished it is simple enough to submit for possible publication". "– the Journal is only as good as the contributions and the quality or lack of it reflects on Institute Members. In a sense, criticism of the Journal is self-criticism".*

The Journal remained in Dunedin with Mr H Matthews as Editor until 1988 when it shifted to Auckland first with Mr Dennis Dixon-McIver and subsequently Ms Maree Gillies as Editors. During this period there were frequent reports to Council regarding the difficulty in attracting quality articles for the Journal.

In 1994 I took over as Editor and in an Editorial expressed hope that support would be forthcoming from the Members of our profession. I urged Members presenting papers at conferences and at the various Special Interest Group Meetings to take the final and ultimate step of submitting their paper to the Journal. Except in a few instances this has not occurred. At the last Annual Conference I was ensured by many delegates that a submission to the Journal of their presented paper would be forthcoming. I am still waiting for the first one to cross my desk. An Editorial Board comprising of senior experienced Medical Laboratory Scientists in a variety of disciplines has been formed. They are there to help and advise the Editor, but equally important is that they are available to give help and advice to potential authors. Furthermore with the introduction of the

Maintenance of Laboratory Professional Standards Programme (MOLS), albeit voluntary at present, ensures that Medical Laboratory Scientists who have their submitted articles published in the Journal, receive appropriate credit points which with others obtained, will be required to satisfy the Medical Laboratory Technologist's Board that they continue to provide a high and up to date standard of care and knowledge in their profession.

Last year Council approved the Editor's proposal for a special one off Award to commemorate the Journal's 50 years of continuous publication. The Journal 50th Anniversary Award is open to all Fellows, Members and Associate Members of the NZIMLS and is for the sum of $500 for the best submitted and accepted Review Article published in the Journal from November 1995 to and inclusive of the August 1996 issue. This prestigious award will be presented to the winner at the 50th Jubilee Conference in Auckland later this year. Sadly to say to date the Editor has only recently received one submission. There is still time to put pen to paper (last date of submission is 1 July 1996 for inclusion in the August issue).

When I started to write this Editorial it was my intention to highlight some of the historical facts from 50 years of publication of the Journal. I hope I have achieved this to some extent but from perusing the Editorials throughout this period a common theme emerged. This was the pleas from successive Editors for suitable material for the Journal. I make no apology for continuing this theme in my Editorial. The Journal is the flagship of the Institute. Through it the professional image of the Institute is not only projected to its Members, but to a wider readership both locally and overseas. The Journal belongs to the Members and from them must come a major input into it. The Journal has had a varied, interesting and productive 50 years. I look forward to the start of the next 50 years with a little bit of help from the Members of the New Zealand Institute of Medical Laboratory Science.



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

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| **Title** | NZIMLS Student Award. |
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| **Nature** | The purpose of this award of $200 is to encourage the presentation of scientific papers at the Annual Scientific Meeting by undergraduate students of Medical Laboratory Science. |
| **Eligibility** | All undergraduate students at a recognised course of training in medical laboratory science at Massey or Otago Universities or at the Auckland Institute of Technology are eligible. |
| **Judging** | All students wishing to have papers considered for this award are required to make an application to the convenor of the awards committee through the Executive Officer, no later than two weeks before the Annual Scientific Meeting. This application must include a brief synopsis of the paper to be presented. Responsibility for selecting the best paper will rest with the convenor who will seek the advice of appropriate special interest group convenors or the journal editor where necessary. The decision of the convenor of the awards committee will be final. |
| **General** | Papers for consideration must have been completed and presented prior to the completion of undergraduate training.<br>Students should consider submitting the paper in publishable form to the journal editor within one month of oral presentation. |

# Leading Article

## Seeing Beyond Ourselves

*Ron MacKenzie, QSO, PhD, FNZIMLS, Chairman*
*Pacific Paramedical Training Centre, PO Box 7013, Wellington*

NZ J Med Lab Science 1996 50:1 6

This year the NZIMLS will have been in existence for 50 years and it is no coincidence that the shape of the New Zealand Medical Laboratory Service was firmly laid down over the same period of time. The results of this are reflected in the excellence of the clinical and blood transfusion services of today.

There have been occasions over these years when the Institute has been accused of viewing the world through rose-coloured glasses!

It is probably more true to say that it has looked at its role and responsibilities through bi-focal glasses . . . it has taken both a near and far sighted view of its goal, that of advancing medical laboratory science both within New Zealand and in the Pacific Islands.

In regard to this latter aspect, some of the more senior members of the Institute may recall the modest efforts made back in the 1950s to assist the emerging hospital laboratories of the Pacific Island Region. Inspired by the enthusiasm and zeal of people like Alf Samuels from the CWM Hospital in Fiji and Peter Rassmussen from Apia Hospital in Western Samoa our interest in the Pacific Islands began. Both of these men were outstanding Laboratory Technologists of their time. Working in professional isolation, they were ingenious and self-reliant with few facilities but with a keen desire to provide training opportunities for their Pacific Island colleagues.

It was not until the 1960s however that much progress was made in this direction when an occasional scholarship became available for medical laboratory training in New Zealand.

Then, with the goodwill of the Wellington Area Health Board, NZ Ministry of Foreign Affairs, NZIMLS and The NZ Red Cross the PPTC was established in 1980 on the Wellington Hospital campus. Thus began the short term training courses which have done much to stimulate medical laboratory science in the Pacific Islands.

The first decade passed and by 1991 the PPTC had earned a reputation internationally as a centre of excellence and was invited to become a collaborating centre of the World Health Organisation. This status gave official responsibilities to the PPTC for a range of medical laboratory programmes in the Pacific region. These included training and laboratory development, quality control and consultation and advisory services.

From these tasks an extensive network has been developed throughout the Pacific Basin and includes the Pacific Islands Quality Assurance Programme which now serves 21 hospital laboratories. To date some 500 laboratory workers from all areas of the Pacific have attended training courses and in addition there have been trainees from China, Korea, Indonesia and Africa. The PPTC has and continues to make a significant contribution to the New Zealand official Overseas Aid Development Programme.

Over 16 years, the PPTC has evolved into an organisation which fulfils three roles. They are, the provision of Technical training programmes, Quality Assurance and Technical advisory services . . . and if the upgrading of the Pacific Island medical laboratory service is to continue, these roles must be continued with vigour into the future.

Of these three services it is the training component which must now be reshaped to meet new and different requirements. The original plan in 1981 was to provide short term training courses in medical laboratory disciplines at a basic level. The training philosophy of the PPTC established in 1980 remains the same today . . . The transfer of medical laboratory technology which is appropriate for the work setting in which it is employed, is reliable in the test results produced and is affordable and sustainable by the laboratory concerned.

This training approach has proved both successful and useful and has filled a real need for the developing laboratories of the Pacific Islands. Many of the laboratories which benefited from these courses are now through their initial development phase and now seek more advanced technology. Training for this second development phase should now be provided by follow on courses.

It is clear then, that the training needs of the developing medical laboratories in the Pacific Islands and Asia change over time and guided by this knowledge the centre is now supplementing the present training courses in New Zealand with in-country training.

This approach has been tested by the PPTC in recent years in Fiji, the Solomon Islands and Western Samoa. During 1995 in-country training courses were also held in Papua New Guinea and Vietnam and the success of these can now serve as a guide for the future.

Finally, the PPTC has succeeded as a unique New Zealand training venture for a variety of reasons, it has won the support of government and the World Health Organisation.

But in large measure the success of the PPTC has been due to the goodwill and support of many NZIMLS members who have given much voluntary time and effort over the years.

In acknowledging this and on the occasion of the 50th Anniversary of the Institute, the Management Committee of the PPTC wish to extend congratulations and good wishes for the future.

May the NZIMLS flourish and the PPTC continue to serve as its vehicle for its overseas aid programme in the years to come.

# *NZIMLS HISTORY*

As we mature, the **'older days'** takes on more meaning. Sometimes the passage of time softens into nostalgia for the past - other times memories stay fresh, sharp and vivid.

Whatever it is now or will be in 10, 20, 30 or 40 years **nothing** will ***compliment the memories as much as an***

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***Make sure the history book is written as you experienced it and will always be able to relate to!!***


The Management Committee record with pleasure that the centre has now relocated on the Wellington Hospital campus into permanent premises of its own.

The prefabricated building known as the Seddon Annexe and formerly occupied by the College of General Practitioners, has been purchased by the PPTC from the Wellington School of Medicine, University of Otago.

The move from the laboratory area in the main hospital building took place in August and with refurbishments now complete, the new premises should meet requirements for the foreseeable future.

On November 17th, 1995, her Excellency Dame Catherine Tizard, GCMG, DBE, Governor General, officially opened the building in front of a small gathering of tutors, students, friends and benefactors.

In the afternoon of the same day, the Annual General Meeting of the Pacific Paramedical Training Centre was held in the new building.

Dr. Ron McKenzie presented the Annual Report which is outlined as follows:

## Activities 1995

During 1995 the PPTC has continued to play an active part in the New Zealand Development Aid Programme for the Pacific Islands.

While the acquisition, refurbishing and shift into permanent premises on the Wellington Hospital Campus has been a major undertaking this year, it has not impeded the training activities of the Centre. 1995 has proved to be a record year with some 70 laboratory workers being involved in PPTC Technical Training programmes.

A Blood Bank Technology Course took place in Wellington in Feb/April this year and the three year PPTC/Western Samoa Medical Laboratory Technicians Course was successfully continued at the National Hospital Laboratory, Apia.

The provision of in-country training has been further extended this year to include Papua New Guinea where two five week training courses for rural health laboratory assistants were provided in collaboration with the Faculty of Health Sciences, University of Papua New Guinea.

The PPTC also provided a six day blood bank technology workshop at the Provincial Hospital in Qui Nhon, Socialist Republic of Vietnam. This assignment was undertaken for the Development Co-operation Division of the Ministry of Foreign Affairs and Trade, as part of the Asia Development Assistance Facility/LABENZ development project for the Province Hospital, Qui Nhon.

The Pacific Regional Health Laboratory Quality Assessment programme remains a major and most important WHO collaborating activity and this too has been further expanded during 1995.

These activities together with a number of special training attachments for Pacific Island Laboratory Workers in New Zealand hospital laboratories have made up a productive and successful year for the PPTC.

## The Pacific Regional Health Laboratory Quality Assessment Programme

This programme is a monitor of the quality of health laboratory work carried out in the Pacific Islands and is viewed by WHO as a major contribution to the upgrading of the Medical Laboratory Services of the Region.

The programme is a major expense item of the PPTC and 1995 has seen a large increase in the cost of running the programme due to the introduction of new IATA and Postal Transport Regulations.

Costings established under new regulations for one year's postings current September, 1995:

| | |
|---|---|
| TNT Express Worldwide: One month = $2,201 – 8 postings/years | $17,608.00 |
| Tins (National Can) $8.40 each 2 postings/Micro – 38 cans | $271.20 |
| Lab Mailers $6.80 ea 6 postings Haem/Immuno/Biochem – 114 units | $775.20 |
| Small sterile tubes (Immuno/Micro) 35 cents ea 4 postings: Immuno = 160 tubes Micro = 60 tubes = 220 tubes | $67.00 |
| Slide mailers (Haem) $1.00 ea = 38 slide mailers | $38.00 |
| Photocopying: 720 pages @ 5 cents/page | $36.00 |
| Postage: Immediate reply & personal answer: Haem 4 postings, Immuno postings, Micro 4 postings, Biochem 2 postings | $294.00 |
| Misc. cost: Haem glass slides, small amount of agar, labels, envelopes | $40.00 |
| Technical time covering disciplines of Microbiology, Clinical Chemistry, haematology, Immunohaematology (190 man hours at $20.00/hr) | $3,800.00 |
| | **$22,9929.40** |

The shift to the new premises and unexpected changes to the transport regulations and costs resulted in some delays in the dispatch of assay materials in the first half of 1995. These problems have now been largely resolved in terms of the transport requirements and regulations but additional funding will be required if the programme is to be continued in 1996. The committee wish to record their thanks here to the New Zealand Institute of Medical Laboratory Science and the Western Pacific Regional Office of the World Health Organisation for grants received during 1995 towards the cost of running this programme.

The results obtained from the eighteen participating Pacific Island Laboratories remain satisfactory with 75% of the Laboratories returning assay results with an average score of 76% over all disciplines.

This represents a small reduction in return rates for assay results from 1994 with scoring rates essentially the same.

## Other Activities – Overseas Consultancies

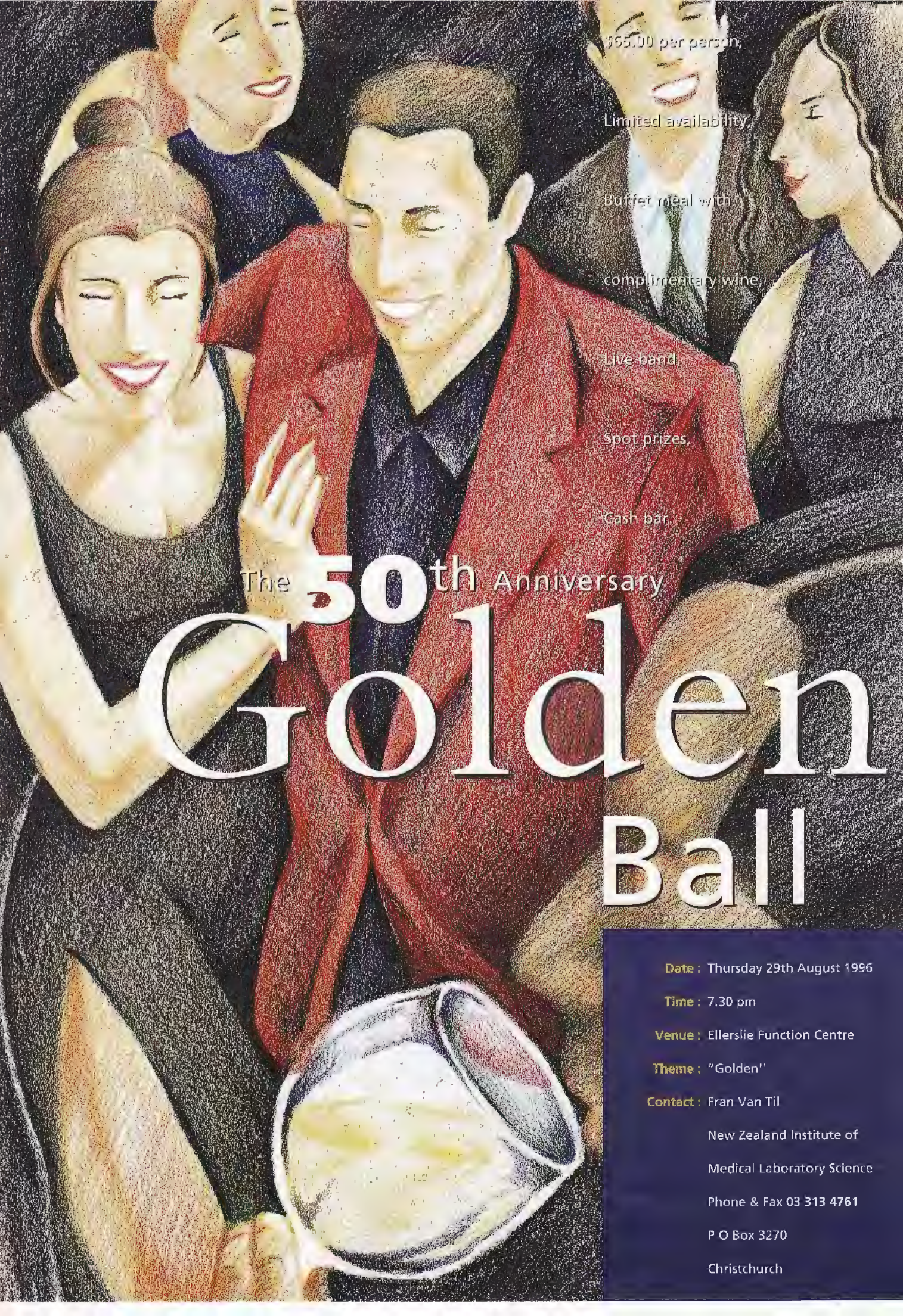
During 1995 the PPTC responded to requests from the Ministry of Foreign Affairs and Trade and the World Health Organisation to undertake a number of short term Technical consultancies in the Pacific Island and S.E. Asian Regions. The following consultancies were completed:

| | | |
|---|---|---|
| Cambodia | | |
| M.J. Lynch | March/April, 1995 | WHO |
| Cambodia | | |
| M.J. Lynch | August 1995 | WHO |
| Vanuatu | | |
| Ms. C. Murphy | April 1995 | WHO |
| Lao | | |
| J.E. Elliott | Feb/March 1995 | WHO |
| Papua New Guinea | | |
| G. Rose | Sep/Dec 1995 | MFAT/PPTC |
| Vietnam | R. McKenzie/S Dixon | |
| Sep 1995 | | PPTC/LABNZ |

## Overseas Laboratory Equipment Project

For a number of years the centre has served as a co-ordinating agency for the collection of appropriate surplus medical laboratory equipment for donation overseas.

The equipment is mainly sent to Pacific Island Hospital Laboratories. This was


$65.00 per person,
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Buffet meal with
complimentary wine,
Live band,
Spot prizes,
Cash bar
The 50th Anniversary
Golden
Ball
Date : Thursday 29th August 1996
Time : 7.30 pm
Venue : Ellerslie Function Centre
Theme : "Golden"
Contact : Fran Van Til
New Zealand Institute of
Medical Laboratory Science
Phone & Fax 03 313 4761
P O Box 3270
Christchurch

continued during 1995 and in addition a consignment of assorted equipment in good working order was sent to the Cho Ray, Phan Thiet and Qui Nhon Hospital Laboratories in the Socialist Republic of Vietnam.

The PPTC are greatly indebted to Mr. David Wiseman of Medical Aid Abroad/The Peace Council for packing and shipping arrangements.

In a joint project with the Central Region of New Zealand Red Cross fifteen haemoglobinometers were sent to Papua New Guinea for use in the Rural Health Laboratory Project.

## Projected Activities 1996

Two Wellington based courses are planned for 1996. They are Blood Bank Technology in February – April and a Medical Laboratory Update course to be held in September – November.

The Pacific Regional Quality Control Programme will continue to run monthly from March to November, and the first year of the Third cycle of the Western Samoan Laboratory Technology course will commence in February with five new trainees.

Hopefully the long planned Quality Assurance/Quality Control Course scheduled for Tonga will proceed during 1996.

Attachments for Pacific Island Technicians at New Zealand Hospital Laboratories will be arranged as and when requested by CITEC.

## Acknowledgements

The Pacific Paramedical Training Centre is indebted to a number of organisations and individuals for ongoing support and encouragement.

To the following the PPTC extend sincere thanks for generous assistance:

The New Zealand Ministry of Foreign Affairs and Trade.
The New Zealand Ministry of Health.
Capital Coast Health, Department of Laboratory Services.
New Zealand Red Cross, National Headquarters.
New Zealand Red Cross, Central Region.
New Zealand Institute of Medical Laboratory Science.
Norman Kirk Memorial Trust.
John Ilott Charitable Trust.
The Royal College of Pathologists Australasia.
Australasian Association of Clinical Biochemists.
CITEC Training Solutions Ltd.

and in concluding this report the Management Committee wish to acknowledge with sincere thanks the staff, the group of voluntary lecturers and advisors who gave so generously of their time and expertise during 1995.

## The Samoa Course

The Tutor Co-ordinator, Mike Lynch and Marilyn Eales, visited Samoa to conduct the final examination for the second cycle of the course in November 1995. More details of this visit will be reported in the next edition of this Journal. Three students were successful in passing the examinations. They were Makereta Leolaga, Fetalaiga Vasa and Tilau Lopa.

***Samoan Graduates 1995***
*Makerita Leolaga, Fetalaiga Vasa and Tilau Lopa.*

*Co-Chairman Assoc. Professor H.C. Ford and Dr. R. McKenzie at the AGM in the new building. Note: The Role of Honour Board of PPTC on wall above. Good tea making facilities at left.*

*A section of the laboratory area in the new premises of the PPTC.*

*Christine Storey – Staff Member PPTC in the new Tutorial Room and Library area.*

*Drs H. Ford and R. MacKenzie welcoming her Excellency Dame Catherine Tizard at the official opening of the new premises of the PPTC.*

# Report on: The 12th International Congress of Cytology. 21-25 May 1995, Madrid, Spain

The International Congress of Cytology is a 3-yearly event. This year's meeting was held in the Spanish capital city of Madrid. More than 1200 registrants form some 60 countries attended.

There were 3 fora running concurrently during the Congress which made the decision of what to attend rather difficult at times. All papers were simultaneously translated from English to Spanish and vice versa. The interpreters were so good they even translated the jokes!

The first day there were panels on Terminology, Human papilloma Virus, Quality Assurance, Teaching and Testing, Telecytology as well as lectures on breast, lung and urinary tract among other things.

I attended the panels on Quality Assurance and Teaching and Testing, the latter topic being of special interest to me. It is interesting that we have the same aims and ideals all round the world and we also have similar problems – cytology schools are being closed as cytology becomes incorporated into technology degrees; specialised training for cytopathologists is recommended, as is a mandatory national certification system for cytotechnologists – all things that are under discussion here.

The next day I concentrated mainly on gynaecological papers and the panel on fine needle aspiration cytology. The gynaecological papers were of particular interest as they covered some difficult areas such as false negative cervical cytology and ASCUS (atypical squamous cells of uncertain significance) which is a worldwide headache.

I also listened to some of the papers on automation. There is still much research and trialling of various automated cytology systems. Some are used for preparation of cytology specimens, others are used for analysis and quality control. I felt that some of the papers I attended in other forums lost some of their credibility when it became apparent the object of the discussion was to push a particular machine. It does not seem that the good old cytology screener is going to be made redundant in the too near future.

The third day saw sessions on HIV, salivary glands, body fluids and technical procedures as well as more automation. This day was also designated as "Cytotechnology Day" – a feature of all Congresses. I took part in a panel on gynaecological cytology which was a great honour for me. The panel was chaired by a pathologist from Argentina, co-chaired by a cytotechnologist from the UK and the other panel members were from Japan, USA and Spain. As one panel member had pulled out about 4 weeks before the Congress I was asked to present a second case. There was standing room only in the hall. I took the opportunity to tell people that New Zealand is the furthest place from Spain on the globe and to flash up a few pictures of Mt Cook, etc which all went down very well. Many of the cytotechs commented that it was nice to see kodachromes of cells instead of all the high power graphs and information that had been a feature up until now.

The last day of the Congress included such topics as workload limitations, immunocytochemistry, urinary tract, respiratory cytology, central nervous system, GI tract and lymph nodes. As a member of the Cytotechnology Certification and Registration Committee for the International Academy of Cytology I helped run examinations for part of the day.

Madrid is a grand and rapidly growing modern city surrounding the lovely old city which is full of narrow winding streets and fascinating buildings. The people of Spain made us all very welcome. The social events for the Congress were wonderfully extravagant to say the least.

The opening ceremony included a concert by an 80-man orchestra (all university dons) playing guitars and mandolins, followed by a cocktail party for 1200. During the ceremony I sat between the presidents of the cytology societies of Khazakstan and Hong Kong.

There was a concert by the Spanish Chamber Orchestra including a piece of music that was specially written for the Congress.

The Victor Ullate ballet performed at the closing ceremony was created especially for the closing of Expo at Barcelona.

The Congress Banquet was spectacular, not just for the food and entertainment, but also for the fact that over 1200 meals were served at the table simultaneously by a swarm of waiters.

All registrants received tickets for free admission to the wonderful art galleries of Madrid including the Prado (said to rival the Louvre), the Thyssen and the Reina Sofia. The hardest part was trying to find time to fit it all in.

I also attended 2 days of workshops before the Congress started. I sat next to cytologists from Sweden, Costa Rica, Tenerife and others. We are indeed an international family.

For me the Congress was a great opportunity to reacquaint myself with friends from around the world and make many new friends. It is wonderful to be able to meet and talk to the people that wrote the textbooks and to realise that New Zealand is up there with the rest of the world in our field.

I am grateful to Murex Diagnostics Ltd for recognising the discipline of cytology by awarding me the 1994 International Murex Travel award which made it possible for me to attend this memorable event.

I would like to point out to members of the Institute that this award is open to all its members from every discipline. People should be encouraged to apply for the Murex award when it is offered – somebody has to win and it might just be you!

*Carol Green*
*Valley Diagnostic Laboratories*
*Lower Hutt*

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# *Cyclospora cayetanensis:* An Emerging Intestinal Pathogen in New Zealand

*Michelle Dougherty, Laboratory Assistant*
*Microbiology Department, Medlab Hamilton, Hamilton*

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NZ J Med Lab Science 1996 50 : 12-15

## Abstract
Reports of Cyclospora induced diarrhoea, are uncommon in New Zealand. As the organism is easily contractable and may be increasing in incidence, standard laboratory identification may become more important. Complex identification methods are available but we demonstrated this organism in three overseas travellers using simple routine procedures.

## Keywords
Diarrhoea, Immunocompromised Host, Travel, Cyanobacteria, *Cyclospora cayetanensis*

## Introduction
*Cyclospora cayetanensis*, formerly known as cyanobacteria-like bodies (CLBs) have emerged worldwide as a cause of diarrhoea affecting not only immunocompromised patients but also immunocompetent travellers [1,2]. Our first identification was made by chance on a returned traveller. As the organisms had not been previously reported in New Zealand, we decided to ascertain whether this organism is present in diarrhoeal overseas travellers.

## Materials and Methods
We followed our normal procedure for all faecal specimens, which includes concentration by the formalin – ethyl acetate method, the sediment being examined under phase contrast microscopy and routine examination of all cysts by trichrome stain and where relevant a modified acid-fast stain [3]. However, having had Cyclospora previously brought to our attention by the RCPA QAP 93:8:6B, only the very first recognisable Cyclospora cysts seen in any concentration (Patient A) had both the trichrome stain and the modified acid-fast stain performed, where as all subsequent recognisable cysts only had confirmatory modified acid-fast stains.

## Results
The faecal concentrations of three patients' samples showed numerous granulated cysts measuring 10 µm, some degenerating inside and others demonstrating bubbly granulation. The trichrome stain (on Patient A) showed no cysts, whereas all the modified acid-fast stains showed spheres measuring 10 µm, ranging from unstained glassy and wrinkled, to deep red. Confirmation was obtained from Wellington Hospital laboratories and no other pathogens were observed in any of these three patients' specimens.

## Discussion
Numerous Cyclospora cysts have been found in faecal specimens and jejunal aspirates from symptomatic patients [4,5]. In fresh unpreserved faeces, Cyclospora is a spherical non-refractile hyaline cyst with a 6-7 µm blue-green spherical mass, composed of a hollow cluster of refractile membrane-bound globules, containing a clear material resembling lipid. In preserved faeces, the contents of Cyclospora cysts appear as granules of irregular shape and size[6]. The three patients positive for Cyclospora were a 29 year old female (Patient A), who on returning from holiday in Bali in December 1993, developed spasmodic diarrhoea; a 59 year old male, who returned from South America in June 1994, with diarrhoea, anorexia and general malaise; and an 11 year old girl, who returned from Bali in October 1995 with abdominal pain and diarrhoea.

The organisms have been shown to be resistant to many stains, including the trichrome. However, the modified acid-fast stain imparts a faint pink to deep red colour, with some cysts appearing to retain granules of stain, while others take on a bubbly appearance. Safranin stains the organisms orange. Both however show great variability with many organisms remaining as unstained glassy wrinkled spheres [1]. All three patients' cysts were well demonstrated by the modified acid-fast stain. Therefore we would suggest that after an initial search of a faecal concentration reveals cysts suggestive of Cyclospora, a modified acid-fast (or safranin) stain be performed as well as the trichrome stain. Although similar in appearance to Cryptosporidium cysts, the Cyclospora cysts are double the size (8-10 µm) and do not dehydrate or collapse [5]. All acid-fast cysts must be measured.

According to published papers ultra-violet light causes Cyclospora to strongly fluoresce as bright blue circles as the internal contents of the cysts do not fluoresce and this may be more reliable and sensitive than the modified acid-fast stain for identification [2]. After seven to ten days incubation in potassium dichromate solution, oocysts divide internally to produce two smaller sporocysts, each in turn giving rise to two sporozoites containing a membrane-bound nucleus and micronemes. Electron microscopy of jejunal biopsies reveal the organisms within an intracytoplasmic vacuole, located towards the luminal end of the enterocytes and often surrounded by lysosomes. Cyclospora measures 8-10 µm long and 1-4 um wide, being crescent shaped on longitudinal section but circular or polygonal on cross section. Cysts have 63 nm outer fibrillar coats and over 50 nm thick cell walls. They contain light and dark intracytoplasmic granules. Some are arranged in bundles of six, their nuclei having prominent nucleoli and some are binucleated, suggesting cell division. This electron microscopic appearance correlates with active jejunal infection[4,5]. As a result of these observations, these cyanobacteria-like bodies (CLBs) are no longer considered blue-green algae but Coccidian parasites [1,4]

The complete life cycle of Cyclospora is currently unknown but waterborne transmission seems likely [2,5]. Symptoms have included severe abdominal cramping, bloating, intermittent prolonged watery diarrhoea, often with up to six motions a day, flatulence, nausea, anorexia, low grade fever and fatigue[2]. Typically periods of diarrhoea lasting four weeks or more, are interspersed with remissions of profound fatigue and sometimes constipation[7]. Although self

limiting, with diarrhoea usually resolving even in AIDS patients, recent reports of symptoms resolving on cotrimoxazole have been published[2,7]. It is suspected that emerging resistance of other microbiological causes of diarrhoea in travellers, to the older antibiotics e.g. cotrimoxazole, which has inevitably led to a shift towards the newer agents e.g. fluoroquinolones, may have contributed to the emergence of Cyclospora as a cause of diarrhoea, as the "inhibitory use" of cotrimoxazole declined[8].

Cyclospora may therefore be an easily contractable but possibly treatable cause of prolonged unexplained diarrhoea in an increasing number of both travellers and immunocompromised patients. We demonstrated that this organism was indeed present in three symptomatic patients and could easily be identified by our simple routine diagnostic methods.

## Conclusion

We demonstrated the presence of Cyclospora in overseas travellers from New Zealand by using simple routine methods, i.e. concentration followed by modified acid-fast stain. It is important for laboratories to be aware of routine procedures for diagnosing this emerging enteric pathogen in order to assist with therapeutic relief of diarrhoea.

## References


1. Long, EG, Ebrahimzadeh A, White EH, Swisher B, Callaway CS. Alga associated with diarrhroea in patients with acquired immunodeficiency syndrome and in travellers. *J Clin Microbiol* 1990; 28:1101-4.
2. Wurtz R. Cyclospora: a newly identified intestinal pathogen of humans. *Clin Infect Dis* 1994; 18:620-3.
3. Garcia LS, Bullock-Iacullo S, Palmer J, Shimizu RY. Diagnosis of parasitic infections: collection, processing and examination of specimens. In: Murray PR, Baron EJ, Pfaller MA, Eds. Manual of Clinical Microbiology. ASM Press, Washington, USA, 1995.
4. Bendall RP, Lucas M, Moody A, Tovey G, Chiodini PL. Diarrhoea associated with cynobacterium-like bodies: a new coccidian enteritis of man. *Lancet* 1993; 341: 590-2.
5. Ortega YR, Sterling CR, Gilman RH, Cama VA, Diaz F. Cyclospora species – a new protozoan pathogen of humans. *N Engl J Med* 1993; 328:1308-12.
6. Centres for Disease Control. Outbreak of diarrhoeal illness associated with Cyanobacteria (blue-green algea) – like bodies: Chicago and Nepal, 1989 and 1990. *MMWR Morb Mortal Wkly Rep* 1991; 40:325-7.
7. Hale D, Aldeen W, Carroll K. Diarrhoea associated with Cyanobacteria-like bodies in an immunocompetent host. *JAMA* 1994; 271:144-5.
8. Hoge, CW, Shlim DR, Ghimire M, et al. Placebo-controlled trial of co-trimoxazole for cyclospora infections among travellers and foreign residents in Nepal. *Lancet* 1995; 345:691-3.

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# 50th Anniversary Annual Scientific Meeting 27 – 30 August 1996

## INVITATION TO ATTEND

On behalf of the Organising Committee, I wish to extend to you, an invitation to attend the 50th Anniversary Annual Scientific Meeting of the New Zealand Institute of Medical Laboratory Science (Inc).

The conference will be a celebration of the last 50 years of technology in New Zealand and will take a look at the state of the art technology now available.

**50th Anniversary Reunion.** An invitation is extended to past members of the profession to attend the 50th Anniversary Conference. Delegates will be welcome to our opening ceremony and plenary sessions on Wednesday 28th. On Thursday 29th, delegates are invited to either attend the scientific sessions or meet in a reserved room.

We look forward to welcoming you all to Auckland, the City of Sails, and to our ***"going for gold"*** Anniversary Conference.

Leanne Mayhew
Chairperson, 50th Anniversary Committee

## CONFERENCE THEME

***"Going for Gold"*** has been chosen to reflect the 50th (Golden) Anniversary of the New Zealand Institute of Medical Laboratory Science. The opening session will focus on our history and then move onto "Healthcare 21st Century".

## VENUE

The **Ellerslie Convention Centre** in Auckland is one of New Zealand's foremost convention and exhibition venues, and offers excellent facilities and services.

## INDUSTRY DISPLAY

A comprehensive industry exhibition will be on display for exhibitors to meet with delegates. We gratefully acknowledge participation of all exhibitors.

## EXHIBITION

A display of historic equipment and memorabilia will be on show for some to reminisce over and others to see for the first time.

## ACCOMMODATION

Accommodation is available at sufficient hotels and motels close to the Ellerslie Convention Centre to cater for all registrants and partners. Accommodation and rates will be published in the registration brochure.

## SPECIAL NOTE

Over the course of the conference, a questionnaire will be run, looking back over the last 50 years and on into the 'Star Wars' era, just to rattle those brains a little.

## SOCIAL PROGRAMME

**Tuesday 27 August 1996**
Jim Le Grice Ice Breaker / Opening of Industry Display and catch up session over some drinks and light nibbles.

**Wednesday 28 August 1996**
A casual night of eating out in the heart of Auckland City at one of a number of restaurants and cafes available. Move on to Auckland's latest top attraction the 'Sky Tower' Casino, try your luck at the tables, or maybe take a relaxed walk down to the waterfront for a beer/coffee.

**Thursday 29 August 1996**
This is it, the event not to be missed, the big **50TH GOLDEN BALL!** A chance to come out in your hottest, most glitzy outfit for a spectacular evening of wining and dining, then dancing into the small hours of the morning. Get in early as tickets will be limited!!

**Accompanying Persons**
A package of sightseeing tours/trips for accompanying persons will also be available.

## ENQUIRIES

Enquiries can be directed to:
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## ABSTRACTS

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Please submit your abstract on a Computer Disk and **one** hard copy in an IBM compatible format. (WordPerfect or Microsoft Word).

Approximate length 250 words on A4 page size.
Please include:

- The Presentation Title
- Your preferred session
- Authors with the **presenter's name in bold and underlined**
- Contact address
- References
- Indicate whether a poster or oral presentation

Abstract formats will be standardised for publication. No changes will be made to content.

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**CLOSING DATE FOR ABSTRACTS**
**10 JUNE 1996**

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| **Title** | NZIMLS Scientific Meeting Trades Display Award |
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| **Judging** | Judges of this award shall be the Trades Display Convenor and the Awards Convenor. The winner will be announced at the end of the first session of the Scientific Meeting. |

## *TENTATIVE SCIENTIFIC PROGRAMME*

| **TUESDAY 27 AUGUST 1996** | |
|---|---|
| Evening | Registrations<br>**Jim Le Grice Ice Breaker / Opening of Industry Displays** |

| **WEDNESDAY 28 AUGUST 1996** | | | |
|---|---|---|---|
| 0800 | Registration and Coffee | | |
| 0900 | **Welcome** | | |
| 0915 | **A Rich Heritage (Celebrating 50 Years)** | | |
| 1045 | Morning Tea | | |
| 1115 | **T H Pullar Address** | | |
| 1145 | **Healthcare 21st Century** | | |
| | *(EDS (NZ) Limited – Speaker to be confirmed)* | | |
| 1230 | Lunch / Poster Session | | |
| 1315 | Health and Safety:<br>Hazardous Substances and New Organisms Act<br>*Dr Steve Vaughan*<br>*Ministry for the Environment* | Quality Communication<br>*Dr Ian Brooks*<br>*Brooks & Royston* | DNA Developments<br>*Dr Eric Terzhagi*<br>*University of Auckland* |
| 1400 | Discussion: Hazardous Goods Management<br>*Format to be confirmed* | New Developments in Accreditation<br>*Telarc NZ* | DNA Technology – PCR<br>*Mrs Holly Perry*<br>*Protein Genetics Laboratory*<br>*Auckland Regional Blood Centre* |
| 1430 | Shiftwork Performance<br>*Fiona Johnston*<br>*Auckland Sleep and Anxiety Centre* | Bad Blood<br>(Hepatitis C Lookback, Ethics and Issues)<br>*Dr Chris Bullen* | Genetic Counselling<br>*Dr Ingrid Winship*<br>*Auckland Healthcare* |
| 1515 | Afternoon Tea | | |
| 1545 | **Annual General Meeting NZIMLS** | | |
| Evening | Casual Dining | **Social Programme** | Venue to be confirmed |

**THURSDAY 29 AUGUST 1996**

**Special Interest Forums** — **Scientific programmes organised by Special Interest Groups**
**Proffered papers: 15-20 minutes each**

| Time | Clinical Chemistry | Haematology | Histology/ Cytology | Immuno-haematology | Immunology /Virology | Microbiology | Management /General |
|---|---|---|---|---|---|---|---|
| 0900 | Immunoassay | Proffered Papers | To be finalised | State of the Art Reagents | Virology-Epidemiology | Microbes Disease | Proffered Papers |
| | Morning Tea | | | | | | |
| 1100 | Electrode Technology | Haemophilia | Proffered Papers | Quality Forum | Proffered Papers | Technology 1946→?? | To be finalised |
| 1230 | Lunch/Poster Sessions | | | | | | |
| 1330 | Proffered Papers | Haemato-logical Malignancies | Cytology Slide Workshop | Proffered Papers | Autoimmune /Infectious Serology | Proffered Papers | Near Patient Testing |
| | Afternoon Tea | | | | | | |
| 1530 | Proffered Papers | To be finalised | Cytology Slide Workshop | To be finalised | Proffered Papers | Proffered Papers | To be finalised |
| 1700 | Associated Event: AACB 1996 Roman Lecture<br>**Setting Quality Specifications in Laboratory Medicine**<br>*Dr Callum Fraser (Scotland)* | | | | | | |
| Evening | **Social Programme** | | **NZIMLS 50th Anniversary Golden Ball** | | | | **Social Programme** |

## *TENTATIVE SCIENTIFIC PROGRAMME CONTINUED*

| FRIDAY 30 AUGUST 1996 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 90 Minute Sessions | | | | | Full Morning Workshops | | |
| 0900 | **Latest Developments in Computing Software /Network Technology** *Ace Training* | **Temperature Measurement** *Rod White Industrial Research Limited* | **Barcode Technology** *John Brimblecombe & Andy Craig Scan A Log Systems Ltd* | **Health and Safety** *Gillian McLeay H&S Officer Laboratory Services Auckland Healthcare Limited* | **Suggestions Welcome** | **Telecommunication – Voice Imaging and Hardware Developments** *Noreen Patton et al Callpower Consultants Telecom* | **Surviving Corporate Culture** *Wendy Smillie Telarc Hamilton Ann McNabb Auckland City Council and Joanne Webster* | **Site Visit** *Starship Auckland Hospital/ Philson Library/ Medical Books/ Skin and Tissue Bank ARBC* |
| 1030 | Morning Tea | | | | | Morning Tea – included in session format | | |
| 1100 | **Latest Developments in Computing Software /Network Technology** *Ace Training* | **Temperature Measurement** *Rod White Industrial Research Limited* | **Barcoding Technology** *John Brimblecombe & Andy Craig Scan A Log Systems Ltd* | **Health and Safety** *Gillian McLeay H&S Officer Laboratory Services Auckland Healthcare Limited* | **Generation and Application of Data on Biological Variation** *Dr Callum Fraser (AACB Roman Lecturer)* | **Above workshops continue to lunchtime** | | |
| 1230 | Lunch | | | | | | | |
| 1315 | **Maintaining Appropriate Standards of Service** *Robyn Stent, Health and Disability Commissioner* | | | | | | | |
| 1430 | **Ready for 2000** *Janis Grummitt, Director Grummitt, Turney & Co* | | | | | | | |
| 1515 | **Farewell and Closing** *President NZIMLS* | | | | | | | |
| 1530 | Afternoon Tea | | | | | | | |

## *NOTES*

1. Two industry breakfast sessions have been booked:

   Wednesday 28 August 1996: Radiometer Pacific User Group Breakfast
   Thursday 29 August 1996: New Haemostasis Products from Diagnostic Division Pharmaco (NZ) Limited
   *Coag-a-mate MTX Instrument*

2. Most aspects of this programme are now confirmed. A number of sessions are being sponsored. These will be acknowledged when arrangements are completed.

3. Depending on Conference registration numbers, additional workshops may need to run on Friday morning. Offers to present these and any other suggestions are welcome. Please contact **Margaret Dickinson,** Scientific Programme Convenor, telephone 64 9 521 5168 (evenings) or fax to 64 9 307 2863.

Registration Forms will be printed in the next issue of the NZIMLS Journal or contact the NZIMLS Conference Secretariat, P O Box 3270, Christchurch
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# Book Reviews

## Human Chromosomes Principles and Technique
Second Edition
By Ram S Verma/Arvind Babu

The first edition of this most welcome laboratory manual of cytogenetics and molecular genetics was printed in 1988, proving to be a most valuable instrument to practising cytogeneticists. The second edition of 1995 is also a must for the cytogenetic laboratory, it has been extensively revised and expanded, full of excellent illustrations, exemplary in layout and beautifully presented. As is now common with similar manuals, the authors have invited various distinguished scientists to contribute chapters in their particular areas of expertise.

The aims of the second edition have remained essentially as the previous edition with the addition of those exciting new advances which have been outstanding during the past eight to ten years.

The routine cytogeneticists will be delighted still with the concise informative introductions to procedures and the in depth protocols of the chromosome banding techniques and tissue culture methodologies. There is much guidance on how to avoid pitfalls associated with the subtleties of the banding techniques, and enlightenment on the recent revolution in the newer molecular procedures.

The newer technology has chapters on Fluorescence in situ hybridization techniques (FISH), immunocytogenetics techniques, microdissection and direct PCR amplification of human chromosomes, flow cytometry, Southern and Northern blotting techniques and the polymerase chain reaction (PCR) application in genomic analysis. Though a chromosomal basis remains the dominating theme, the manual reflects, as has just been outlined, the exciting advances at the DNA level.

The chapter on human chromosomes in clinical medicine is wonderfully tabulated for easy reference, which will be particularly appreciated by the cancer cytogeneticists as expansion continues without let up in this aspect of chromosomal involvement in disease.

The section on fluorescence in situ hybridization techniques (FISH) gives the reader good sound practical advice and insight. Nevertheless the detail in procedure and protocol could be better in relationship to the everyday routine application of the techniques, as opposed to the more esoteric research approach.

Overall however, the manual remains possibly the most useful publication available on both standard and non standard cytogenetic techniques. It is highly recommendable and should become a staple in every cytogenetic laboratory as did the first edition.

Reviewed by
Dennis Romain, HGSACC, MSc(Dis), FIMLS
Principal Cytogeneticist
Central Regional Genetic Services
Wellington Hospital

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|---|---|---|---|---|
| | 1006 | 1079 | 1084 | 1174 |
| Less resignations | 11 | 68 | 6 | 28 |
| Less G.N.A. | 15 | 7 | 6 | 16 |
| Less deletions | – | – | – | 109 |
| Less deceased | 1 | 2 | – | – |
| Less duplications | – | – | – | – |
| | **979** | **1002** | **1072** | **1021** |
| Plus applications | 12 | 4 | 5 | 62 |
| Plus reinstatements | 3 | – | 2 | 1 |
| **Total** | **994** | **1006** | **1079** | **1084** |

| Composition | | | | |
|---|---|---|---|---|
| Life Member (Fellow) | 12 | 12 | 12 | 12 |
| Life Member (Member) | 9 | 9 | 9 | 9 |
| Fellow | 21 | 21 | 21 | 21 |
| Member | 618 | 621 | 645 | 644 |
| Associate | 258 | 266 | 311 | 317 |
| Non Practising | 49 | 50 | 54 | 54 |
| Honorary | 27 | 27 | 27 | 27 |
| Total | 994 | 1006 | 1077 | 1084 |

### New Members

C MARTIN, Cardinal, A HERYET, Greenlane, I MACKAY, Auckland, M KILGOUR, Auckland, S BENSON, Middlemore, K WRIGHT, Taumarunui, M MAJEED, Overseas, G. McFADGEN, Southland, G. TUNBRIDGE, Wanganui, R. PEARCE, Southland, K. GRAHAM, Biolab, R. HUNAPO, Middlemore

## NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE 1996 CALENDAR

| | |
|---|---|
| 22/23 February | Council Meeting – Auckland |
| 16 March | South Island Seminar – Methven |
| 30 April | Committee Annual Reports to be with the Executive Officer |
| 30 April | All accounts to National Treasurer for auditing |
| 30 April | Proposed rule changes and remits to be with the Executive Officer |
| 16/17 May | Council Meeting |
| 24 May | Applications close for Specialist Certificate examinations |
| 24 May | Applications close for QTA examinations |
| 28 June | Nomination forms for the election of Officers and Remits to be with the Membership (60 days prior to AGM) |
| 1 July | Annual Staffing Survey |
| 9/10/11 July | Fellowship examinations |
| 19 July | Nominations close for election of Officers (40 days prior to AGM) |
| 7 August | Ballot papers to be with the membership (21 days prior to AGM) |
| 14 August | Annual Report and Balance Sheet to be with the membership (14 days prior to AGM) |
| 21 August | Ballot papers and proxies to be with Executive Officer (7 days prior to AGM) |
| 26-27 August | Council Meeting – Auckland |
| 28 August | AGM – Auckland |
| 27-30 August | **50th Anniversary Annual Scientific Meeting – Auckland** |
| 6 November | QTA examinations |
| 14/15 November | Council Meeting – Wellington |
| 20/21 November | Specialist Certificate examinations |

Abbott Diagnostics Division
New Zealand

1996

INFECTIOUS DISEASE SEROLOGY
ANNUAL GRANT

# DO YOU WISH TO ADVANCE YOUR KNOWLEDGE AND UNDERSTANDING IN INFECTIOUS DISEASE SEROLOGY ?

Through the generosity of ABBOTT Diagnostics Division the trustees of the New Zealand Medical Laboratory Science Trust are pleased to offer the opportunity for members of the New Zealand Institute of Medical Laboratory Science to apply for assistance to advance "their knowledge and understanding of Infectious Disease Serology in New Zealand"

ABBOTT Diagnostics have again made the sum of **$ 5,000.00** available to the Science Trust to award to members of the Institute to further their understanding in Infectious Disease Serology in accordance with the objectives of the Trust. Applications are invited from financial members of the Institute, not necessarily employed with the New Zealand Blood Services.

Applications will be judged on the expected benefits from an award and where appropriate, the advancement of knowledge and understanding in Infectious Disease Serology.

Applications should be made on the official form and sent to :

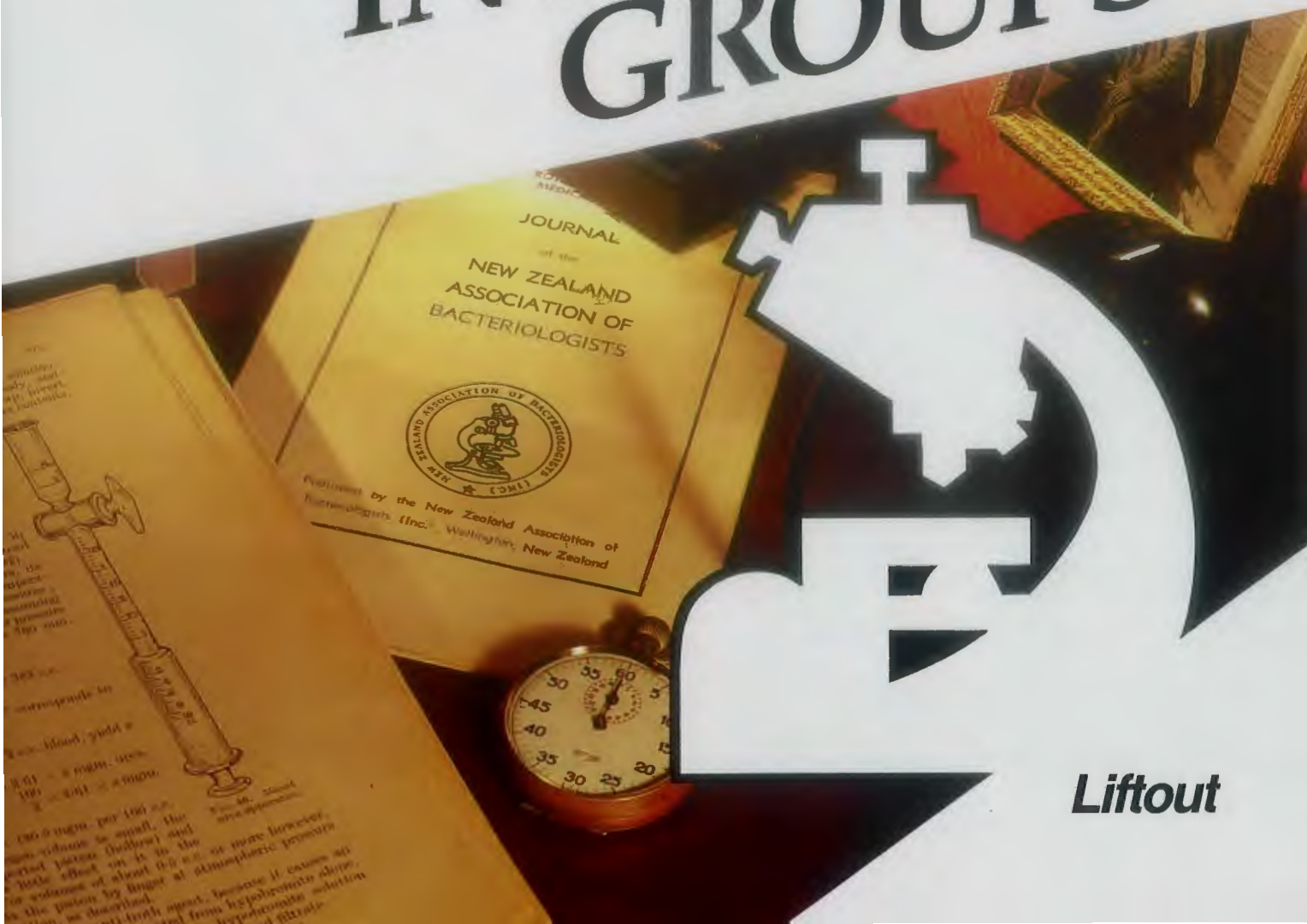
**The Executive Officer**
**New Zealand Medical Laboratory Science trust,**
**C/- Pathology Department,**
**Palmerston North Hospital**
**PALMERSTON NORTH**

**1st Round applications close 26th January 1996**
**2nd Round applications close 31st May 1996**

Application forms are available from Abbott Representatives or your local Blood Transfusion Service.

NZIMLS CONTINUING EDUCATION

# SPECIAL INTEREST GROUPS




Liftout

# Transfusion Science

## Special Interest Group

**Convenor:** Sheryl Khull, Transfusion Medicine, Palmerston North Hospital
**Members:** Ray Scott, Auckland Regional Blood Centre; Roger Austin, Blood Bank, Taranaki Base Hospital, New Plymouth; Sue Baird, Blood Bank, Lakeland Hospital, Rotorua; Marie Willson, Blood Bank, Gisborne Hospital; Diane Whitehead, Transfusion Medicine, Christchurch Hospital; Suzanne Williams, Blood Bank, Otago Hospital, Dunedin; Kaye Fissenden, Laboratory, Timaru

Welcome to Kaye Fissenden from Timaru, who has joined our little bunch on the Transfusion Science Special Interest Group. Kaye has had more years experience in laboratory technology than I am allowed to tell you about. We are sure she will have a great deal to offer and we are pleased she is joining the team. If anyone is interested in joining the TSSIG, just let one of the members know – we are always on the lookout for new heads, brains and hands.

It is with great regret that we say goodbye to Kevin McLoughlin, who has been a part of the Transfusion Science Special Interest Group since its inception, and who has been a major contributor to Transfusion Medicine in New Zealand for many more years than that. The high esteem in which Kevin is held was demonstrated in 1994 when he was awarded life membership of the NZIMLS. During his time with us on the TSSIG, Kevin has been a guiding light to us all, and we have relied heavily on his wisdom and expertise, not least for moderating almost all of the Transfusion Science examinations at all levels for as long as I can remember. Cliche or not, I have to say that Kevin will be sorely missed. I understand that he has taken to the role of "mein host" at the Federal Hotel in Blenheim, so maybe we can still catch some gossip and perhaps a song or two anytime we are crossing the strait. May we wish you happiness, Kevin.

### Transfusion Medicine Audio Updates

The American distributors of this programme have now ceased business, so you have got the last one you will get.

Does anyone know of any kind of continuing education for Transfusion Science which might be a suitable replacement for TMAU? It is becoming more important that we participate in continuing education (and document the fact), especially with the MOLS program currently being trialled.

### NICE Weekend

The 1996 NICE Weekend will be held in Wairakei on 13-14 April. We are all looking forward to another great time of learning, sharing, gossiping, getting nervous, and soaking in the hot pool. I'm sure you have all sent in your application forms already and are frantically putting together your presentation. If not, make like the white rabbit. (Make haste). I hope we will see you there!

HSIG held a very successful one day "Seminar in the Cytopenias" on 13 September 1995. Over 120 people registered for the seminar. It was an overwhelming response from all parts of the country. The HSIG Committee thanks all of you who attended and contributed to the success of the day. In particular we thank the presenters of each paper and case history and the medical companies who support our seminars. It is always encouraging to see representatives (in many instances more than one) from firms such as Sandoz, Abbott Diagnostics, Bayer Diagnostics (Technicon) and Coulter Electronics in the audience and contributing to the discussions.

Unfortunately we were unable to obtain abstracts for publication from all of our very busy speakers. A few of the speakers have submitted their papers for publication in the Journal and providing the editor approves, will appear in future editions of the journal.

In this edition, we feature an abstract from the paper given by Dr R Y Harding on "Immune Thrombocytopenia". "A Case History of Cyclic Neutropenia" presented by Ailsa Bunker, will be published in a later issue of the Journal as an Original Article.

### Regional Representatives HSIG

| | |
|---|---|
| Northland/Auckland | Cindy Lincoln |
| Waikato | Robin Allen |
| Palmerston North | To be advised |
| Wellington | Errol Crutch |
| Christchurch | Brent Bishop |
| Dunedin | Alison Holt |

### Immune Thrombocytopaenia

**R Y Harding, M.B.B.S. F.R.C.P(C)**
**Auckland Regional Blood Centre**

Platelets carry ABH, HLA Class I, and so called platelet specific antigens on their surface, some of the latter are also found on endothelial cells.

Immune thrombocytopaenia is caused by auto or alloantibody, coating the platelet and either causing lysis of the platelet through activation of complement or ingestion of the platelets by macrophages. Autoimmune thrombocytopaenia may be

idiopathic or secondary to other disease processes or drugs.

Alloimmune thrombocytopaenia is initiated by transfusion of platelet concentrates or red cells or pregnancy. This may be caused by allo-anti HLA Class I antibody. In both instances patients are refractory to platelet transfusions. Matched platelets may be required for those patients who have alloantibodies, those with autoantibody are best treated with immune suppressive drugs.

## Methods Available to Demonstrate Platelet Antibodies

At the Auckland Regional Blood Centre we use two tests to demonstrate platelet auto and allo antibody.

There are several other tests in use which we hope to develop.

1. Platelet immuneflorescent test. To demonstrate autoantibody on the platelet surface.
2. Solid phase red cell adherence test. To demonstrate both auto and alloantibody and lymphocyte antibody.
3. Lymphocytoxicity test can be used to confirm antibody to HLA Class I and to identify the antibody if appropriate cells are used.

## Other Tests

4. Immune complex capture assays – Immunobead. Monoclonal antibody – specific immobilisation of platelet antigen (MAIPA).
5. Antigen capture assays
6. Immunoprecipitation assay
7. Immunoblot assay

All of the assays have advantages and disadvantages none is perfect and a combination of assays may be required to obtain an answer to the posed problem.

## Errata

Two publication errors occurred in HSIG articles during 1995. The first in volume 49 No. 2, May 1995 – *Cultural Differences in Social Behaviour*.

In the printing, one line had been transposed which changed the true meaning of the specific cues listed for Polynesians and Pakehas. The correct version is re-printed below:

The second occurred in Volume 49, No. 2 November 1995. In the final sentence of Kathryn Schollum's article on "Standardisation of EDTA. Anticoagulant for Blood Counting Procedures". The sentence should read:

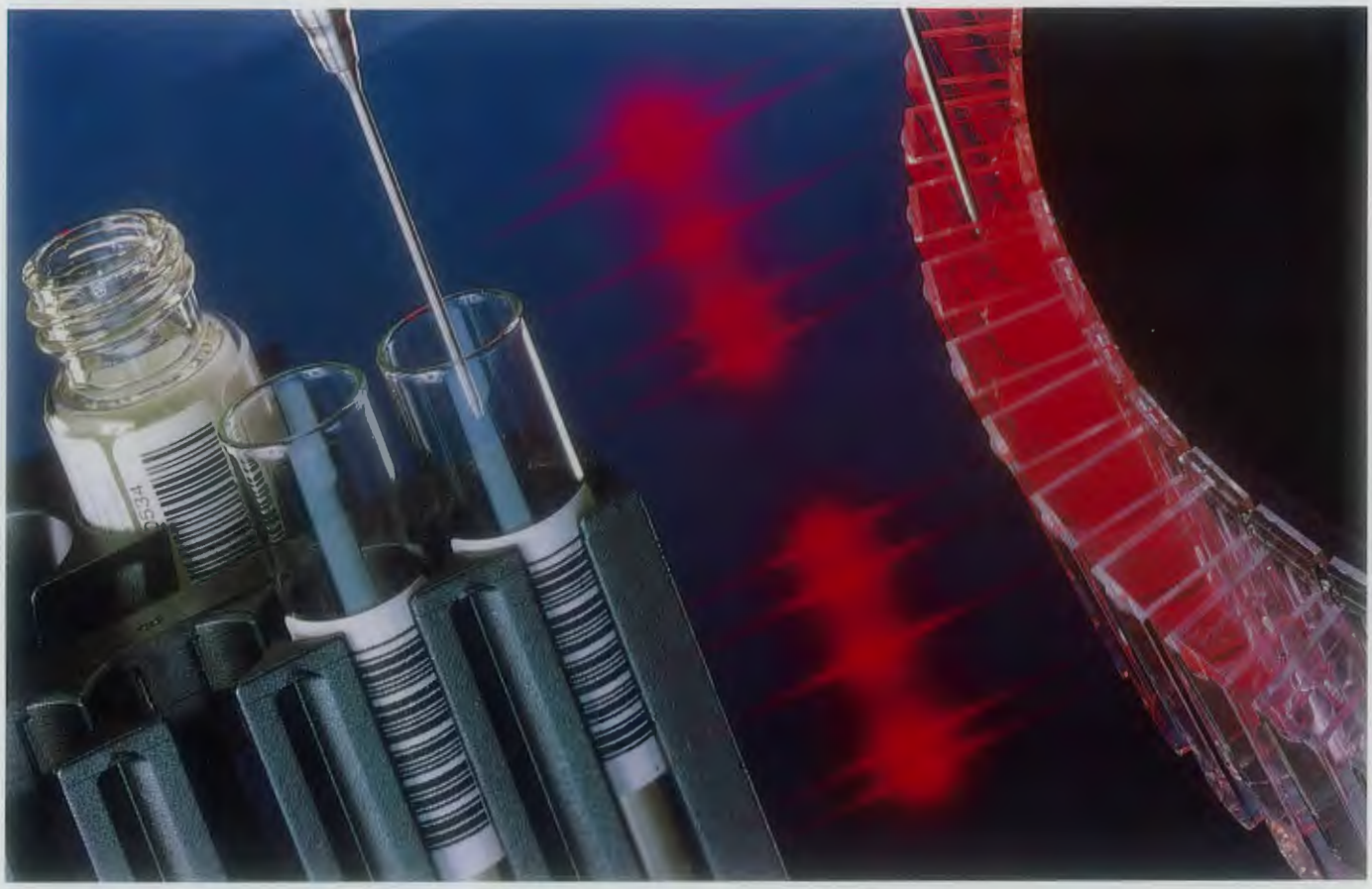
**The HSIG reaffirms that K2 EDTA is the anticoagulant of choice.**

Note: Not **K3**

The Editor apologises for the errors.

| Specific cues | Polynesians<br>Convey meaning by body language and listen by watching | Pakehas<br>Convey meaning by voice and word and listen by attending to words |
|---|---|---|
| Head tilt and/or eyebrow raise | Agreement | Questioning or surprise |
| Unresponsive looking ahead or down | Disagreement (verbal) | Failure to understand |
| Hunched shoulders | "I don't know" | "I don't care" |
| Quick frowns | Puzzlement, please help | Disapproval |
| Sniff | Admit mistake, apologize | Disdain |
| Hand down and in to chest | Come here (Samoan) | It doesn't matter (Maori or Pakeha) |
| Touching and hugging | Welcome, support, desire for friendship, liking, gratitude or apology | Close friendship only – otherwise seen as excessive or hypocrisy |
| Standing up to greet | Sign of superior status | Sign of respect |
| Sitting down to greet | Sign of respect | Sign of superior status |
| Wandering eyes, looking away | Politeness | Boredom, evasion of guilt |
| Attentive and steady gaze | Opposition or conflict | Undivided attention |
| Using imperatives ("Do this") | Acceptable | An order |
| Requests as a question | Uncertainty | Politeness |
| Double negative eg "You don't want it, do you" | "No" (I do want it) | "Yes" (I do want it) |
| Pauses and silences | Time to think, being companionable and relaxed | Unresponsive or stupid. Creates awkwardness unless with intimates |

# Behring Nephelometer II -
# The Powerful System



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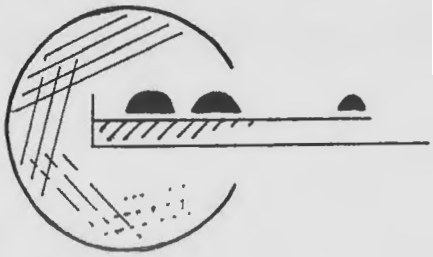
BEHRING

VD 172

**Microbiology**

**Special Interest Group**

Convenor: Jan Deroles - Main
Contact Address: Medical Diagnostics
Palmerston North



*Invites you to a*

# POTPOURRI SEMINAR

to be held at Rotorua Hospital

The weekend of 20 and 21 April is this year's date for the Potpourri Seminar in Rotorua.

It is an informative gathering of medical laboratory assistants and scientists held along the same lines as the successful Taupo and Rotorua seminars. Short talks of 5-10 minutes involving case studies, assessment of equipment, new test trials, problems – anything that is Microbiological.

We are not insisting that all registrants speak, but we do need your participation for this to be successful. So start getting ready now! Best presentation will receive $500 towards attending a Medical Conference.

A certificate of attendance and credit points will be issued to all NZIMLS members that attend.

Registration form with further details will follow.

For further information contact: Jan Deroles-Main
Medlab Palmerston North
PO Box 293
PALMERSTON NORTH

# HISTOLOGY

# SPECIAL INTEREST GROUP

# SEMINAR 1996

**WHERE:** CHRISTCHURCH

**WHEN:** SATURDAY 5 OCTOBER 1996

**WARNING:** A PRELIMINARY NOTICE OF THE DATE FOR THIS YEAR'S HSIG SEMINAR SO YOU CAN START TO BEG, BORROW, AND/OR STEAL THE FUNDING TO GET HERE.

**SEEKING:** VOLUNTEERS/VICTIMS TO ENTHUSIASTICALLY PRESENT STUNNING, INTERESTING OR EVEN JUST ORDINARY PAPERS ON THE DAY.

**ALERT:** WATCH YOUR MAILBOXES FOR FURTHER INFORMATION ON THE PROGRAMME.

*See You All There!!*

## Workshop Announcement

### Introduction to Molecular Genetics and Gene Manipulation

A one week non-credit workshop will be held in the Microbiology and Genetics Department of Massey University during the mid-semester break 8-12 July 1996. The aim of the course will be to provide a working introduction to the powers and limitations of molecular genetic techniques, for people with a professional interest in the subject. Material to be covered in lectures and discussions will include DNA and genome structure, DNA polymorphisms, gene regulation, the molecular genetics of plasmids and transposons and basic strategies of recombinant DNA research, including PCR and sequencing. Concurrent sessions will be held on the final day to allow for specialised interests in the areas of plant and medical molecular biology. Practical work will include plasmid isolation, transformation/electroporation, restriction enzyme mapping, DNA cloning, PCR and RFLP analysis. Background assumed will be the equivalent of Introductory Genetics and Introductory Biochemistry (200-level). Although Boehringer-Mannheim are continuing their generous sponsorship for this course in the form of biological materials, there will be a charge of $500 (plus GST), in order to cover the cost of additional materials and facilities. Accommodation will have to be arranged off campus as, unfortunately, extramural fully books the campus accommodations. The enrolment will be limited to 30 (the capacity of the teaching laboratory). For further information and an enrolment form, please contact:

Dr Rosie Bradshaw (Organiser)
or Mrs Esther Belikoff (Administrator)
Department of Microbiology and Genetics
School of Biological Sciences

Phone: (06) 350 4025 (R. Bradshaw)
(06) 354 9104 (E. Belikoff)

## Pacific Paramedical Training Centre

The Pacific Paramedical Training Centre provides training courses in medical laboratory science subjects for laboratory staff from Pacific Island and S.E. Asian countries.
The courses are usually held at the Centre which is based at Wellington Hospital.
It is proposed that in future some courses will be run overseas.
As a pre-requisite to this the PPTC is presently compiling a list of experienced medical laboratory scientists who are interested in undertaking teaching assignments or consultancies in the main medical laboratory disciplines at overseas locations.
The assignments would be of short term duration.
If you are interested, contact Mike Lynch at the PPTC for further information.
PO Box 7013, Wellington or telephone (04) 3855999 ext 6971 or Fax (04) 3855890.

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# Publications in Overseas Medical Laboratory Science Journals

We exchange journals with various overseas medical laboratory science organisations. Members wishing to obtain articles of interest should forward their requests to the Editor, NZJ Med Lab Science, c/- Dept. of Medicine, Wellington School of Medicine, PO Box 7343, Wellington South.

## British Journal of Biomedical Science. 1995. Volume: 52. No: 4.

Favaloro EJ, Mohammed A, Coombs R, Mehrabani PA. **Filtered plasma as a potential cause of clinical misdiagnosis: inappropriate testing in a haematology laboratory**. p.243-248.

Gibbs RV, Lewis JL, Gordon MY. **Expression of cell-surface lectins on haemopoitic progenitor cells.** P.249-256.

Sweetman SF, McKenna PG, McKelvey-Martin VJ. **Bleomycin-induced DNA damage and repair in wild-type and thymidine kinase-deficient Friend mouse erythroleukaemia cells.** p.257-265.

Parker PI, Scott Y, McArdle B, Wallis PJ. **Automated blood grouping by gel technology.** p.266-270.

Mera SL. **Peptic ulcer and gastric cancer.** p. 271-281.

Stark RM, Greenman J, Millar MR. **Physiology and biochemistry of *Helicobacter pylori*.** p.282-290.

Isaacson PG. **Primary gastric lymphoma.** p.291-296.

Knight RC, Poole GD. **Detection of red cell antibodies: current and future techniques.** p.297-305.

Nation BR. **Cellular pathology – a progress report.** p.306-311.

Roch OG, Blunden G, Haig DJ, Coker RD, Gay C. **Determination of aflotoxins in groundnut meal by high-performance liquid chromatography: a comparison of two methods of derivatisation of aflotoxin $B_1$.** p.312-316.

Fanning S, O'Mullane J, O'Meara D, et al. **Detection of the heat-stable toxin coding gene (ST-gene) in enterotoxigenic *Escherichia coli:* development of a colour amplified PCR detection system.** p.317-320.

Okeke IN, Lamikanra A. **Bacterial capsules: a simple method for demonstration under the light microscope.** p.321-322.

Famodu AA, Oduwa D. **Platelet count and platelet factor 3 (PF-3) availability in sickle cell disease.** p.323-324.

## Clinical Laboratory Science. 1995; Volume 8, No: 5.

Bedford SE. **Patient focused care: good in theory, bumpy in practice.** p.263-268.

Larsen JT. **Hepatitis C.** p.273-275.

Brock DA, Hundley JM. **Reporting differential white blood cell results in absolute numbers.** p.276.

Westgard JO. **A method evaluation decision chart (MEDx Chart) for judging method performance.** p.277-283.

Smith C, Furman A. **Evaluation of between-sample carryover on an automated coagulation instrument: recommendations for quality control procedures.** p.284-287.

Handley CS, Hudson J, Goodwin C, Lux M. **Prediction of minority student success on national certification examinations in the clinical laboratory science program at the University of Southern Missisipi.** p.288-291.

Starr C, Ramsey MK, Roberts GH. **Hairy cell leukemia: a case history.** p.292-297.

Taylor RA, O'Donnell H. **Case studies: from flu-like syndrome to amputation.** p.298-301.

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

| | |
|---|---|
| **Title** | Jim Le Grice Award |
| **Nature** | An annual award in memory of Jim Le Grice to sponsor a full time student, qualified staff technologist or qualified technical assistant to the Annual Scientific Meeting. |
| **Eligibility** | 1. Any student who is a member of the NZIMLS and in full time tertiary education.<br>2. Any qualified technical assistant or staff technologist with less than 5 years total work experience. (Work experience to be verified on application form). |
| **Conditions** | No conditions apply to student applications. However, qualified staff will present a paper or poster at the Annual Scientific Meeting. |
| **Applications** | Applications should be completed on the official application form published in the NZIMLS Journal and available from the Executive Officer, NZIMLS, PO Box 3270, Christchurch. |
| **Selection** | Will be made by ballot by the convenor of the NZIMLS Awards Committee. |
| **Amount** | The prize awarded will vary yearly and will consist of travel to and from conference, accommodation and registration with the successful applicant making all arrangements. |
| **Term of Award** | Initially offered in 1995 and subsequent 9 years with a review at that time. |

# JIM LE GRICE MEMORIAL AWARD

## APPLICATION FORM

**Date** (Month/Year): .....

**Name:** .....

**Contact Address:** .....

.....

.....

.....

Full time students, please complete Section A.

QTA, Staff Technologists, please complete Sections B, C, D.

A. Which institution are you attending as a full time student? .....

Signature: .....

B. What year did you gain your qualification? .....

Signature of applicant: .....

C. I declare that the applicant has total New Zealand work experience of less than 5 years since qualification.

Signature: .....
(To be verified by Charge Technologist)

D. Please provide a brief outline (abstract) of the paper or poster you will be presenting at the Annual Scientific Meeting.

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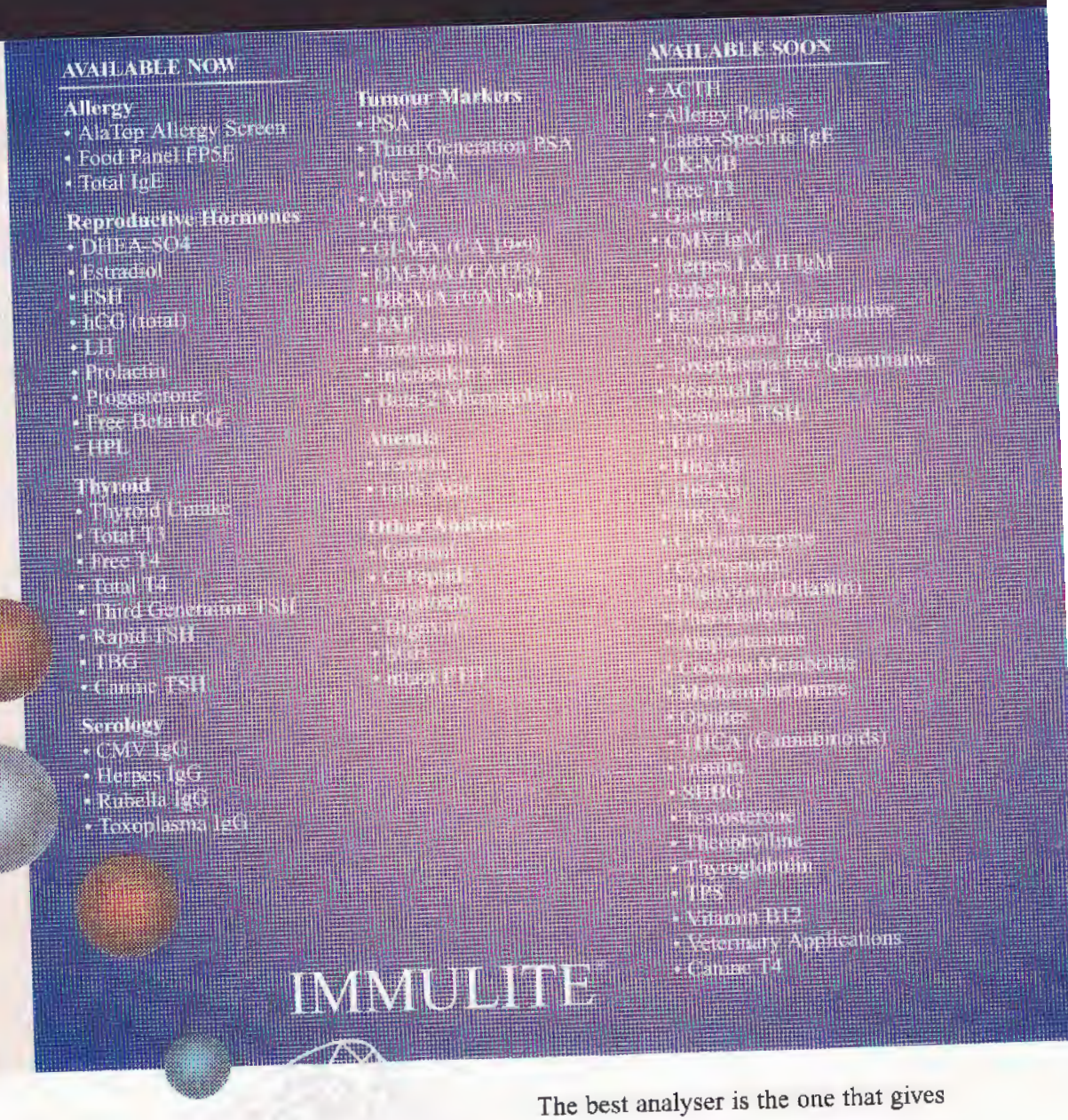
Send your completed application to the NZIMLS Executive Officer, PO Box 3270, Christchurch to be received no later than 5pm, 31st March 1996.

# The menu designed to feed you new business.

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NEW ZEALAND INSTITUTE OF

# MEDICAL LABORATORY SCIENCE

## *EXAMINATION LIFTOUT*

**Specialist Certificate Regulations**
**Specialist Certificate Examination Application Form**
**Q.T.A. Regulations**
**Q.T.A. Examination Application Form**
**N.Z.I.M.L.S. Membership Application Form**

The New Zealand Institute of Medical Laboratory Science offers to medical laboratory assistants the qualification known as the Certificate of Qualified Technical Assistant (QTA) and to medical laboratory technologists the qualification known as the Specialist Certificate.

The Examinations Committee is based in Christchurch and all correspondence should be addressed to:—

**Executive Officer**
**N.Z.I.M.L.S.**
**P.O. Box 3270**
**Christchurch**
**Phone/Fax (03) 313-4761**

# NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE
# SPECIALIST CERTIFICATE EXAMINATION

## EXAMINATION SUBJECTS

The examination is offered in:

Clinical Biochemistry
Haematology
Histology
Cytogenetics
Virology
Clinical Microbiology
Transfusion Science
Medical Cytology
Immunology

## PREREQUISITES

1. Candidates for the examination must be registered as a Medical Laboratory Technologist by the New Zealand Medical Laboratory Technologists Board and have completed one years practical experience in the examination subject in a laboratory in New Zealand.

2. **Candidates must be financial members of the NZIMLS at the time of sitting the examination and be a financial member or have submitted a valid membership application form at the time of applying to sit the examination.**

## SYLLABUS

Copies of the syllabus are available from the Executive Officer of the NZIMLS.

## EXAMINATIONS

1. The examinations will be held annually in New Zealand during November.

2. Candidates must complete the application form and forward this, complete with examination fees, to the Executive Officer of the Institute before the closing date. **No late applications will be accepted.**

3. Candidates must be financial members of the NZIMLS at the time of sitting the examination.

4. The examination consists of two written papers each of three hours duration.

5. To pass the examination candidates must obtain an overall mark of 50%.

6. The results of the examinations will be announced by the New Zealand Institute of Medical Laboratory Science. Successful candidates will be awarded the NZIMLS Specialist Certificate in the appropriate discipline.

7. The candidate's script will be returned upon receipt of a written request by the candidate. No copy will be retained and no correspondence relating to the marking of the script will be entered into.

8. Candidates who have disabilities or injuries at the time of the examination may request the Examinations Committee of the NZIMLS to allow them a scribe. Enquiries should be made to the Executive Officer of the NZIMLS.

# NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE

Application to sit Specialist Certification Examination
20th and 21st November 1996

## SECTION A — TO BE COMPLETED BY THE CANDIDATE

Name: Mr / Mrs / Miss ..... (Surname) (First Names)

Laboratory .....

Laboratory Address .....

.....

Examination Subject .....

I certify that I am registered in New Zealand as a medical laboratory technologist and have completed a years practical experience in New Zealand in the examination subject post registration

Signed .....

EXAMINATION FEE: $400 (GST Inclusive)

**The full examination fee must be paid with the application.**

## SECTION B — TO BE COMPLETED BY THE PRINCIPAL OR CHARGE TECHNOLOGIST

"I certify that the above candidate will meet the requirements of the Specialist Certificate Examination"

Signed .....

Designation .....

Please state the name and address of the person responsible for receiving the papers and supervising the Examination in your laboratory or centre.

Name .....

Address .....

.....

.....

## APPLICATIONS CLOSE FRIDAY 24 MAY, 1996

**Please forward application forms accompanied by fees to: Executive Officer, NZIMLS, PO Box 3270, Christchurch.**

## NO LATE APPLICATIONS WILL BE ACCEPTED

***Special Note to Applicants***

*If not already members of the NZIMLS applicants to sit this examination **must** submit a valid membership application along with this examination application.*

# NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE
# CERTIFICATE OF QUALIFIED TECHNICAL ASSISTANT

## EXAMINATION SUBJECTS

Clinical Biochemistry
Haematology
Histological Technique
Clinical Cytology
Immunology
Transfusion Science
Transfusion Science - Blood Products
Clinical Microbiology
Clinical Mortuary Hygiene and Technique

## PREREQUISITES

1. Candidates for the examination must be employed as medical laboratory assistants in an approved laboratory in New Zealand and have worked continuously in the subject for 18 months prior to the examination or accumulated not less than 18 months practical experience in the examination subject.
   Upon completion of two years continuous or accumulated practical experience in the subject, the certificate of Qualified Technical Assistant will be awarded.

2. Candidates who have passed a Qualified Technical Assistant examination and who wish to sit a second Qualified Technical Assistant examination must fulfil the above criteria but need only to have worked continuously or accumulated experience of one year in the examination subject.

3. **Candidates must be financial members of the NZIMLS at the time of sitting the examination and be a financial member or have submitted a valid membership application form at the time of applying to sit the examination.**

## SYLLABUS

Copies of the syllabus are available from the Executive Officer of the NZIMLS, P O Box 3270, Christchurch.

## EXAMINATIONS

1. The examinations will be held annually in New Zealand in November.

2. Candidates must complete the application form and forward this, complete with examination fees, to the Executive Officer of the Institute before the closing date. **No late applications will be accepted.**

3. Candidates must be financial members of the NZIMLS at the time of sitting the examination.

4. The examination consists of one written paper of three hours duration. Candidates for the Clinical Cytology examination are also required to complete a practical examination.

5. To pass the examination candidates must obtain an overall mark of 50%. Clinical Cytology candidates must pass the practical and theory examinations.

6. The results of the examinations will be announced by the New Zealand Institute of Medical Laboratory Science. Successful candidates will be awarded the NZIMLS QTA Certificate in the appropriate discipline.

7. The candidate's script will be returned upon receipt of a written request by the candidate. No copy will be retained and no correspondence relating to the marking of the script will be entered into.

8. Candidates who have disabilities or injuries at the time of the examination may request the Examinations Committee of the NZIMLS to allow them a scribe. Details may be obtained from the Executive Officer of the NZIMLS.

# NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE

Application to sit the Examination of Qualified Technical Assistant
6th November 1996

## SECTION 1 — TO BE COMPLETED BY THE CANDIDATE

Name: Mr / Mrs / Miss ..... (Surname) (First Names)

Laboratory .....

Laboratory Address .....

.....

Subject (Haematology, Microbiology, etc) .....

EXAMINATION FEE: $80 (GST Inclusive)

**The full examination fee must be paid with the application.**

## SECTION B — TO BE COMPLETED BY THE PATHOLOGIST OR CHARGE TECHNOLOGIST

Date candidate commenced work in examination subject .....

"I certify that the above candidate meets the requirements of the Q.T.A. Regulations"

Signed .....

Designation .....

Please state the name and address of the person responsible for receiving the papers and supervising the Examination in your laboratory or centre.

Name .....

Address .....

.....

.....

**Office use only**

## APPLICATIONS CLOSE FRIDAY 24 MAY, 1996

**Please forward application forms accompanied by fees to: Executive Officer, NZIMLS, PO Box 3270, Christchurch.**

## NO LATE APPLICATIONS WILL BE ACCEPTED

***Special Note to Applicants***

*If not already members of the NZIMLS applicants to sit this examination **must** submit a valid membership application along with this examination application.*

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

**Application for Membership (For use with Examinations only).**

(Please Print Clearly and Tick Appropriate Box)

I, _____

SURNAME _____

MR, MRS, MS, MISS _____

INITIAL(S) _____

FIRST NAME(S) _____

OF,

WORK ADDRESS _____

_____

Hereby apply for membership of the New Zealand Institute of Medical Laboratory Science in the category of:

☐ Member ☐ Associate

AND Certify That I Have:

☐ Not Previously Been a Member ☐ Previously Been a Member (State Category: ___)

☐ Resigned (Date: ) _____ ☐ Did Not Resign

I am employed as: _____

in the Speciality Department of: _____

Highest Professional Qualification: _____ Year Obtained: _____

Nominated By: _____

(Current Financial Member N.Z.I.M.L.S.)

Please forward payment with Application for Membership, to the Executive Officer, NZIMLS, P.O. Box 3270, Christchurch.

Current Membership Subscriptions are:

MEMBER $98.40 (GST incl.) ASSOCIATE $43.80 (GST incl.)

Member — any person who is registered by the Medical Laboratory Technologists Board

Associate — any person engaged in Medical Laboratory Science who is not eligible for any other class of membership.

***The appropriate membership subscription must accompany this application for this to be a valid application.***

# Publications by NZIMLS Members

**From the Dept. of Clinical Chemistry and Transfusion Medicine, University of Goteborg, Sweden; Dept. of Transfusion Medicine, Auckland Regional Blood Centre; and INSERM U 178, Villejuif, France.**

Henry S, Oriol R, Samuellson B. Lewis histo-blood group system and associated secretory phenotypes. *Vox Sang* 1995; 69: 166-82.

**From the Dept. of Clinical Chemistry and Transfusion Medicine, University of Goteborg, Sweden; INSERM U 178, Villejuif, France; and the Howard Hughes Medical Centre, Ann Arbor, USA.**

Henry S, Mollicone R, Lowe JB, Samuelsson B, Larson G. A second nonsecretor allele of the blood group(1,2) fucosyltransferase gene (FUT2). *Vox Sang* 1996; 70:21-5.

**From the Dept. of Clinical Chemistry and Transfusion Medicine, and Dept. of Medical Biochemistry, Goteborg University, Sweden.**

Henry SM, Jovall PA, Ghardashkhani S, Gustavvson ML, Samuelsson BE. Structural and immunochemical identification of $Le^b$ glycolipids in the plasma of a group O Le (a-b-) secretor. *Clycoconj J* 1995;12:309-17.

**From the Dept. of Transfusion Medicine, Auckland Regional Blood Centre.**

Henry S, Woodfield G. Frequencies of the Jk(a-b-) phenotype in Polynesian ethnic groups. *Transfusion* 1995;35 (3):277.

**From the Epidemiology Group and National Reference Laboratory, ESR, Health Communicable Disease Centre, Porirua.**

McNicholas AM, Bates M, Kiddle E, Wright J. Is New Zealand's recent increase in campylobacteriosis due to changes in laboratory procedures? A survey of 69 medical laboratories. *NZ Med J* 1995;108:459-61.

**From the Wellington Asthma Research Group, Wellington School of Medicine.**

Ayson M, Rajasingham S, Wong C, Siebers R, Crane J, Burgess C. A pilot study to investigate the pulmonary effects of digoxin in patients with asthma. *NZ Med J* 1996;109:36-7.

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

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|---|---|
| **Title** | **Journal 50th Anniversary Award** |
| **Donor** | NZIMLS |
| **Nature** | This award is for the best review article published in the Journal from the November 1995 issue to and inclusive of the August 1996 issue. The review article may be on any topic related to medical laboratory science. |
| **Eligibility** | All Fellows, Members and Associate Members of the NZIMLS are eligible. Formal applications are not required. |
| **Judging** | All review articles submitted and accepted for publication in the Journal will be judged by the Editor, the President of the NZIMLS, and the convenor of the Awards Committee. The decision of the judging panel will be final. |
| **Amount** | The award will be for the sum of $500 and will be presented to the winner at the 50th Year NZIMLS Conference in Auckland in 1996. |

# New Products and Services

## New Swab For Pathogen Sample Collection

The "FLEXI SWAB" from Biolab Scientific offers major advances in ease of collection over current systems.

Toxicity and recovery trials have proven the benefit of 'FLEXI-SWAB" for the collection of samples suspected to contain Listeria and Salmonella species.

The swab is designed as a closed system and the necessary transport diluent is included in the swab tube.

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## Advertisers in this Issue



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

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| **Title** | **Med Bio Journal Award.** |
| **Donor** | Med Bio Enterprises Ltd.<br>P.O. Box 11-016 Sockburn<br>Christchurch |
| **Nature** | This award is intended to encourage and foster the submission of quality scientific or management papers to the New Zealand Journal of Medical Laboratory Science (NZJMLS). |
| **Eligibility** | All fellows, associate members and members of the NZIMLS are eligible.<br>Applications will not be required and all papers published in each edition of the NZJMLS will be considered for the award. |
| **Frequency** | The award will be made following the publication of each edition of the NZJMLS. |
| **Amount** | The award will be for an annual sum of $600.00 which will be divided evenly between the number of journals published in each 12 month period. |
| **Judging** | Responsibility for selecting the most suitable paper in each journal will rest with the convenor of the awards committee. Where necessary the convenor will consult with the editor of the N.Z.J.M.L.S. The decision of the convenor will be final. |
| **Period of Award** | The Med Bio Journal Award is offered for an initial period of one year and will be reviewed annually thereafter. |
| **Selection** | Factors which will be taken into account when selecting the best paper in each journal will include:<br>(a) Appropriateness of content of paper.<br>(b) Layout and presentation.<br>(c) Evidence of original work or ideas.<br>(d) Previous publication experience of the author(s). Quality papers by first time authors are encouraged.<br>(e) The paper which makes the most valuable contribution to a branch of medial laboratory science. |

Winners of the Med Bio Journal Award for the December 1995 issue were Stephen Henry and Paul Clark from the Auckland Regional Blood Centre for their article "High titre IgG ABO antibodies in group O Polynesian and European blood donors. Incidence, variability, racial and gender differences".

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## Subject Index

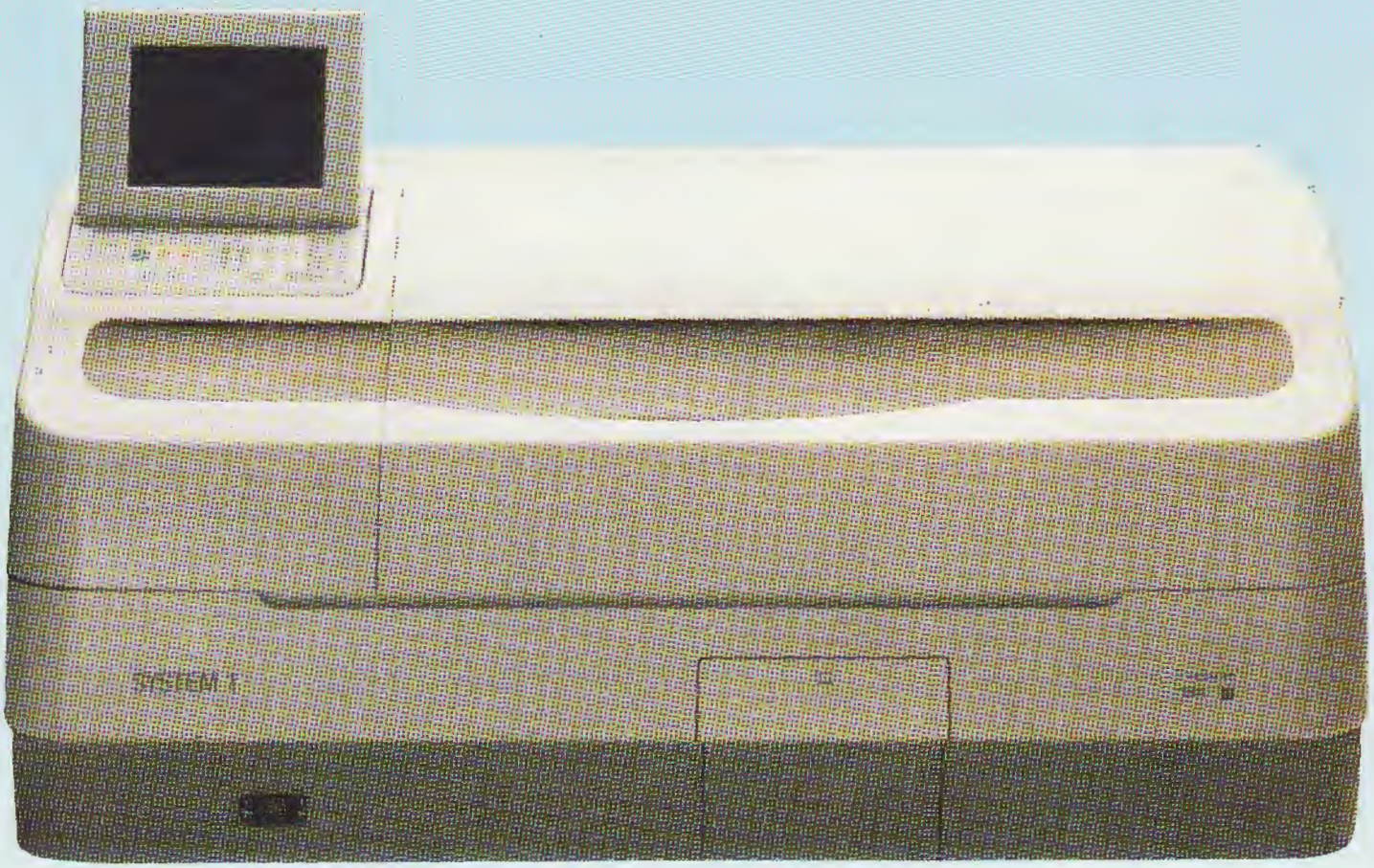


## Author Index

Laboratory Systems from Boehringer Mannheim

# Elecsys

## Immunology for tomorrow



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