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NEW ZEALAND JOURNAL OF MEDICAL LABORATORY SCIENCE

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All editorial matter, including submitted papers, press releases and books for review should be sent to the Editor: Rob Siebers, Department of Medicine, Wellington School of Medicine, PO Box 7343 Wellington South. Phone: (04) 385 5999 (Ext: 6838). Fax: (04) 389 5725, E-mail: rob@wnmeds.ac.nz.

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Information for Contributors:

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

Medical laboratory science education. Then, now and in the future.

Jim Clark. Programme Leader

Bachelor of Medical Laboratory Science, Auckland Institute of Technology.

50 years is a memorable milestone for both individuals and professional bodies. While for both, reflection on the past might be considered an indulgence, the time spent is valued if it can help in giving lessons for the future. There may well be plenty of stories of past times at the 50th Jubilee Celebrations of the NZIMLS, when people will tell and retell of famous and infamous laboratory escapades. This is a perfectly acceptable human trait, but one which quickly divides the listeners into two groups:

"When I started in the lab, we calculated the MCHC with a slide rule"

"When I was first rostered in the wash-up room we had to scrape agar out of glass petri dishes, wash and rinse them, restack and sterilise."

". . . after ward collects, I had to wash out the glass syringes, and sharpen my needles!

Much younger members of the profession have by now a firmly fixed smile on their face, and are thinking, "if he mentions once more that he remembers when the milkman used a horse and cart to make his deliveries, I'll leave." And so the stories are told to willing listeners, or are tolerated by less willing ones.

Professional bodies who are of course the sum of the individual members, have a more serious view of reminiscing. It is not just appropriate but essential that a history is recorded for posterity. However, unlike many individuals, a professional body does not have a finite time to accomplish things. At fifty years of age would a professional body worry about whether its retirement plan is adequate?

The professional body should always be looking to the future; to be doing some crystal ball gazing; to be listening to the needs of all members; to offer wise counsel; to advise. It must be vigorous and full of energy, as if it were forever young but with the accumulated wisdom of a dozen 70-year-olds with not a hint of Alzheimer's. Unlike the Bard's advice that "crabbed age and youth cannot live together", organisations such as our professional body will need to have mixed membership to keep it alive and well.

So here we are at this milestone, and at many events at the conference at August, there will be people who wish to remember how things were better in their day. One area that has changed a great deal is the education of medical laboratory scientists. Like many other professions, medical laboratory science has had to accept the altered patterns of training that have resulted from a change in Government policy. Further back, of course almost the entire education of laboratory workers rested on the goodwill of those who offered to teach the apprentice. There are those who recall sitting in the sun on the laboratory doorstep after work listening to Doug Whillans or Hugh Olive.

At the end of the restructuring of the registerable qualification, all New Zealanders can feel pleased that three tertiary institutions offer a degree in Medical Laboratory Science. Each institution may have a different emphasis, but the profession is well served by having a clear and easily understood qualification. We may

be pleased that this has been achieved, but it must be asked, how the workplace likes it? It may well be too soon to know, but it is important that we keep re-examining what is happening. Where are we heading with new qualifications? If we now have a degree as the minimum requirement to gain registration for our highly skilled and diverse area of science, we need to check on the avenues that open in terms of post-graduate diplomas, Masters etc. It is also time to consider the entry point for other members of our work force. The Council of the Institute have been investigating the setting up of an advisory group to look at putting standards and qualifications relating to medical laboratory science on the National Qualifications Framework. The area to be investigated is the entry to the Framework of the Qualified Technical Assistant qualification. The issues that surround this need to be fully debated. Who is to pay and for what portions are questions that immediately spring to mind. How they will link with degree qualifications should be of concern to present Qualified Technical Assistants who understand only too well what it means to have a cul de sac qualification that does not easily link to gaining a qualification that will permit full registration.

Countries with similar types of educational institutions to New Zealand have a variety of schemes, and are also looking at new qualifications. For example, Leeds College of Health are investigating a new structure for medical laboratory assistants and Queensland University of Technology has an Associate Degree in Applied Science (Medical Laboratory Techniques). All members of the profession have to have input into new structures that are suggested. They must link easily with higher qualifications and follow the philosophy of "seamless education", with multiple entry and exit points. To meet the extra demands that are being made in the presently changing world, all possibilities that management and the professional body see as relevant to accomplish the varied and complex tasks set before us, must be considered. It is important that all members of the institute have input from their various perspectives to help decide the direction of new changes. Let us hope that our exciting world of science continues to hold our interest, and that we see as many improvements in the way that we perform our work, and are trained to do so, as we have seen in the last 50 years.

Leading Article

Towards 2001: Teaching or Learning?

*Dr Chris Lovell-Smith, MBChB, PhD, FRCPA, MAACB, DipHAD; Course Director;
BMLSc, and Associate Professor Peter Schwartz, BSc MD FAIC.
Pathology Department, University of Otago.*

NZ J Med Lab Science 1996 50(3): 88-89

Change is the only constant that many of us can recognise in the current New Zealand health environment, and teaching medical laboratory science is under the same sort of pressures as other activities within the health and education systems. Nationally, we now have three degree courses, replacing a long-standing apprenticeship system, which relied on a lot of voluntary teaching by laboratory staff to make it work. The new courses are taught, by and large, by full-time professional teachers, although often with considerable back-up from scientists working in diagnostic laboratories. Is this an improvement, or merely a change? In a technologically advanced discipline, with a short half-life for current knowledge, how do we best equip students for their future working lives?

Learning is a complex process, with many facets that can be explored. Currently, there is talk within universities about the desirability of fostering a "deep" approach to learning. While this sounds a rather fuzzy concept, there is general agreement that students using this approach will focus on overall messages from learning and other life experiences, relate and integrate the ideas they receive, and thus construct their own meaning. It requires students to be intrinsically motivated, and to have the ability to integrate new ideas with old. It therefore includes such skills as analysis, summarising, problem-solving, researching, and working collaboratively, as well as fact-acquisition. It may be contrasted with "surface" learning, which occurs when students are extrinsically motivated (i.e. concerned about their grades, rather than acquiring and understanding knowledge), and involves the rote learning of lists of facts or the memorisation of theories without analysis.

Intuitively, we can probably all agree that medical laboratory scientists should engage in deep learning during their studies towards a degree, and employers have indicated that some of the attributes they seek in graduates are consistent with such an approach. However, there are some factors which inhibit the students moving towards deep learning. These include heavy workloads, which tend to push students towards learning the bare essentials for passing grade, without a commitment to achieving understanding, and inappropriate assessment techniques¹.

With these thoughts in mind we have attempted to develop courses which promote deep learning. Although there are still areas we want to work on further, our Clinical Biochemistry course for the University of Otago BMLSc is an example that we believe goes some way towards meeting the theoretical objectives of a modern degree course. It is probably best described as "case-based", self-directed learning". Clinical and laboratory situations, many drawn from real life, are used to raise the students' awareness, act as an early focus for discussion, and provide the framework for learning about a defined set of topics. Written objectives, suggested readings or summaries, and self-assessment quizzes help to further define the

parameters of study. The learning takes place in two distinct settings: solo (usually), in free time, as a student works through the relevant written materials, and in small groups, facilitated by the teacher. Each topic is structured so that the more practical aspects are covered earlier, tying in with a laboratory practical session, and the pathophysiology and clinically relevant material follow later².

The teacher, in this context, loses the lecturing role and has to develop other skills. A lot of collaborative work is required initially to set the boundaries for study and provide clear, achievable objectives. Facilitating the group process becomes of major importance, particularly with students who are not used to working together. In addition, the methods of assessment become critically important, since they provide a powerful cue to a student's choice of learning methods. There is no point in fostering understanding and analytical skills if traditional 3-hour written examinations with questions essentially saying "Write all you know about . . ." are still used. We favour multiple assessments, including short theory tests, again based on problems, a practical test, and a subjective assessment of each student's contribution to the group work at each tutorial. Our approach is generally well regarded by our students, who enjoy the practical orientation of the problems, the informal atmosphere of the tutorials, and the close working relationships that they develop with each other and with their tutor. Some students find the intensity of the course hard to handle, and occasionally personality clashes within groups need to be sorted out. The students' final grades are comparable with those obtained by medical students taking similar problem-based assessments (Table 1), and in 1994, for example, over half the class recorded their top mark for the year in our paper.

There is, however, a tension appearing between what we as educationalists might view as desirable, and what employers want. In a recent survey³, employers ranked the demonstration of high level competencies in laboratory practice very highly (mean score 4.50 out of 5) and did not perceive our graduates as demonstrating these (mean score 2.75 out of 5). We see this as one of the challenges for the future. It is our belief that our students are well-equipped to deal with new ideas and changes and have abilities to research options and make choices, and in this context we would expect them to be able to become dexterous in the use of analytical techniques with minimum intervention. However, we will have to revisit what we believe is ideal and try to match it against what is achievable and desired by others.

Conclusion

In providing teaching to students in the BMLSc Course, we have attempted to utilise principles and practices which will foster deep learning approaches by the students. We believe that these can be supported so that suitable learning habits are formed for life. At the

same time, we recognise deficiencies in what is being achieved in practical work and we must try to correct these without using a training process which develops a lot of superficial skills that rapidly become outdated.

Table 1:

Final Examination Results (Unadjusted) for Third Year Courses in Clinical Biochemistry for BMLSc and Medical Students.

Year	BMLSc			Medical		
	n	Mean %	SD	n	Mean %	SD
1993	26	71.2	(8.7)	172	69.1	(9.5)
1994	30	71.1	(9.7)	188	71.8	(10.7)
1995	28	75.4	(9.9)	191	66.7	(10.6)

References

1. Andrews J, Garrison DR, Magnusson K. The Teaching and Learning Interaction in Higher Education: a study of excellent professors and their students. *Teaching in Higher Education* 1996; 1:81-103.
2. Schwartz PL, Lovell-Smith CJ & Loten EG (1995) Small-Group, Case-Based Clinical Biochemistry Course for a Medical Laboratory Science Curriculum. *Clin Chem* 1995; 41: 1193-5.
3. Andrews RJ. A Survey of Employer Perceptions of Graduates of the University of Otago: 1995 The University of Otago, Dunedin, NZ.



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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). All fellows, associate members and members of the NZIMLS are eligible.

Eligibility

Applications will not be required and all papers published in each edition of the NZJMLS will be considered for the award.

Frequency Amount

The award will be made following the publication of each edition of the NZJMLS. 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 NZJMLS. 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:

- (a) Appropriateness of content of paper.
- (b) Layout and presentation.
- (c) Evidence of original work or ideas.
- (d) Previous publication experience of the author(s). Quality papers by first time authors are encouraged.
- (e) The paper which makes the most valuable contribution to a branch of medical laboratory science.

Winner of the Med Bio Journal Award for the May 1996 issue was Ailsa Bunker from the Haematology Department, Middlemore Hospital for her article "Cyclic neutropenia – A case history". *NZ J Med Lab Science* 1996; 50 (2): 54-56.

News from Massey University. Master of Medical Laboratory Science (MMLS).

Plans to offer the MMLS in 1997 have been deferred for at least a year owing to the concerns about the funding for this programme. The MMLS had been proposed as an extramural programme. This method of delivery will allow students to continue to work in laboratories, thus reducing the considerable expense involved in full time University study. Unfortunately the Ministry of Education funding for courses in extramural mode is about one quarter of that for internal Masters programmes. This has forced a rethink of the financial viability of this programme. Massey University is currently conducting some market research to establish the numbers likely to take an extramural MMLS, if it were offered, and the amount students would be prepared to pay for it.

Anyone interested in the MMLS who has not already been contacted is invited to write to/phone or fax:

Dr Mary Nulsen
Director of Medical Laboratory Science
Department of Microbiology and Genetics
Massey University
PALMERSTON NORTH
Phone 06 350 4021
Fax 06 350 5687

The MMLS Proposal

(Note: This has not yet been approved by CUAP and may have to be altered.)

The MMLS will be available to:

- i) all BMLS/BMLSc graduates who have worked for at least one year in Medical Laboratory Science or a related area;
- ii) those who have completed the Diploma in Medical Laboratory Science (DipMLS); and
- iii) those who have qualified for any other degree of a New Zealand University, and qualify to be a registered Medical Laboratory Scientist.

The MMLS will consist of papers worth 100 points and a Research Project (62.589) worth 50 points. The papers must include 62.581 DNA Technology (25 points) and 62.582 Research Methods and Communication (25 points) and two of 26.413 Health Systems Management (25 points), 55.402 Advanced Health Care Law (25 points), and 43.527 Quality Management for Medical Laboratories (25 points).

The research project will involve the investigation of some aspect of one of Biochemistry, Microbiology, Virology, Haematology, Transfusion Science, Immunology, Histological Technique or Cytology. The research project may be undertaken in a medical laboratory. The completed project will be presented in thesis form.

If the MMLS were to be done full time, it would take three semesters to complete i.e. approximately 18 months. However we do not plan to offer all the papers every year. It will take about five years to complete part time.

Quality Management for Medical Laboratories: Your Views

Mr Malcolm Rees wishes to canvass the views of medical scientists on the course content of this paper (43.527) which will be part of the proposed MMLS.

'Quality Management for Medical Laboratories' will be organised and run from the Department of Production Technology. The staff involved have expertise in the theory and general principles of quality management but lack an intimate knowledge of medical laboratories. Mr Rees has been asked to provide a link between laboratory personnel and the Production Technology staff. He would welcome comments on the subject matter being considered.

The current proposal is that the paper will be divided into seven sections as follows:

1. Principles of Quality Management

Definition of quality

The spiral of quality

The history of quality management movement (Juran, Deming, QCC, TQC)

Quality relates to products and services

Cost of quality

Quality relates to health service

2. The Management Systems Approach

ISO 9000

Malcolm Baldrige National Quality Award

New Zealand Quality Award

Developing a Quality Management System

3. Measurement and Management of Service Quality

The service versus product

What is service quality

Service excellence (Total Quality Service)

Service Quality Measurement (SERVQUAL), Customer Satisfaction, Successful Customer Survey)

Quality audits

Benchmarking

Service quality related to health care

4. Total Quality and Continuous Improvement

Total quality philosophies

Continuous Improvement (Kaizen, the concept)

Quality improvement tools (QC tools)

The foundation of improvement (Commitment, culture)

Approaches to improvement (Problem solving, QCC, QIT)

TQM and human factors (Leadership, training, empowerment, supplier involvement, etc)

Why TQM fails

5. Principles of Good Laboratory Practice

Introduction to Good Laboratory Practice (GLP)

GLP legislation

The Testing Laboratory Registration Act, 1972, No 36

ISO 25

QA in good clinical research practice

6. Validity and Verification of Measurement: Calibration of Instrumentation and Related Issues

7. Laboratory Safety and Related Issues

Conclusion

It is intended that this paper will be a critical appraisal of the issues mentioned with the students researching the current literature, and articles provided, in an effort to develop their own opinions. It is likely that some sections will be dealt with only briefly while others will be covered in depth.

Your comments on the content are welcome and should be

sent to:

Malcolm Reeves, Medical Scientist,
2nd Field Hospital,
Linton Military Camp,
PALMERSTON NORTH
Phone 06 351 9391
Fax 06 351 9567.

Certificate of Proficiency (COP)

From 1997, students with a BMLS or BMLSc degree will be able to enrol in the 400-level papers of the BMLS degree at Massey University for a COP. With the phasing out of the NZMLTB 'O' level examinations, this option may be attractive to registered Medical Laboratory Scientists who wish to broaden their skills beyond the two disciplines in which they specialised in their final year of University study. Potential students will need to be employed in a suitable laboratory and will be required to complete the full course of study which includes a log book, fortnightly reports, assignments and a final written exam.

Students who do not have a BMLS/BMLSc will have to complete relevant sections of the 300-level papers as internal students first. This will involve periods of tuition at the Palmerston North campus ranging from 4 to 12 weeks depending on the subject. Having passed the 300-level component, candidates could then enrol in the 400-level papers on the same basis as the BMLS/BMLSc students.

Anyone interested in pursuing this option should contact:

Dr Mary Nulsen
Director of Medical Laboratory Science
Department of Microbiology and Genetics
Massey University
PALMERSTON NORTH
Phone 06 350 4021
Fax 06 350 5687

Postgraduate Programmes in Medical Laboratory Science The MMLS Proposal

In 1996, the Division of Health Sciences will introduce two postgraduate programmes in medical laboratory science.

These are:

Postgraduate Diploma in Medical Laboratory Science (DipMLSc)

This course is offered as one year full-time or two years part-time study and consists of 3 papers, one of which is a research project. For part-time study, the core paper (from MELS 501-509) would be taken in Year 1, with the Research Methods paper and the Research Project being completed in Year 2. It is anticipated that most candidates would be in employment and would undertake the course part-time. The DipMLSc may be undertaken in an approved pathology laboratory under the supervision of University of Otago academic staff (The availability of this course for 1996 is dependent on confirmation of funding by the Clinical Training Agency).

Master of Medical Laboratory Science (MMLSc)

This course consists of one year full-time, supervised study and research in an approved topic, or its part-time equivalent. The results

of the research are to be presented as a thesis. Completion of the DipMLSc or equivalent qualification is a prerequisite for entry to the MMLSc programme. The MMLSc course will be undertaken in any one of the four schools of the Faculty of Medicine (Christchurch, Dunedin or Wellington Schools of Medicine, or the Dunedin-based School of Medical Sciences) under the supervision of academic staff.

Eligibility

Postgraduate Diploma in Medical Laboratory Science

Every candidate shall

(i) have been admitted to the degree of Bachelor of Medical Laboratory Science, or have been admitted to an alternative degree or diploma which is acceptable to the Board of Studies for Medical Laboratory Science and is recognised for purposes of registration by the Medical Laboratory Technologists Board, or be admitted ad eundem staturum as entitled to proceed to the diploma.

(ii) for non-degree candidates, work experience will be taken into consideration in approving candidacy.

Master of Medical Laboratory Science

Every candidate shall

(i) have been admitted to the Postgraduate Diploma in Medical Laboratory Science, or an equivalent qualification acceptable to the Board of Studies of Medical Laboratory Science, or have been admitted ad eundem staturum as entitled to proceed to the degree.

Schedule of Papers

Postgraduate Diploma of Medical Laboratory Science

HASC 403 Research methods 10 points

MELS 501-509* one option of the following: 20 points

MELS 501 Clinical Biochemistry

MELS 502 Clinical Microbiology

MELS 503 Clinical Virology

MELS 504 Cytogenetics

MELS 505 Cytopathology

MELS 506 Haematology

MELS 507 Histopathology

MELS 508 Molecular Pathology

MELS 509 Transfusion Medicine

* Not all options may be available in any year

MELS 580 Research Project 10 points

Master of Medical Laboratory Science

Thesis 40 points

The University of Otago

The University of Otago was founded in 1869 and has grown steadily to its present roll of more than 15,000 students. There are four academic divisions of which the Division of Health Sciences is the largest, in terms of staff, research and resources. In 1996, it will comprise seven Schools, the four Schools of the Faculty of Medicine, (Dunedin, Christchurch and Wellington Schools of Medicine and the School of Medical Sciences) and the Schools of Dentistry, Pharmacy and Physiotherapy.

Medical Laboratory Science courses for undergraduate and postgraduate study are administered by the Division of Health Science through the Board of Studies for Medical Laboratory Science. Facilities are provided through the four Schools of the Faculty of Medicine.

The Academic Year

The year at Otago is divided into two semesters. The first semester begins at about 20 February and ends about 10 June, whereas the

second semester runs from about 11 July until 14 October.

Facilities

Facilities for study towards the DipMLS_c may be provided by any approved pathology laboratory, operated either by a Crown Health Enterprise, or privately owned, as the emphasis of the DipMLS_c is vocationally oriented to enable candidates to further their professional development by pursuing advanced speciality study in a discipline of the medical laboratory sciences. The DipMLS_c also serves as a prerequisite for the MMLS_c, allowing selected medical laboratory scientists who do not hold a university degree as well as BMLS_c graduates, to proceed to the masterate after completing the diploma. The Research Project (MELS 580) may also be undertaken in an academic department within the Faculty of Medicine of the University of Otago.

For the MMLS_c, an approved programme of study and research will be undertaken in an academic department within the Faculty of Medicine of the University of Otago.

For Further Information

Postgraduate information is available from:

Medical Laboratory Science Office
C/- Department of Pathology
Dunedin School of Medicine
University of Otago
PO Box 913, Dunedin
New Zealand
Fax 64-3-479 7136
Phone 64-3-479 7151



Colin Watts Memorial Prize

In December 1995, Louise Stratford was awarded the Colin Watts Prize which is awarded to the best performed student in all papers taken in the 2nd, 3rd and 4th years of the BMLS_c degree.

Louise is currently working in the Microbiology Laboratory at Hutt Valley Health and believes the BMLS_c course thoroughly prepared her for employment in the laboratory environment.

James Le Grice Memorial Prize

I was grateful to receive this prize for my efforts in Biochemistry at the end of the four year BMLS_c degree. It was one of the highlights of an action packed graduation in December 1995.

I had chosen Biochemistry along with Cytogenetics for my disciplines to focus on in the practical based fourth year of the course, after gaining an interest in both of these fields from the first three years.

I am now working in the Dunedin Hospital Cytomolecular Genetics Laboratory working towards my registration. At some stage in the future I hope to travel to the UK and possibly work in both Biochemistry and Cytogenetic laboratories over there.

Thank you to the family of James Le Grice for this generous prize. Jim's contribution to the Medical Laboratory Science degree is well remembered.

Stephanie Easthope

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Book Reviews

Interpretation of Diagnostic Tests Author: Jacques Wallach 6th edition. Little Brown & Company, Boston. 1996

Medical knowledge and technology like – “Old Man River – just keeps rolling along”. In fact for some of us the latter seems to have advanced more like a jet-plane. This book is a testament to this.

When I graduated some 25 years ago the best diagnostic tests for myocardial infarction were an ECG and an LDH; for lupus erythematosus we used to put blood in a bottle with paper clips and shake for what seemed ages before sending to the laboratory for “LE cells”; infectious diseases did not include Hepatitis C, D and E etc. and no-one had heard of AIDS; and lastly, endocrinology was a clinical specialty depending very much on careful history taking and awaiting for tests such as the PBI (protein-bound iodine) or 17 ketosteroids. How laboratory testing has changed all that. Our tests are now more sophisticated and reliable, they not only confirm clinical impressions but they may even make a diagnosis for the clinician.

This book reviews the use of laboratory-based tests and their use in diagnosis. It is divided into four main parts: normal values, specific laboratory examinations, diseases of organ systems, and drugs and laboratory test values. Each chapter is extensive, with stress on the positive findings in each disease, relevant negative findings are also mentioned. In some sections algorithms are added, an example is the antigen-antibody findings in Hepatitis B. Some of these

algorithms are daunting, but in general they are helpful. I dipped into areas which are familiar to me (a generalist and clinical pharmacologist) and found the information useful. The downside was the small print and the lack of photographs in the haematology section, it's always easier to have a picture of the abnormal cells either in blood or bone marrow than just reading about them. I also found that the index did not always contain words that I am used to using, for example hyponatraemia is found under sodium, and ESR is found under sedimentation.

Who is this book meant for? I would see it more as a desk reference for both practitioners and laboratory-based individuals. It is not a text to learn from, because it is presented as a wedge between clinical findings and treatment choices, neither of which are considered here. However, if one wants to find the relevant lab. test, this would be the book to go for. Maybe now I will be more successful with that game much beloved of physicians called chase the ESR!

*Dr Carl Burgess
Wellington School of Medicine*

Immunochemistry in Practice Johnstone A & Thorpe R, Editors. Third edition, 1996, Blackwell Science.

This greatly expanded, new style, 3rd edition will be welcomed by those familiar with this publication, and be a valuable asset to those who may be new to the science and practice of immunology. An “all you need to know” is probably the best way to describe this book's approach to the technical aspects and procedures involved with immunochemical practice from the basics of protein measurements, antibody production and purification, and antigen detection to the more complex techniques of gel electrophoresis, radiolabelling, and tissue studies to name a few.

Divided into 13 chapters, the text follows a very concise but easy to follow format with each section/technique commencing with a short informative introductory theoretical passage with appropriate supporting diagrams, a much appreciated highlighted materials and equipment requirement list which saves valuable time in sorting out reagents from screeds of text and literally gets you started, which leads to step by step methodology followed by informative notes which reflects the vast practical experience of the scientists who have contributed to the book and will provide invaluable assistance to solving technical problems and troubleshooting. The reader is clearly directed to associated issues by clear cross-section referencing throughout the text. A small number of colour plates support the

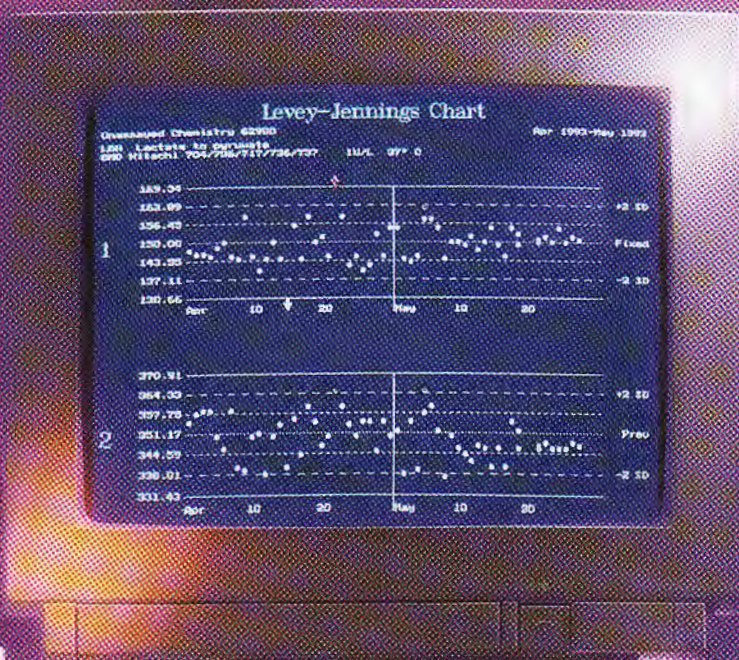
immunocyto/histochemistry and flow cytometry.

The reference and index sections are preceded by a list of manufacturers and suppliers which although a useful inclusion, contains mostly British addresses which unfortunately omits phone, fax, or E-mail/Web addresses, which would be a very useful addition for overseas readers. Formulae of commonly used buffers are also included.

As a user of the second edition I am impressed with the expansion and layout of this book which I would recommend as a bench book for any post graduate researcher, technician or scientist who is embarking on an immunological trail, and as a reference book for those persons already experienced or wishing to delve deeper into the many aspects of immunological technique. With regard to the medical laboratory this book is probably of limited value to those performing basic kit set immunological analysis, but is a must for diagnostic laboratories executing more complex techniques and in particular associated with research, and should be listed in all medical and appropriate scientific libraries.

*Harold Neil
Canterbury Health Laboratories*

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In Service Training Course - Papua New Guinea

The following report was compiled by Gilbert Rose after spending ten weeks as the PPTC tutor on the In Service Training Courses in Basic Laboratory Techniques, September to December 1995.

"In collaboration with the Faculty of Health Sciences, University of Papua New Guinea and the Pacific Paramedical Training Centre an In-Service Training Course in Basic Laboratory Techniques was designed and two five week courses were conducted in Papua New Guinea between the 18th September and 1st December 1995.

The courses were funded by the New Zealand Government Ministry of Foreign Affairs and Trade, through their official Development Assistance Bilateral Programme.

The first course was held at the Faculty of Health Sciences in the University of Papua New Guinea, Port Moresby; the second in the Medical Laboratory Assistants Training School at the Highlands Regional Health Support Unit in Goroka. Ten participants attended at each venue; many coming from very remote rural areas.

In rural areas the main laboratory work done in the health centres relates to Haematology and Microbiology, so the emphasis was on appropriate methods and techniques used in these disciplines and approved by the World Health Organisation and the Papua New Guinea Health Department.

Theoretical background to the basic techniques currently being used was covered to enable the laboratory worker to better understand the principle of each test as well as to give them some knowledge of the interpretation and validity of the final test results.

Laboratory Safety and Quality Assurance were also covered taking into account the conditions and facilities available in the various rural areas.

Approximately 80% of the population of Papua New Guinea live in the rural areas. The people in the rural areas do not receive their proportionate share of the health resources.

As a result, they remain at very high risk for many health problems that can be treated and eliminated.

The leading causes of mortality for all age groups are:

- pneumonia
- malaria
- meningitis
- tuberculosis
- intestinal infections? parasitic



- pulmonary/heart conditions
- anaemia
- septicæmia
- digestive system disorders

Neonatal sepsis is the main cause of death in the perinatal period. In children under the age of five years, the major causes of death are:

- respiratory disorders
- diarrhoea • malaria
- vaccine preventable diseases
- malnutrition

The majority of the above causes of mortality are communicable diseases in which the laboratory worker can help greatly in diagnosis, control of treatment and surveillance of these diseases.

Among the techniques covered in the course were examination of cerebrospinal fluid, white blood cell and differential counting, haemoglobin estimation, red blood cell morphology and basic interpretation of causes of anaemia.

As well as consolidating familiar techniques of urinalysis the concept and practice of quantitative urinary cell counting was introduced. Since meningitis is a common occurrence among young children the examination of cerebrospinal fluid by cell counting and Gram staining was fully revised.

The World Health Organisation (WHO) has recommended that the Sahli haemoglobin method which is used predominantly in rural areas should be phased out and replaced with a more accurate and reliable method.

To help this transition, BMS Haemoglobinometers were donated by the Central Region of the New Zealand Red Cross to fifteen participants. The five other participants were already using a more accurate method than the Sahli method. The WHO is also committed to providing a larger number of haemoglobinometers for use in other areas of the country and for training.

As typhoid is endemic, particularly in the Highlands, the slide agglutination test is used widely as a simple screening test for the detection of typhoid antibodies in possible typhoid cases and as an aid in differential diagnosis. Discussion of typhoid as a disease was a convenient way in which to introduce pathogenesis, transmission and immunology in infectious diseases.

To the present date there have been 434 laboratory workers trained through the

Papua New Guinea training system, they are in the following categories:

- 30 medical Technologists (MT)
 - 165 Medical Laboratory Technicians (MLT)
 - 57 Medical Laboratory Assistants Part 2 (MLA 2)
 - 182 Medical Laboratory Assistants Part 1 (MLA 1)
- Previously designated Rural Laboratory Assistant (RLA)

At the end of 1995 the Papua New Guinea Government published their 1996-2000 Health Plan and included in this plan were proposals to establish two rural hospitals in each of the country's nineteen provinces, the recruitment and posting of Clinical Pathologists to Mt Hagen and Nonga Base Hospitals, and to develop Public Health Laboratory capacity at Goroka, Lae and Rabaul regional hospitals.

The government also intends to reclassify all the health facilities at six different levels:

1. National Referral Specialist Hospitals
2. Regional Referral Specialist Hospitals
3. General Specialist Hospitals
4. General Care Hospitals
5. Rural Hospitals
6. Health Centres
Sub Health Centres
Aid Posts

Each level has among other criteria specific mention of diagnostic services which would include a medical laboratory facility.

There will be a need to train more laboratory workers in all categories if the Papua New Guinea Government is to fulfil the future needs of the proposed Laboratory Services.

In Service Training Course - Faculty of Health Sciences

Taurama Campus of University of Papua New Guinea, Port Moresby
18 September to 20 October 1995

Participants	Location
1. Mr Max Ako	Health Centre, Evangelical Health Services Balimo, Western Province
2. Mr Timmeus Awaun	Health Sub-Centre Anglican Health Services Alotau, Milne Bay Province
3. Mr Noah Banigola	United Church Health Centre Goodenough Island, Milne Bay Province
4. Mrs Pamela Giurina	St Barnabas Hospital, Dogura, Milne Bay Province
5. Mr John Makario	Tapini Health Centre Goilala District, Central Province

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6. Mr Peter Norapa Boana Health Centre
Nawaeb District, Lae, Morobe Province
7. Mr Bowali Pelowa Health Centre,
Evangelical Health Services
Balimo, Western Province
8. Mr Asmo Pisua Morehead Health
Centre,
Morehead, Western Province
9. Mr Jack Raurela Health Centre,
Anglican Health Services
Oro Bay, Oro Province
10. Mr Conway Toia Manau Health Centre,
Anglican Health Services
Popondetta, Oro Province

In-Service Training Course - MLA Training School

Highlands Regional Health Support Unit,
Goroka, Eastern Highlands Province
30 October to 1 December 1995

Participants	Location
1. Mr John Nokue	Asaro District Health Centre, Goroka, Eastern Highlands Province
2. Mr Robin Peter	Kabwum Health Centre Lae, Morobe Province
3. Mr Cyril Tapasia	Annaberg Health Centre, Madang, Madang Province

4. Mr Jeson Tipa Kotna Health Centre
Goroka, Eastern Highlands Province
5. Mr Benjamin Yaga Upawe
Henganofi Health Centre
Goroka, Eastern Highlands Province
6. Mr Dominic Wansana Raihu Health
Centre, Aitape, Sandaun Province
7. Mr Febian Warez Tabibuga Health
Centre, Mt Hagen, Western Highlands
Province
8. Mrs Ludwina Yarkit St Mary's Hospital
Vunapope, East New Britain Province
9. Mr Valentine Yemaiye Wasengla Health
Sub-Centre, Vanimo, Sandaun Province
10. Mr Tatt Young Gaubin Hospital
Karkar Island, Madang Province



Left to right: Rosemary Munaga (Charge nurse PNG Red Cross, Port Moresby); Bowali Pelowa (Balimo, Western Prince); John Makario (Tapini, Central Prince); Pamela Guirina (Dogura, Milne Bay Province).



Goroka class at the end of the course.



Rosemary Munaga from the Central Region NZ Red Cross presenting the BMS Haemoglobinometers to the Port Moresby course students. Mike Ballinger, Head of Department, Medical Laboratory Science UPNG and Gilbert Rose, Tutor from PPTC in background.



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

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Rob Siebers
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School of Medicine, P.O. Box 7343
Wellington South.
E-Mail: rob@wn.meds.ac.nz

Membership Fees and Enquiries

Membership fees for the year beginning April 1, 1996 are:

For Fellows – \$98.40 GST inclusive

For Members – \$98.40 GST inclusive

For Associates – \$43.80 GST inclusive

For Non-practising members – \$40.00 GST inclusive

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

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

Membership Report – February, 1996

Membership	14.06.96	04.05.96	13.02.96	19.09.95
	1002	994	1006	1079
Less resignations	8	12	11	68
Less G.N.A.	4	8	15	7
Less deletions	–	–	–	–
Less deceased	–	2	1	2
Less duplications	–	–	–	–
	–	972	979	1002
Plus applications	41	27	12	4
Plus reinstatements	–	3	3	–
Total	1033	1002	994	1006

Composition

	14.06.96	04.05.96	13.02.96	19.09.95
Life Member (Fellow)	11	12	12	12
Life Member (Member)	9	9	9	9
Fellow	19	20	21	21
Member	621	621	618	621
Associate	297	265	258	266
Non Practising	45	49	49	50
Honorary	27	27	27	27
Total	1033	1002	994	1006

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NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE 1996 CALENDAR

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

At the May Council meeting, concern was expressed that there has been a lack of communication from Council to Institute members. So to address this, it was decided that the Executive Officer should write a report informing the membership of Council activities and important issues. This report will be printed in each issue of the Journal.

Fellowship

A review of Fellowship and the Specialist Certificate examination is being undertaken. The objective of this review is to ensure that these examinations are an appropriate post graduate professional examination that meets the needs of the profession. A discussion document will be in the August Journal for the membership's consideration and will be discussed at the August AGM.

Review of the Registration Board

All registrations boards, including the Medical Laboratory Technologists Board, are currently being reviewed. This process will occur over the next eighteen months and will require submissions from organisations such as the Institute.

The question of whether or not we remain as a registered health profession is the first question to be answered. If we do retain registration status, then the Act under which the MLTB will function will be radically different from the current statutes. The model Act being suggested is the new Medical Practitioners Act. Opinion on this Act is also being sought by the Ministry of Health.

New Zealand Qualifications Board

An update on where the NZIMLS stands with NZQA was circulated to membership with the election notice.

In summary, due to a number of uncertainties, mainly regarding the Universities degrees and the framework, and the laboratory employers commitment, Council has decided to wait for these issues to be addressed before proceeding further with an advisory group.

Laboratory Quality Standards

The NZIMLS has made a submission and many laboratory scientists were present at the meetings held throughout the country. The NZIMLS has asked to be involved in any further reviews of these standards.

MOLS

This pilot programme, the Maintenance of Laboratory Standards, was initiated by the Medical Laboratory Technologist Board. The purpose of this programme is to ensure that scientists are involved in a range of ongoing educational activities, so that scientists can continue to provide the highest quality service in their respective laboratories and maintain professional competence.

Although this programme belongs to the Medical Laboratory Technologists Board, the NZIMLS will do the day to day running of it. However, it is up to each individual to keep a record and relevant documentation of their continuation education activities. To ensure that you are doing this, the NZIMLS will carry out a check of a small percentage of registered scientists at the end of 1996.

IAMLT

The NZIMLS Council have nominated Dennis Reilly for a position on the IAMLT Council. Dennis attended the General Assembly of Delegates meeting in Oslo on 26 June 1996 and I am pleased to advise that Dennis topped the polls receiving the most votes for the five IAMLT Council members required. Dennis also did a presentation

on our MOLS programme which is the subject of a considerable amount of interest from other countries.

Historical Publication

To acknowledge the 50 years of the NZIMLS, we are in the process of preparing a history of the Institute and Medical Laboratory Science in New Zealand. I am sure that you will appreciate that such a publication is very expensive to produce and our thanks and grateful appreciation must go to the many laboratories, companies and associated organisations who have been very generous in their offer of sponsorship towards the cost of the history publication.

I wish to acknowledge the tremendous amount of work that Anne Paterson and her team have put into this history publication. It has taken hours and hours of research, writing, collating and begging to get it near completion. Many, many thankyou's and much appreciation goes to all involved.

SIG Convenors Meeting

Again, the Council will meet with the SIG Convenors at the 1996 Conference. This is a yearly meeting to discuss any relevant issues and also a time when Council can acknowledge the effort and time that the SIGs put into running various activities on behalf of the NZIMLS.

Conference

We look forward to seeing as many as possible at the 50th Anniversary Annual Scientific Meeting. The organising committee are doing a wonderful job and are providing an extensive and interesting scientific programme as well as allowing plenty of time for social interaction.

Gerard Verkaaik has kindly taken up the challenge to organise the 1997 Conference. Even though Blenheim is a lovely place, it does not have a suitable facility, so it is likely that the conference itself will be held in Wellington.

Housekeeping

Some of you may have spoken to Gini (Virginia Cairns) when you have rung the Institute's office. Gini is not employed by the Institute, but employed by me to help run Executive Events/Secretarial. However, as part of her duties as an assistant, she is becoming knowledgeable of the running of the Institute's day to day affairs and may be able to assist you should I not be available at any particular time.

If there are issues/topics that members would like addressed in this column, we would be very happy to do so.

Fran van Til
Executive Officer

Discussion Document

Fellowship and Specialist Examination, A Review, and a Proposal for Change

You will be aware that all training of Medical Laboratory Scientists is now degree based and that the Universities involved have developed post graduate programmes including Masters degrees. To ensure that the profession continues to have a role in the education of Medical Laboratory Scientists Council has extensively reviewed its post graduate examinations ie; Specialist level and Fellowship. The prime objective is to have an appropriate post graduate professional examination that meets the needs of the profession. This document presents the outcome of this review for consideration by the membership. It is Councils intention that the proposal will be discussed at the forthcoming AGM in Auckland on the 29th August and if the membership approves, will introduce the new examination as soon as practicable.

Currently the Institute offers two post graduate qualifications: the Specialist examination and Fellowship.

Prior to 1988 the Specialist exam was conducted by the Medical Laboratory Technologist Board (MLTB) and was part of the Board's Diploma of Medical Laboratory Technology. However, in 1988 the MLTB announced a change in the registration requirements, from either two Certificate levels in different disciplines or one Certificate and Specialist level in the same discipline, to just one Certificate level.

At the NZIMLS AGM in 1988, Council was directed by the membership to take over the Specialist Examination from the MLTB. Since 1990 the NZIMLS has conducted the examinations which consist of 2 x 3 hour theory papers. The number of candidates sitting the examination peaked in 1992 with 45 but has decreased steadily with only 13 applications this year.

The examination has been seen by many in the profession as a prerequisite for employment in larger, more specialised laboratories, or for those Medical Laboratory Scientists aspiring to charge positions. It is also recognised by employers, who frequently state in their advertisements for protective employers that having a specialist level is a requirement for the position.

Fellowship was introduced in 1968 as the highest academic membership category offered by the Institute. The standard set was equal to the highest medical laboratory technology qualifications available world wide.

Currently Fellowship can be gained by examination, the submission of a thesis, or by exemption. Applicants for Fellowship must have held the membership category of Member of the Institute for 3 years.

The route by examination consists of the submission of a treatise of three to five thousand words which contributes 20% of the final marks. Once the treatise has been successful, candidates sit eight hours of theory examinations, for the remaining 80% of marks. A pass of 60% is required.

The second route is by the submission of a thesis of original work not exceeding twenty thousand words.

Exemption is granted in exceptional circumstances at the discretion of Council in recognition of an approved higher degree from a recognised university, other suitable qualifications and experience, publications or outstanding achievement.

Since its inception 4 members have gained Fellowship by examination, 10 by submission of a thesis and 6 through exemption by the submission of publications.

There are currently 35 Fellows of the Institute. Some of whom are founder Fellows who were eligible under the original regulations drawn up in 1968. The last Fellowship to be awarded was in 1992.

Council's Proposal

Council is of the opinion that the Institute should offer one post graduate qualification only and that it should be Fellowship. We propose that Fellowship could be gained in three ways.

These are:

- 1) by examination and submission of a treatise.
- 2) by submission of a thesis
- 3) by publications

ROUTE 1 will be divided into 2 parts.

Part 1 would comprise of written examinations in present Specialist level disciplines, similar in depth and knowledge to the current Specialist examination. The minimum time after registration (as a Medical Laboratory Scientist) candidates could sit this exam would be 2 years.

Part 2 would be a treatise of 3000-5000 words chosen by the candidate which directly relates to the part 1 examination. The treatise could be submitted one to five years after completing Part 1.

Medical Laboratory Scientists who have a Specialist Certificate would be given the opportunity to gain Fellowship by route 1. They would be exempted from Part 1 but would have to submit a treatise. This opportunity would be available for 3 years after the introduction of the proposed changes.

ROUTE 2

There would be no change from the current regulations that require the submission of a thesis of original work not exceeding twenty thousand words.

ROUTE 3

A minimum of five peer reviewed articles published in international or discipline acknowledge scientific journals could be submitted together with a review of 3000-5000 words summarising the work done.

Major changes have occurred over the last five years in the education of Medical Laboratory Scientists from an apprenticeship style training to degree based training. Any post graduate examination offered by the profession must fit in with the aspirations and requirements of the new generation of Medical Laboratory Scientists. It is our belief that the proposed changes will fulfil those aspirations but also cater for current Medical Laboratory Scientists by providing an opportunity for them to upgrade their qualifications.

New Zealand Institute of Medical Laboratory Science

Annual Staffing Survey as at 1 July 1995

The Annual Staffing Survey figures for 1995 are not accurate due to a major CHE not making the figures available.

Medical Laboratory Technologists									
Currently Employed	1987	1988	1989	1990	1991	1992	1993	1994	1995
Clinical Biochemistry	187.0	187.0	175.0	208.0	182.0	202.0	221.5	241.4	209.9
Microbiology	176.0	186.0	189.0	204.0	183.0	206.0	209.8	232.0	193.5
Haematology	168.0	176.0	174.0	180.0	163.0	167.0	184.6	205.9	168.9
Transfusion Science	97.0	102.0	96.0	105.0	101.0	120.0	126.7	132.9	113.4
Histology	24.0	28.0	26.0	29.0	34.0	35.0	32.9	36.5	32.3
Cytology	5.7	7.8	9.5	22.0	26.6	23.5	23.0	28.7	27.7
Nuclear Medicine	5.8	9.0	7.0	8.4	9.2	12.2	9.4	8.0	2.0
Immunology	22.0	21.0	30.0	31.0	34.0	38.0	47.4	48.6	43.4
Cytogenetics	7.5	8.0	6.4	5.8	12.6	14.7	12.4	15.7	12.0
Virology	4.5	6.5	10.0	12.0	13.5	13.6	8.8	10.2	7.5
Administration (full time)	34.0	33.0	33.0	30.0	29.0	39.0	36.2	37.9	26.1
On rotation	41.0	44.0	40.0	31.0	31.0	34.0	40.6	28.4	35.0
Other	3.0	11.0	7.8	13.0	8.6	9.7	6.4	9.9	15.3
	775.5	819.3	803.7	879.2	826.5	914.7	959.7	1036.1	887.0

Medical Laboratory Assistants									
Currently Employed	1987	1988	1989	1990	1991	1992	1993	1994	1995
Clinical Biochemistry	169.0	174.0	177.0	154.0	133.0	135.0	127.3	158.8	112.9
Microbiology	152.0	188.0	176.0	185.0	156.0	150.0	140.6	181.8	135.9
Haematology	117.0	112.0	118.0	120.0	92.0	85.0	84.8	106.9	87.4
Transfusion Science	114.0	112.0	100.0	98.0	83.0	87.0	86.1	95.2	60.2
Histology	76.0	96.0	76.0	74.0	56.0	66.0	36.4	72.1	47.0
Cytology	40.0	35.0	56.0	59.0	49.0	56.0	47.3	64.0	44.5
Nuclear Medicine	11.0	13.0	9.0	4.0	3.2	5.0	3.2	3.1	3.0
Immunology	31.0	48.0	46.0	42.0	31.0	29.0	31.7	27.1	17.8
Cytogenetics	5.5	13.0	3.5	3.5	1.2	2.0	1.2	2.5	—
Virology	8.0	6.5	5.5	6.5	6.5	1.0	—	1.0	—
Blood Collection	91.0	75.0	77.0	71.0	68.0	108.0	—	—	—
Administration	—	—	—	—	—	—	11.2	10.5	7.6
On rotation	56.0	67.0	64.0	28.0	40.0	26.0	41.5	32.5	35.3
Other	49.0	49.0	66.0	50.0	47.0	52.0	11.2	98.0	103.8
Total	919.5	988.5	974.0	895.0	765.9	802.0	622.5	853.5	655.4

Medical Laboratory Trainees					
	1991	1992	1993	1994	1995
Medical Laboratory Technologists	177	114	72	84	32
Scientific Officers	18	6	63	71	33

Students (as at 1 February 1996)					
	Year	1993	1994	1995	1996
Auckland Technical Institute	1	–	–	11	30*
	2	–	–	24	30*
	3	–	–	20	8
	4	–	–	6	5
Massey University	2	30	30	30	27
	3	20	20	16	24
	4	–	18	18	15
Otago University	2	40	40	34	28
	3	30	33	34	22
	4	–	25	30	23
* Approximate numbers					

World Courier are world leaders in the handling of biological and hazardous goods. Our expertise is in providing a 24 hour, seven days a week, premium service for urgent shipments that demand immediate nationwide or worldwide door to door delivery. We handle goods that require special attention, such as chemicals, infectious specimens, and live lab animals. **We are also experts in handling perishable goods on dry ice or gel pack refrigerants.** Currently, we are handling shipments for over 60 clinical trials throughout Australia, New Zealand and the South Pacific Region.

With a network of over 100 offices throughout the world and a history of over 25 years of dedicated air courier service, we truly *do* offer you a **service no-one else can deliver!**

We will be an exhibitor at the International Meeting Of The Australian and New Zealand Societies for Microbiology in Christchurch this year. We will also be presenting a talk on the special requirements needed to handle the intricacies of frozen sample shipping. Please come by the booth for a chat. We look forward to meeting you and answering any questions you may have.

Joint ICP and NZ Trace Elements Groups Conference

20-22 November 1996
Hamilton, New Zealand

Venue: Le Grand Hotel, Victoria Street, Hamilton, NZ

Organised by: Waikato Branch, NZ Institute of Chemistry
NZ Trace Element Group

Topics to be included:

Trace elements – analysis, importance in agriculture, horticulture, health, and the environment.

ICP-MS and ICP-OES – instrumental technique, sample preparation, applications.

The conference will include Plenary Speakers, invited and submitted papers, a Trades display and a conference dinner.

Contact: Dr Peter Robinson
R J Hill Laboratories Ltd
PO Box 4048
Hamilton, NZ
Phone: +64 7 855 2266
Fax: +64 7 854 9886
Email: Peter@rjhill.co.nz



Australian
Institute
of
Medical
Scientists
National
Scientific
Meeting

Adelaide Convention Centre
Adelaide
7 - 11 October, 1996

Program and Registration

On behalf of the Organising Committee, we extend an invitation...

to all medical scientists and technical officers to attend the AIMS '96 National Scientific Meeting.

The Meeting will be held in Adelaide at the Adelaide Convention Centre from 7 - 11 October, 1996.

The scientific program for AIMS '96 is outstanding. Sessions will cover 'cutting edge' issues and will be designed to educate, stimulate and challenge. Workshops, scheduled both before and after the meeting, will provide valuable educational and 'hands-on' training opportunities, allowing you to improve and update your skills.

Socially, you'll have a great time at AIMS '96 - social events catering for all tastes have been planned for delegates and accompanying persons. There will be plenty of opportunities to relax, enjoy Adelaide and get to know fellow delegates. Adelaide's restaurants are superb with a wide selection close to the conference venue, and if you want to shop until you drop, the central shopping district is only a few steps away. The Adelaide region also has some of the best wine-producing areas in Australia, you'll enjoy a trip through the hills to sample their wares.

So, plan to attend now. We extend a warm invitation to colleagues throughout Australia, New Zealand and South-East Asia - *COME TO ADELAIDE FOR AIMS '96*.

Organising Committee

Chairman:	Brian Matthews
Treasurer:	Bruce Whitby
Exhibition and Sponsorship:	John Glasson
Publicity:	SAPMEA
Scientific Convenor:	John Stirling

Secretariat

All correspondence should be directed to:

SAPMEA Conventions
80 Brougham Place
North Adelaide 5006
South Australia

Telephone: +61 8 239 1515
Facsimile: +61 8 239 1566
Email: conv@sapmea.asn.au

Conference Venue

Adelaide Convention Centre
North Terrace
ADELAIDE SA 5000

Telephone: +61 8 212 4099
Facsimile: +61 8 212 5101

The Adelaide Convention Centre is part of a unique business and entertainment precinct, the Adelaide Plaza, nestled on the banks of the picturesque River Torrens and comprising Adelaide Convention Centre, Adelaide Casino, Hyatt Regency Adelaide and the Adelaide Festival Centre. It's a very special environment. A place that reflects success, achievement and pride.

The Exhibition

A comprehensive industry display will be held in conjunction with the Meeting, located in the Exhibition Hall.

Exhibits will cover the latest technological advances, instruments and materials available in the medical sciences.

If you are interested in exhibiting, a prospectus can be obtained from the Secretariat.

Thanks to our Sponsors

Grateful acknowledgement is given for their support.

Bayer Health Care
Johnson & Johnson Clinical Diagnostics
Abbott Diagnostics Division

Disclaimer

Every effort has been made to present, as accurately as possible, all the information contained in this Brochure. AIMS and its Conference Program Committee, the South Australian Postgraduate Medical Education Association Incorporated, its Agents or Servants of the Sponsors will not be held responsible for any changes in the structure or content of the scientific program, tours and costs, registration fees, accommodation and costs and any generally or specific information published in this brochure. The Conference Program Committee reserves the right to change any or all of the scientific program. SAPMEA © 1996. All rights reserved.

Scientific Program

The scientific program of AIMS '96 will focus on three main areas: Aboriginal health; molecular pathology and emerging diseases. In addition, a comprehensive range of sessions will cover important topics that will interest both scientists and technologists. All sessions will be held at the Adelaide Convention Centre.

Invited Speakers

Aboriginal Health

Lois O'Donoghue CBE AM (Chair of ATSIC); Dr Paul Torzillo (Medical Director, Nganampa Health Council, Alice Springs); Dr Jeffrey Hanna (Medical Director, Tropical Public Health Unit, Queensland Health); Dr David Pugsley (Renal Unit, The Queen Elizabeth Hospital, Adelaide); Assoc. Prof. Tony Seymour (Head of Tissue Pathology, Gribbles Pathology, Adelaide); Prof Kerin O'Dea (Pro Vice-Chancellor (Research), Deakin University).

Molecular Pathology

Randall K Saiki (Roche Molecular Systems, Alameda, California, USA) is a world leader in polymerase chain reaction (PCR) methodology and its application in the field of DNA-based diagnostics, particularly human genetic diseases. Randall holds seven patents in PCR technology and has worked closely with Kary Mullis who, with Michael Smith, received the Nobel Prize in Chemistry for developing the PCR technique. Since 1977, Randall has written, or contributed to, five book chapters and numerous journal articles in the field of molecular biology.

Emerging Diseases

Dr David Satcher has lead the Centres for Disease Control and Prevention (CDC) and administered the Agency for Toxic Substances and Disease Registry (ATSDR) since 1993. As Director of the CDC, Dr Satcher leads the agency of the US Public Health Service responsible for promoting health and preventing disease, injury and premature death. As Administrator of the ATSDR, Dr Satcher controls the public health service agency created to prevent or mitigate adverse human health effects and diminished quality of life resulting from exposure to hazardous substances in the environment. Dr Satcher has had an exceptional career having been, for example, President of Meharry Medical College, Professor and Chairman of the Department of Community Medicine at Morehouse School of Medicine (Atlanta) and Chairman of the Department of Family Medicine at King-Drew Medical Centre. For six years Dr Satcher also directed the King-Drew Sickle Cell Research Centre.

During 1995, Dr Satcher chaired a US Government Working Group on emerging and Re-emerging Infectious Diseases which was convened to consider the global threat of infectious disease.

Dr David Anstee is the Director of the International Blood Group Reference Laboratory in Bristol, UK. His main area of interest, apart from reference services for transfusion laboratories is the structure and function of blood group-active proteins of the human red cell. However, his interests also include the molecular biology of blood groups (particularly the role of foetal DNA typing in HDN), the use of monoclonal antibodies as diagnostic and therapeutic agents, and the potential role of transfusion services in gene therapy. Dr Anstee was awarded the Jean Julliard Prize of the ISBT in 1980. During his distinguished scientific career he has published 111 research papers and 32 reviews and book chapters.

General Information

Parking

There are several parking facilities adjacent to the Venue. Early bird rates are available, in by 0900 out by 1830.

Entrance to the Meeting

Each attendee of the Meeting will receive a name badge at registration. This badge will be your official pass and must be worn at all times to obtain entry to meeting sessions, social functions, morning & afternoon teas and lunches.

Registration Desk and Check In

The Conference registration desk will be situated in Foyer 1, Adelaide Convention Centre. It will be open from 1700-1900 Monday 7 October for check in and on-site registration, and from 0730-1700 during the Conference.

Deadlines

Early Bird Registration	12 August
Cancellations	23 August
Accommodation Reservations	2 October

Workshops

Participation in workshops is not restricted to fully registered AIMS '96 delegates, workshops are open to everyone. If you wish to register for workshops only, simply complete the appropriate sections of the registration form (name/address, workshop/s and payment details). Most workshops will be held at the Adelaide Convention Centre, North Terrace, Adelaide.

Fees for Workshops

GA, GF & GG	Full-day workshops	\$100 each
GB, GD, GH, GI & GJ	Half-day workshops	\$50 each
GC	How to Give Great Presentations (Price includes a course manual)	\$90
GE	How to Chair a Scientific Meeting	\$25
GK	Pathology Specimens by Air 1996	\$90

Workshop Topics

Monday 7 October

0900-1600	GA	Information Technology (I & II)	David Menzies
0900-1200	GB	Image Analysis and Microscopy	Lyn Jarvis
1230-1630	GC	How to Give Great Presentations	Terry Grimmond
1300-1600	GD	Breast Aspiration Cytology	Svante Orell
1700-1830	GE	How to Chair a Scientific Meeting	Terry Grimmond

Friday 11 October

0830-1230	GK	Pathology Specimens by Air 1996	Sandra Rajan
0900-1600	GF	Parasitology (I & II)	Andrew Butcher
0900-1600	GG	Innovations in Haemostasis (I & II)	
0900-1200	GH	Basic Diagnostic PCR	Randall Saiki
0900-1200	GJ	Basic Biochemistry - Reviewing Results	Noel Walmsley
1300-1600	GI	Advanced Diagnostic PCR	Randall Saiki

Social Program

Please indicate your attendance on the Registration Form.

Welcome Reception — 7 October 1996

1830-2130

Join us for drinks and savouries in a relaxing atmosphere created by the traditional Aboriginal tones of the didgeridoo. Take the opportunity to make new contacts, catch up with old friends and set the scene for the following days. The Reception will be held in Hall E of the Convention Centre. *Included in full registration, \$25 for each extra ticket.*

Restaurant Evening — 8 October, 1996

1930

Each restaurant will have a set menu, *not including Beverages*. Transport will be at your own arrangement. Beverages are the responsibility of the individuals. The following restaurants have been selected:
Cafe Tapas, 242 Rundle St, Adelaide. Spanish cuisine — Banquet of 7 dishes @ \$25 per person.

Gekkos Landing Restaurant Bar, War Memorial Drive, North Adelaide. European style — Set menu, 3 courses with choices @ \$30 per person. For those wishing to continue their evening, dancing is available. Approximate cost of taxi is \$6.

HMS Buffalo, Patawalonga Boat Haven, Adelphi Tce, Glenelg. European style — Governor's Menu, 3 courses with choices @ \$35 per person. Approximate cost of taxi is \$17. *Dinner on an 1813 style Tall Ship.*

Conference Dinner — 10 October, 1996

1930 for 2000

Dinner Dance to be held at the Hindley Parkroyal, 64 Hindley Street, Adelaide. Pre-dinner drinks, a three course meal with wines and entertainment are all included. Seating will be limited so book early. \$70 per ticket.

Accompanying Persons Program

Registered accompanying persons will receive an official name badge.

Introductory Morning Tea & Adelaide Sights Tour

8 October 1996,

0900-1200

We would be delighted to welcome you at morning tea on Tuesday morning. A representative from A Little Shopping and Touring will introduce you to the range of attractions and tours available. This is an opportunity to meet other "accompanying persons".

Following morning tea there will be a short tour introducing some of the special features of the city, including the Festival theatre, home of the world-famous Festival of Arts, and Adelaide Oval, considered by many as the most picturesque cricket ground in the world, interesting eating spots, shopping areas and markets are suggested as you learn of Adelaide's rich heritage, culture and lifestyle. *[Includes: Pickup from Adelaide Convention Centre 1100, 1hr guided tour and return to Adelaide Convention Centre.]*

Registration

Participation is open to all persons interested in the medical sciences.

Fees	By 12 August	After 12 August
AIMS/NZIMLS Member	A\$380.00	A\$410.00
Non-Member	A\$430.00	A\$460.00
Student*	A\$180.00	A\$210.00
Day - Member	A\$140.00	A\$150.00
Day - Non-Member	A\$150.00	A\$175.00
Day - Student*	A\$ 50.00	A\$ 60.00

* "Student" at all times refers only to full time students. Verification from your Course Co-ordinator must be enclosed with your registration form in order to be accepted.

Full and Student registration includes the Welcome Reception, attendance at sessions [8-10 October], refreshments and lunches during the conference, delegate pack and handbook.

Day registration includes attendance at sessions, refreshments, lunch, delegate pack and handbook on nominated day/s [8-10 October].

Note *Additional fees apply for attendance at workshops.*

Day Workshops include morning & afternoon tea.

1/2 Day Workshops include morning or afternoon tea dependent on timings of sessions.

Application and Remittance

Those attending the Conference must complete a registration form (or a photocopy) and return it, complete with payment, to the Secretariat. Fees must be paid in Australian Dollars either by cheque or credit card. Cheques are to be payable to SAPMEA. Registration Forms received without fees, will not be processed.

Note: *Each active participant must make a separate application.*

Confirmation and Receipt

The Secretariat will send a confirmation letter acknowledging your registration, accommodation booking and payment if registration forms and remittance are received by 23 September, 1996. Please bring this letter with you to the on-site registration desk at the Conference

Cancellations and Refunds

Cancellation of registration must be made in writing to the Secretariat, and fees will be refunded as follows:

On or before 23 August, 1996

100% of fees, less \$75 fee to cover administrative costs

After 23 August, 1996

No refund

Accommodation

Special Rates have been negotiated with the following hotels for the duration of the conference. These can only be booked through the Conference Secretariat, Section C of the Registration Form.

* * * * * **Hyatt Regency Adelaide**, North Terrace, Adelaide. Adjacent to venue. \$180 single/dble/twin.

* * * * * **The Terrace Inter-Continental**, 150 North Terrace, Adelaide. Opposite venue. \$160 single/dble/twin.

* * * * * **Hindley Parkroyal Adelaide**, 65 Hindley Street, Adelaide. 5 minutes walk to venue. \$165 single/dble/twin.

* * * * * **The Grosvenor Hotel**, 125 North Terrace, Adelaide. Opposite venue. (*superior*) \$95 single, \$115 dble/twin (*standard*) \$66 single, \$80 twin.

* * **Holiday Inn Park Suites**, 255 Hindley Street, Adelaide. 5 minutes walk to venue. *Self contained.* \$112 one bedroom, \$135 two bedroom. \$20 per extra person.

Deposit

A deposit of one night's tariff must be paid to secure your reservation. Please include this payment with your registration fee.

Refunds

The room deposit is non-refundable after 23 August, 1996. Please note that your deposit will be forfeited if you do not arrive on the date booked.

Changes

Please notify any changes to your booking to the Secretariat, *not to the hotel.*

Sharing

Delegates must make their own arrangements to share accommodation. Only one deposit is required.

Late Arrival

Please indicate on your registration form if you will arrive at your hotel after 1800. Failure to do so might result in cancellation of your reservation.

Pre registration

Check in at Hotels is from 1400. If you wish to ensure you have access to your room earlier, you must reserve the room for the night before. If you take this precaution, please advise the Secretariat so that the hotel knows that the room is pre-registered and won't release the room when you do not arrive on the reserved date. This will incur the cost of a night's tariff.

Abstract Deadline

Final Receipt date 12 July

No submission will be accepted after this date
Due to popular request the **Deadline** date for submission of Abstracts has been extended.

Travel and Tours

SAPMEA Travel are pleased to announce Ansett Australia are the preferred airline for this conference. To ensure that you are advised of all fares and services available, please contact SAPMEA Travel, Telephone: [08] 239 1515, Facsimile: [08] 239 1566 and quote the following:

Ansett Master File Number: MC06249

Travel Insurance

Most airfares are non-refundable and we strongly advise delegates have travel insurance to cover non-attendance due to illness. Cover is provided for non-refundable deposits on accommodation and airfares. Single policy is only \$17.

Car Hire

A special "Discount Convention Rate" has been arranged for all Delegates attending the conference in Adelaide. Should you require car hire please contact SAPMEA Travel.

Car hire rates for this conference

CAR TYPE	GROUP	COST PER DAY
Ford Laser Hatch (sm)	Group B	From \$62 per day
Ford Laser Sedan (md)	Group C	From \$64 per day
Ford Falcon (lg)	Group D	From \$69 per day

All Prices Include

Collision Damage Waiver, unlimited kilometres and \$500.00 excess in case of accident damage. Pick up and Drop off for cars can be arranged at City or Airport locations.

Pre & Post Conference Tours

F01 Flinders Ranges 3 Day Getaway

Friday 4 October - Sunday 6 October, 1996 **\$365**

Day 1 - Depart Adelaide and travel via Port Augusta, Quorn, Hawker and Rawnsley Park to arrive in Wilpena Pound at approximately 1840.

Day 2 - Enjoy a full day tour to either Arkaba Station featuring Mountain Tops Spectacular Scenery or the Brachina Gorge and Arona Valley Tour.

Day 3 - Relax or enjoy a bushwalk into Wilpena Pound before departing for your return to Adelaide. [Incl: *Luxury Stateliner Coach Travel. Two nights accommodation (with private facilities) at Rasheeds Wilpena Pound Hotel, 2 Dinners and 2 Breakfasts, and Full Day 4-wheel drive tour from Wilpena Pound. Excludes: Meals whilst travelling.*] Depart from Adelaide Bus Terminal, Franklin Street 1115 on Friday, returning approximately by 2125 on Sunday. Fee is based on twin share. Single supplement is \$65.

F03 A day in the Barossa Valley

Sunday 6 October, 1996 (Min. 15 passengers) **\$93**

This full day tour focuses on the enjoyment of wine and the area's distinctive cuisine, much of it drawn from the Valley's German traditions or the newer emphasis on fresh, local produce. A two course meal at one of the region's heritage homesteads, restaurants or wineries will be provided. There will be ample opportunity for browsing through the art and craft shops and galleries which dot the towns and hamlets throughout the valley. [Incl: *8.5hr tour, transport, guides, two-course luncheon (wine excluded), wine tasting and refreshments.*] Pickup from Adelaide Convention Centre 0845 and returning by 1730.

F04 Butterflies & Riverboats

Monday 7 October, 1996 **\$59**

This tour will take you through the beautiful Adelaide Hills to Murray Bridge via the Beerenberg Strawberry Farm. At the Butterfly House watch the antics of the Cockatoos while you enjoy a buffet lunch in the Cockatoo Haven Diner. View the beauty of tropical butterflies within a tranquil enclosure of lush greenery and a bubbling stream. Be delighted by the tame birds as you stroll through the Mobilong Bird Sanctuary. Drift back in time as you cruise down Australia's Big River the Mighty Murray, whilst enjoying afternoon tea onboard the PS Proud Mary. You will then be able to sample the wares at the Cottage Box Chocolate Factory, before returning to Adelaide. [Incl: *7.5hr tour, transport, sumptuous lunch, entrance fees & afternoon tea.*] Pickup from Hotel between 0900-0930, returning by 1700.

F05 Adelaide's Exclusive Shopping Experience

Tuesday 8 October, 1996 (Min. 4 passengers) **\$55**

Spend half a day discovering the shopping delights of Adelaide, exploring the exclusive designer label boutiques, as well as the avant garde gift and antique shops. After-Five and evening wear, appliquéd blouses, patchwork quilts, 'marbled' clothing and gifts, jewellery, aboriginal artefacts and fine chocolates are all on the shopping list. [Incl: *4hr tour, transport, guides and refreshments.*] Pickup from Adelaide Convention Centre 1230.

F06 Hahndorf/Mount Lofty Summit/Cleland Wildlife Park

Wednesday 9 October, 1996 (Min. 4 passengers) **\$60**

This half-day tour involves a scenic drive through the Adelaide Hills, taking you from the breathtaking views of Mount Lofty through a fascinating wildlife park to an historic town which takes pride in its German and artistic heritage. [Incl: *4hr tour, transport, guides, refreshments, and pat a Koala.*] Pickup from Adelaide Convention Centre 0830.

F07 Jam Factory Craft and Design Centre/Carrick Hill

Wednesday 9 October, 1996 (Min. 4 passengers) **\$60**

The Jam Factory is South Australia's centre of excellence for local crafts, watch craftspeople working. Carrick Hill is a magnificent English Tudor-style mansion famous for its gardens and housing one of Australia's finest art collections. [Incl: *4hr tour, transport, guides, Devonshire tea and entrance fees.*] Pickup from Adelaide Convention Centre 1230.

F08 Warrawong Sanctuary - Dawn Tour

Friday 11 October, 1996 (Min. 15 passengers) **\$66**

Warrawong Sanctuary in the Adelaide Hills is a haven for Australia's endangered species. Protected by more than two kilometres of fox and cat-proof fencing, the sanctuary provides a safe environment in recreated Australian bushland for fauna such as potoroos, bandicoots, bettongs, wallabies, kangaroos, possums and platypus. [Incl: *4hr tour, transport, guide, entrance fee, 1.5hr walking tour and breakfast.*] Pickup from Hotels 1730.

F9 Glenelg/Port Adelaide Maritime Museum

Friday 11 October, 1996 (Min. 4 passengers) **\$60**

Glenelg marks the first landing site for South Australia's pioneers and the area has since evolved into the State's premier seaside resort. Port Adelaide has a proud maritime heritage, much of which is exhibited in the world famous Maritime Museum. The Museum contains many interactive exhibits and a computer listing of the State's pioneer families. [Incl: *4hr tour, transport, guide, refreshments & entrance fee.*] Pickup from Adelaide Convention Centre 0830.

F10 Weekend Escape Cruise Aboard the Murray Princess

Friday 11 October - Sunday 13 October, 1996 **Sole Occupancy \$520**

Twin Share per person \$360

Extra Adult or Child Sharing \$200

Day 1 - Transfer from Adelaide to Mannum where passengers are welcomed aboard by the ship's crew. Meet your fellow passengers over a quiet drink in one of the ship's bars, followed by our Welcome Dinner and entertainment. This evening we cruise upriver under floodlight, to our overnight anchorage at Coolcha. **Day 2** - After a leisurely breakfast, Murray Princess cruises upriver past spectacular cliffs towards Nildottie. This afternoon be pampered by our enthusiastic crew, laze in the sun with a cool breeze, descend the spiral staircase to the paddlewheel viewing lounge, enjoy watersports including an exhilarating speedboat ride or visit Ngaut Ngaut Reserve for a guided tour along the cliff face boardwalk to local Aboriginal rock paintings. Tonight the Captain's Cocktail Party and Dinner are the grand affairs featuring entertainment by the Murray Princess Jazz Band. **Day 3** - This morning discover the local birdlife on a guided stroll along the riverbank. Enjoy the spectacular scenery and a leisurely luncheon as we make our way downriver to Mannum. Scenic return coach through the Adelaide Hills. [Incl: *Return coach ex-Adelaide, Accommodation (with private facilities), English side board breakfasts, Superb Buffet Luncheons, Table d'hotel, BBQ and smorgasbord dining, Nightly entertainment, access to 2 spas and saunas, and 24 hour tea and coffee.*] Departs Grosvenor Hotel on Friday at 1700 and returns to Adelaide on Sunday at 1600.

F02 Kangaroo Island Day Tour

\$199

Tour operates daily, please indicate preferred day and date on Registration Form.

For those with limited time to visit Kangaroo Island, the Ultimate Day Tour combines return flights to Kangaroo Island, a full day's touring in a fully air-conditioned coach and an Aussie barbecue lunch. The tour departs at 08.25 (check in 30 minutes prior) from the Qantas Domestic Terminal at Adelaide Airport for the 25 minute flight to Kangaroo Island and upon arrival at Kingscote Airport you will be met by our air-conditioned coach and local guide. See traditional eucalyptus oil distilled (receive a sample bottle of eucalyptus oil), wander through the world famous sea lion colony at Seal Bay, view the natural splendour of Kelly Kill Caves, hand feed kangaroos and wallabies and see koalas in their natural habitat. Experience the unspoilt spectacular scenery of nature's pleasure island including Remarkable Rocks, Cape du Couedic Lighthouse and Admiral's Arch on this all encompassing day tour. Your tour concludes with a return flight back to Adelaide Airport arriving at 1845. [Incl: *Return flights to Kangaroo Island, Air-conditioned coach touring on Kangaroo Island, Aussie barbecue lunch, all entrance and guide fees.*] Pickup from Hotel 0750 and returning by 1915.

TRAVEL CONDITIONS OF BOOKING

Prices shown for Travel arrangements are valid for the duration of the Convention, but remain subject to variation without notice. All prices are quoted in Australian dollars.

AIR FARES - Published fares and special Convention fares quoted in this publication are subject to availability. SAPMEA staff will be happy to assist in the selection of the most competitive fares available at the time of booking.

RENTAL VEHICLES - Basic details of rental conditions are available from SAPMEA Travel.

AVAILABILITY AND TOUR AMENDMENTS - All products in this publication are subject to availability.

PAYMENT CONDITIONS - Payment for Travel arrangements will be taken to secure a reservation.

Failure to lodge the payment by the stipulated date will result in reservations being automatically cancelled.

LATE BOOKING AND AMENDMENTS - We reserve the right to charge a late booking fee of \$20.00 per booking. Any change to departure date or itinerary requested by you is subject to an amendment fee of \$30.00 per booking. Amendments made after tickets have been issued will be subject to a fee of \$60.00 per booking.

CANCELLATION AND REFUNDS - Cancellation fees apply. Cancellation of bookings must be submitted in writing to SAPMEA Travel.

RESPONSIBILITY - SAPMEA Travel and our associated travel organisations, finalise all arrangements of these travel options upon the express condition that it shall not be liable for any injury, damage or loss caused by accident, inadvertent errors in bookings, delays generally or irregularity which may be occasioned either by reason of any defect in any vehicle, vessel or aircraft, or through the acts of default of any company or person engaged in conveying or accommodating passengers, or in the carrying out of arrangement of the tours, or otherwise in connection therewith.

SAPMEA Travel will not be liable for and disclaims all responsibility for any loss occasioned by subsequent alteration of prices, details or nature of services shown; all are subject to variation without notice. SAPMEA Travel shall not be responsible for any loss or injury of whatever description howsoever arising (whether through negligence or otherwise) which you may suffer or sustain in the course or consequent upon your travel arrangements with SAPMEA Travel.

The sale of services and tours not operated by SAPMEA Travel are made solely as agent for the persons providing those activities. Furthermore, accommodation establishments may change arrangements, thereby causing variations between the time of publication of this brochure and the time at which booking is made in availability and price.

REGISTRATION FORM

AIMS 1996 Annual Scientific Meeting

7-11 October, 1996

Return completed form together with your remittance to:

AIMS 96

SAPMEA Conventions

80 Brougham Place

North Adelaide SA 5006

AUSTRALIA

Phone: +61 8 239 1515

Facsimile: +61 8 239 1566

Section A - Registration Details

Title [Prof/Dr/Mr/Mrs/Ms]: _____ Family Name: _____ First Name: _____

Name to appear on name badge: _____ Position: _____

Institution/Organisation: _____ Contact Address: _____

_____ City/Town: _____ State: _____ Postcode: _____

Telephone: _____ Facsimile: _____ Email: _____

First and Family Name of accompanying person[s]: _____

Please note any special requirements regarding health, diet, etc: _____

Section B - Registration Fees

	by 12 August	after 12 August	
AIMS/NZIMLS Member	A\$380.00	A\$410.00	\$ _____
Non-Member	A\$430.00	A\$460.00	\$ _____
Student	A\$180.00	A\$210.00	\$ _____
Day - Member	A\$140.00	A\$150.00	\$ _____
Day - Non-Member	A\$150.00	A\$175.00	\$ _____
Day - Student	A\$ 50.00	A\$ 60.00	\$ _____

Please indicate day(s) of attendance: Tue [] Wed [] Thu []

Sub Total Section B \$ _____

Section C - Accommodation

A deposit of one night's accommodation is required to confirm your booking.

Rates quoted are per night per room and do not include breakfast unless indicated. Accommodation charges are fully payable to the hotel on check out. Please list your hotel preferences:

1. _____

2. _____

3. _____

Date of arrival: _____ Approx time of arrival: _____

Date of departure: _____ Type of Room: _____

Sharing with: _____

[If sharing a room it is important for only one person to make the reservation on their registration form, and send only ONE deposit.]

Sub Total Section C \$ _____

Section D - Social Program

Please indicate your attendance by placing a tick in the appropriate box. Catering cannot be guaranteed unless you complete this section;

Welcome Reception, 7 October [included in full registration] []

Number of additional tickets required [] @ \$25 ea \$ _____

Restaurant Evening, 8 October

Please indicate your choice and include payment.

Cafe Tapas @ \$25 [] Gekkos @ \$30 [] HMS Buffalo \$ 35 []

Number of tickets required _____ @ \$ _____ ea \$ _____

Conference Dinner, 10 October

Number of tickets required [] @ \$70 ea \$ _____

Accompanying Partners

Introductory Morning Tea & Adelaide Sights Tour

Number of tickets required [] @ \$45 ea \$ _____

Sub Total Section D \$ _____

Section E - Travel

Airfares

Please contact SAPMEA Travel to obtain your cost and booking number

Booking number: _____ Fare Quoted \$ _____

Airline Frequent Flyer Membership Number _____

Insurance

Travel Insurance @ \$17.00 [] \$ _____

[Please tick if required]

Car Hire

Please contact SAPMEA Travel to obtain your costs and booking number:

Booking number: _____ Car Type _____

Group _____ Cost @ \$ _____ per day \$ _____

Sub Total Section E \$ _____

WORKSHOP PROGRAM

Monday, 7 October

0800-1700	Registration - Workshops only	Foyer 1
0900-1200	GA Information Technology Part I	David Menzies
0900-1200	GB Image Analysis and Microscopy	Lyn Jarvis
0900-1200	Trade Workshop	
1300-1600	GA Information Technology Part II	David Menzies
1230-1630	GC How to Give Great Presentations	Terry Grimmond
1300-1600	GD Breast Aspiration Cytology	Svante Orell
1700-1830	GE How to Chair a Scientific Meeting	Terry Grimmond

Friday, 11 October

0800-1600	Registration	Foyer 1
0830-1230	GK Pathology Specimens by Air 1996	Sandra Rajan
0900-1200	GF Parasitology Part I	Andrew Butcher
0900-1200	GG Innovations in Haemostasis Part I	Chairperson: Hatem Salem
0900-1200	GH Basic Diagnostic PCR	Randall Saiki
0900-1200	GJ Basic Biochemistry - Reviewing Results	Noel Walmsley
1300-1600	GF Parasitology Part II	Andrew Butcher
1300-1600	GG Innovations in Haemostasis Part II	Chairperson: John Lloyd
1300-1600	GI Advanced Diagnostic PCR	Randall Saiki

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SEMINARS

Monday, 7 October

Friday, 11 October

1300-1600	Dade Reagent Users Group
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1400-1500	CSL Bio-Vue Seminar
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PROGRAM

Monday, 7 October

1700 - 1900	Pre Registration	Foyer 1 - Adelaide Convention Centre
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Tuesday, 8 October

0800 - 0900	Registration		Foyer 1 - Adelaide Convention Centre
0900 - 1030	Opening Session		Chairperson: T Grimmond
	Opening and Welcome		M Armitage
	Fellowship Presentations and Awards		L O'Donohue
	Saal Foley Lecture — <i>Musings on the Mesothelium</i>		D Whitaker
MORNING TEA			
1100 - 1230	Aboriginal Health and Medical Scientists		Chairperson: T Grimmond
	Overview of Aboriginal Health		P Torzillo
			L O'Donohue
LUNCH			
1330 - 1500	Aboriginal Health		Infected Diseases
	Obesity, Diabetes, Coronary Heart Disease	K O'Dea	Immunisation Issues for Aboriginal People
	Renal Disease	D Pugsley T Seymour	Community acquired Fungal Infections in Rural Australia with Emphasis on Aboriginal Health
			J Hanna
			D Ellis
AFTERNOON TEA			
1530 - 1700	Aboriginal Health		Infected Diseases
			STD Control in Rural Aboriginal Communities
			G Hart
			Major Communicable Disease Outbreaks in Aboriginal People
			J Hanna
1715-1745	AIMS Annual General Meeting		

PROGRAM

Wednesday, 9 October

0800 - 1700	Registration				Foyer 1 - Adelaide Convention Centre
0900 - 1030	Plenary Session 1 — Molecular Pathology				
	The Diagnosis of Genetic Diseases by PCR				<i>R Saiki</i>
	The Human Genome Project: Aims and Progress				<i>G Sutherland</i>
MORNING TEA					
1100 - 1230	QAP Forum: Future Directions	QAP Forum: Future Directions	Transplantation	Transfusion	Microbiology
	Transfusion Medicine	Immuno- Cytochemistry	Tissue Typing <i>J McCluskey</i>	John Whiteley Lecture	Diagnosis and Identification of Legionella,
	Biochemistry <i>L Penberthy</i>	Cytology		<i>R Rodwell</i> Hepatitis C & G	Mycobacteria and Aeromonas Using DNA Technology
	Immunology <i>R McEvoy</i>	Pathological Anatomy		<i>B Wylie</i>	<i>J Lanser</i>
	Haematology	Microbiology			
		Cytogenetics			
LUNCH					
1330 - 1500	NATA & ISO 9000	Haematology	Tissue Pathology	Clinical Chemistry	Microbiology
		Mutations In Haemophilia A & B <i>B Rudzki</i>		Enzyme Replacement Therapy	Pathogenic Free- Living Amoebae
		Minimal Residual Disease <i>A Morley</i>		<i>J Hopwood</i>	<i>T Ferrante</i>
				Technological Advances in Neonatal Screening and their Impact	Ecology of Free- Living Amoebae and Sources of Infection
				<i>E Ranieri</i>	<i>B Robinson</i>
					Fish Disease in and Around South Australia
					<i>P Durham</i>
AFTERNOON TEA					
1530 - 1700 Preferred Papers	Management Related Issues	Haematology		Clinical Chemistry	
	Organisational Restructuring <i>D Graham</i>	Foetal DNA Typing in Management of HDN		Recent Advances in the Routine Biochemical Detection of Myocardial Damage	
		<i>D Anstee</i>		<i>G H White</i>	
		Identification and Analysis of Rh genes (PCR & RFLP Typing Tests)			
		<i>C Hyland</i>			

PROGRAM

Thursday, 10 October

0800 - 1700	Registration				Foyer 1 - Adelaide Convention Centre
0900 - 1030	Plenary Session 2 — Emerging Diseases				
	Global Infectious Disease Surveillance and Response: A CDC Perspective				<i>D Satcher</i>
	The Diagnosis of Infectious Diseases by PCR				<i>R Saiki</i>
MORNING TEA					
1100 - 1230	Haemostasis <i>Chairperson: E Duncan</i> Inhibitors of the Coagulation Pathway: An Overview <i>H Salem</i> New Agents for the Treatment of Thrombosis <i>A Gallus</i> The Effect of Australian Snake Venoms on the Haemostatic Pathways of Man <i>V Williams</i>	Re-engineering Work Practices Process Re-engineering <i>K Alexander</i> Organisational Re-design <i>L Miller</i>	Microbiology Opportunistic Infections in AIDS <i>P McDonald</i> Emerging Viral Diseases <i>C Burrell</i>	Immunology Transfection of Mammalian Cells with Nuclear Auto Ag: a New Approach to Diagnosing ANA <i>T Gordon</i> Monoclonal Antibodies as Diagnostic & Therapeutic Agents <i>D Antsee</i>	Education & Professional Training <i>Chairperson: R Flower</i> A National Curriculum for Technical Training: The Scitech Project <i>M James</i> Implementing a Scitech Medical Laboratory Science Curriculum <i>G Perkins</i> Diplomas and Degrees: A Distance Education Perspective <i>G MacKenzie</i> Diplomas and Degrees: Training a Workforce for Clinical Diagnostic Laboratories <i>B Day</i>
LUNCH					
1330 - 1500 Proffered Papers					Education & Professional Training <i>Chairperson: R Flower</i> Honours Programs in Australia: Training in Research in Medical Laboratory Science <i>Representative from each of the eight universities offering a MLS course</i>
AFTERNOON TEA					
1530 - 1630	Closing Ceremony Guest Lecture				<i>Chairperson: T Grimmond</i> <i>M Tyler</i>

WORKSHOP DETAILS

Monday 7 October

Information Technology

David Menzies

Women's & Children's Hospital, ADELAIDE
0900-1600 Parts I & II

This workshop will provide an introduction to Information Technology focussing on what is currently used in the workplace. Equipment will be available for 'hands-on' experience. Topics to be covered include:

- Basic introduction to computers: windows and multitasking, Email and electronic diaries, multimedia and peripheral equipment.
- A brief introduction to word processing (Word for Windows), spreadsheets (Excel), databases (Access) and presentation software (Powerpoint).
- An introduction to the Internet and the World Wide Web.
- Where information technology is going in the future.

David Menzies has been the manager of the Information Technology Services Department at the Women's and Children's Hospital, Adelaide for eleven years. David will be assisted by members of his staff during 'hands-on' sessions.

Image Analysis and Microscopy

Lyn Jarvis

Leading Edge Pty Ltd, 69 Finnis St, MARION SA 5043
0900-1200 — Registration limited to 20

Most people will be familiar with computer images, and with the sort of results obtained by image processing. The same techniques can be applied to any source of images including microscopy.

Image analysis is the application of this technology to make measurements and produce numerical data. This provides a quantitative description of the specimen and allows objective evaluation.

However, the ability to produce meaningful data is necessarily affected by the characteristics of the specimen and given the current state of technology these must be simple and well defined.

It is fortunate that many specific staining procedures match well with this requirement and when seen as a companion to staining techniques image analysis is a natural progression towards quantifying the result.

This workshop will present techniques of image analysis applied to microscopy and measurement of specific staining methods.

Dr Jarvis is a leading Australian authority in the area of image analysis.

How to Give Great Presentations

Terry Grimmond

Effective Presentations

HAMILTON EAST, NEW ZEALAND

1239-1630 — Registration limited to 60

"The most value I have ever gained from ANY workshop"

Alana Stoka, Mount Gambier Health

Talking with confidence and style at meetings and conferences requires skill. This interactive workshop is designed to help you become a more effective presenter by teaching you the HOW of: designing your talk; overcoming nerves; design of slides and overheads; dress; body language; manuscript vs memory; vocal technique; clarity; microphone use; avoiding the top six audience turnoffs; equipment use; handling difficult questions and keeping audiences attentive and participating. Terry's book "How to Deliver Effective Presentations" is included in the cost.

Terry has conducted this top-quality workshop throughout Australia and New Zealand and is well-known as an outstanding presenter and workshop leader. Several thousand individuals from more than 500 organisations have attended his sessions and, in their evaluations, every single participant has stated that they would recommend the workshop to colleagues.

Breast Aspiration Cytology

Svante Orell

Clinpath Laboratories, ADELAIDE
1300-1600 — Registration limited to 40

In recent years, fine needle biopsy of the breast has taken on a new dimension with the introduction of mammographic screening for breast cancer. The needling of non-palpable lesions by stereotactic or ultrasonic guidance has led to a greater experience of the cytology of proliferative processes in the borderland between benign and malignant. These are particularly difficult to assess cytologically. The aim of this workshop will be in the form of a short introductory lecture followed by microscopy of circulating cases. Previous knowledge of FNA breast cytology is recommended.

Associated Professor Svante Orell is co-author of *Manual and Atlas of Fine Needle Aspiration Cytology*.

How To Chair A Scientific Meeting

Terry Grimmond

Effective Presentations

HAMILTON EAST NEW ZEALAND

1700-1830 — Registration limited to 60

The success of a scientific meeting depends on the smooth running of the lecture sessions. This interactive workshop aims to improve the skills of session chairpersons. Topics covered will be: the conference lead-up; briefing of speakers; timing; speaker introductions; audiovisual equipment; venue set-up; assertiveness; question time and crowd control. The cost includes a copy of Terry's monograph 'How to Effectively Chair Seminar Sessions'.

Terry Grimmond is well-known throughout Australia and New Zealand as an outstanding presenter, workshop leader and professional chairperson.

Friday 11 October

Pathology Specimens by Air 1996

Sandra Rajan

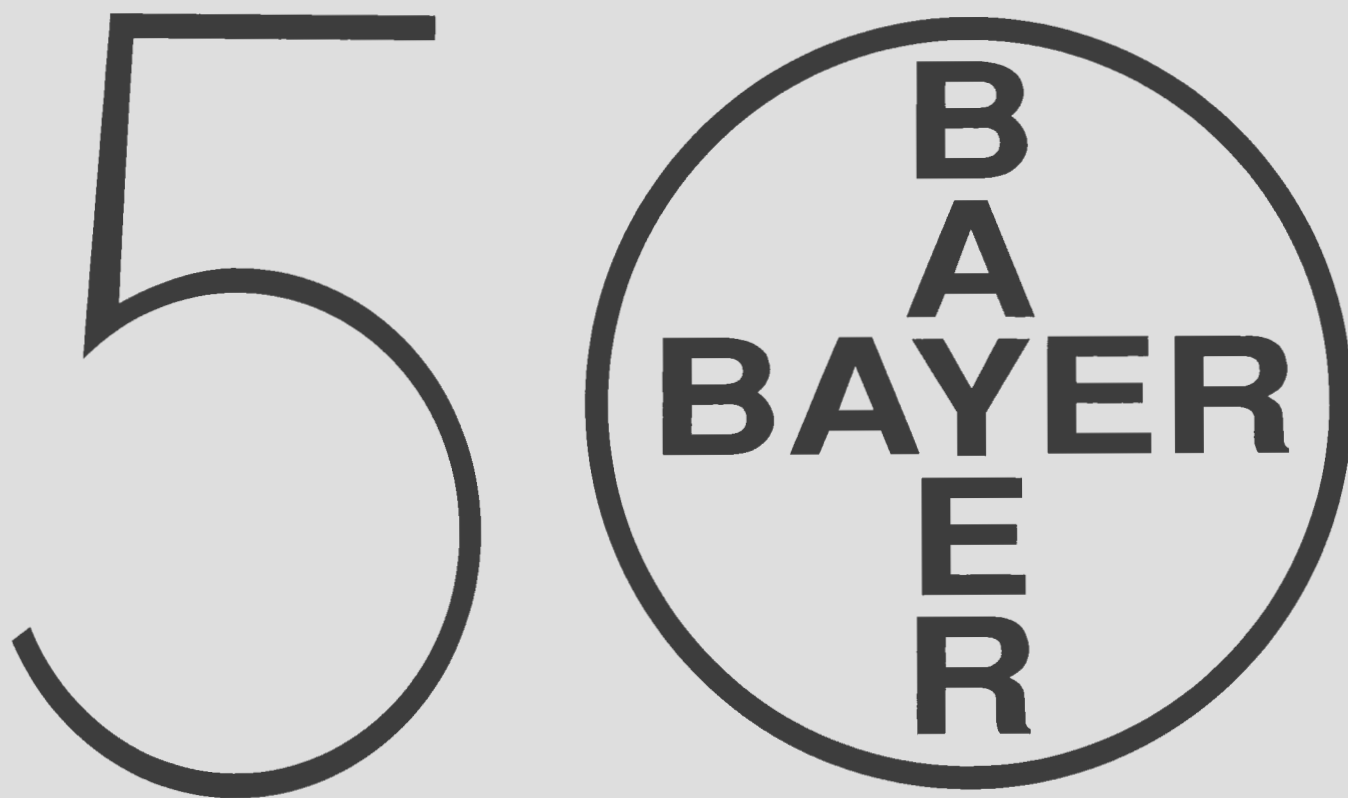
Training Consultant, Institute of Medical and Veterinary Science, Frome Road, ADELAIDE

830-1230 — Registration limited to 18

The regulations for transporting specimens by air are becoming stricter every year and you can now be prosecuted for non-compliance with International Air Transport Association (IATA) regulations.

Pathology Specimens by Air is a four-hour training course based on the IATA regulations for the shipment of infectious substances and dry ice by air. The course has been approved by the Civil Aviation Safety authority and has been specifically designed for medical and pathology industry personnel who ship specimens by air. Specifically, you will be taught how to check that a consignment of pathology specimens has been correctly classified, identified, packed, marked, labelled and documented in accordance with IATA regulations. The cost includes an extensive training manual and regular updates are sent to participants. A certificate will be issued on successful completion of the course.

Sandra Rajan is fully trained in dangerous goods acceptance and has five years experience sending specimens intrastate, interstate and overseas. Previously, *Pathology Specimens by Air* has been run successfully in South Australia and Queensland with participants from Australia, New Zealand and Fiji.



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WORKSHOP DETAILS

Parasitology

Andrew Butcher, Brian Westbrook & Katrina Yates

IMVS, Microbiology, Frome Road, ADELAIDE
0900-1600 Parts I & II — Registration limited to 40

This workshop will focus on human intestinal parasites encountered in routine diagnostic laboratories in Australia. It will be suitable for experienced parasitologists wishing to investigate new techniques and emerging new pathogens but at the same time the workshop will cover human intestinal protozoa followed by an afternoon session investigating helminth infections.

In the morning session we will focus on the technical aspects of the modified iron haematoxylin stain and its use in a routine laboratory for the detection of intestinal protozoa. The use of the stain in large and small laboratories will be discussed along with stain maintenance, quality control, safety and the finer technical points. The stain technique will be demonstrated and there will be the opportunity for hands on experience. A number of cases will be presented to demonstrate the morphological characteristic of intestinal protozoa in the modified iron haematoxylin stain.

In the afternoon session a variety of helminth infections will be presented and discussed. Each participant will be provided with a set of case slides or fixed faecal suspensions which will be viewed and discussed during both sessions.

Andrew Butcher has extensive experience in diagnostic parasitology both in Australia and Canada. Recent publications include *Cyclospora* in Australia and the first description of the intestinal fluke *Brachylaima* sp. in humans. Both of these organisms will be discussed during the workshop.

Innovations In Haemostasis

Chairpersons: Hatem Salem & John Lloyd

0900-1600 Parts I & II

The aim of this workshop is to present and discuss recent advances in haemostasis testing and treatment practice. This is one-day, dry workshop intended for laboratory staff and pathologists with either a general or specialised interest in haemostasis. Expert Australian speakers will cover a range of topics including genetic testing in haemophilia, diagnosis of thrombophilia and a review of new commercial products. Participation of the audience during discussion time will be encouraged to allow a wide exchange of views. The convenor is Liz Duncan, IMVS, who is organising the workshop as a joint presentation by AIMS, the Haematology Society of Australia and the Australian Society for Thrombosis and Haemostasis.

Basic Diagnostic PCR

Randall Saiki

Roche Molecular Systems

ALAMEDA USA

0900-1200

The polymerase chain reaction (PCR) is a simple in vitro DNA/RNA amplification procedure that can amplify a targeted nucleic acid sequence by many orders of magnitude. The selective enrichment provided by this technology greatly simplifies subsequent analytical procedures and has had a profound affect in almost all areas of biological investigation.

This workshop is intended for those who are unfamiliar with PCR or would like a refresher course. The session will focus on the fundamental principles of PCR as they are applied to non-commercial (home-brew) diagnostic assays. Topics to be covered include basic PCR mechanisms, laboratory set-up, the importance of contamination control, and quality control issues. An extensive discussion of PCR optimisation, including primer design, will familiarise participants with common failure modes and how to overcome them. Specimen preparation (pre-PCR) and product analysis (post-PCR) methods will be surveyed to introduce the wide variety of approaches available.

Finally, several PCR-based genetic and infectious disease assays will be examined as model systems.

Randall Saiki is a world leader in polymerase chain reaction (PCR) methodology and its application in the field of DNA-based diagnostics, particularly human genetic diseases. Randall holds seven patents in PCR technology and has written, or contributed to, five book chapters and numerous journal articles in the field of molecular biology.

Basic Biochemistry - Reviewing Results

Noel Walmsley

Specialist Chemical Pathologist

Clinical Laboratories, ADELAIDE

0900-1200

The aim of this workshop is to teach you how to review results before they are reported. The workshop is suitable for non-biochemists who wish to refresh their knowledge. Emphasis will be placed on identifying results that require urgent clinical intervention. Participants will be taught how to recognise disease patterns from requested laboratory tests and select results that provide additional information. The workshop continues the highly successful basic biochemistry workshop presented at the 1995 South Pacific Congress. Topics to be discussed include case histories involving acid-base/electrolyte disorders, liver function tests and calcium and carbohydrate metabolism.

Dr Noel Walmsley is co-author of *A Guide to Clinical Chemistry and Cases in Chemical Pathology*.

Advanced Diagnostic PCR

Randall Saiki

Roche Molecular Systems

ALAMEDA USA

1300-1600

Research laboratories worldwide continue to develop new techniques that employ the polymerase chain reaction (PCR) and many of these research applications are applicable to clinical diagnosis. This workshop will review some of those advances. The topics to be covered include RNA amplification (RT-PCR), amplification of fragments >10kb (XL-PCR), 3'-exonuclease assay (TaqMan), kinetic PCR, in situ PCR, DNA chips, and new thermostable polymerases for amplification and sequencing. Participants are encouraged to bring questions or problems specific to their area of interest to be discussed in the workshop.

Randall Saiki is a world leader in polymerase chain reaction (PCR) methodology and its application in the field of DNA-based diagnostics, particularly human genetic diseases. Randall holds seven patents in PCR technology and has written, or contributed to, five book chapters and numerous journal articles in the field of molecular biology.

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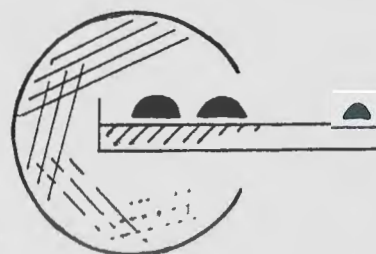
Liftout



Microbiology

Special Interest Group

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



Annual seminar 20th April 1996 in Rotorua

There were 104 registrants with 21 papers presented, with time at the end of the second session for questions and discussion topics.

Outlined below are the papers presented.

Gonococcal Surveillance. Mike Brokenshire, Starship Auckland.

A surveillance programme looking at specimens from the 4 main sexual health clinics in Auckland, processing 30,000 patients annually. The results showed the NZ trend over an 18 year period, which has proved to be consistent with international trends. Also described was the WHO Gonococcal Antimicrobial Surveillance Program which monitors antimicrobial resistance patterns on an international scale. The aim of this data gathering is so an effective treatment regime at global, national or regional levels can be implemented.

Immigration checks for parasites. Myra Humphrey, Auckland Hospital
Refugees entering New Zealand have three stool samples examined for ova cysts and parasites, the stools are cultured for enteric pathogens, and their urine samples are examined for bilharzia.

1256 stools were examined on non symptomatic refugees, 3.4% were positive for parasites. Comparison with randomly selected groups showed similar positivity rates, and post treatment 40% were still positive for parasites. Myra raised the topic "To test or not to test" and queried blanket treatment.

Mycobacterial Matters. Mary Carr, Wellington Hospital.

An update and progress report on Mycobacteria and the national guidelines currently being drawn up.

Faggots & Peas, Roast beef & Yorkshire Pudding. Roberta Henton, Waikato Hospital.
Interesting title! Roberta gave a comprehensive report on BSE, the clinical histories of recent cases in the UK and she described the debates in the medical literature. She also went into the epidemiology of Kuru, Scrapie BSE and CJD.

Supertron Trial. Katherine Snow, Diagnostic

Auckland.

The object of the trial was to compare the Supertron with the Miditron. 500 urine samples were put through both machines to compare and evaluate the results, efficiency and ease of learning. The results were presented.

Incidence of Antibiotic Resistance in gram negative bacilli from septicaemia and urinary isolates. Susan Maher, Rotorua Diagnostic.

Susan was involved in this trial while working in London and she presented some of the findings. The study involved 30 hospital laboratories from 21 different countries, each submitting 200 non copy isolates which had identification and susceptibility testing performed. The differing susceptibility patterns were presented.

Bordetella pertussis culture versus IgA Antibody. Alison Idema, Waikato Hospital.

Alison described the symptoms, epidemiology and recent incidences of *Bordetella pertussis* in New Zealand. She tabled the differences between culture, IgA and IgG antibody levels in the diagnosis of whooping cough.

The Life and times of "Strongyloides stercoralis". Jennifer Cassie and Jennifer Ferguson, Starship Auckland.

The life cycle and global incidence of *Strongyloides* was described by Jennifer Cassie and two case reports with hyperinfection syndrome were described by Jennifer Ferguson.

Eosinophilic Meningitis. Anne Benny, North Shore Hospital.

A case report of a Samoan woman who hadn't been out of New Zealand since 1970 presenting with a headache. The CSF had a high white count with 40% eosinophils. The clinicians said this was due to her ethnic origins, TB or a virus! The microbiology laboratory diagnosed it as a case of eosinophilic meningitis due to "*Angiostrongylus cantonensis*".

Norwegian Scabies. Neil Wood, MedLab Auckland.

A case report on a 25-year-old Tongan woman presenting with hyperkeratotic crusts over most of her body. She had large numbers of "*Sarcoptes scabiei*" mites estimated between 5 and 10 million. This differs from

ordinary scabies where the number of mites present is usually less than 10.

Actinomyces. Megan Smith, Canterbury Health.

A case study of a recent case in Canterbury, Megan outlined the laboratory diagnosis and included an overview of Actinomyces.

Legionella Roslyn Podmore, Canterbury Health.

Two recent studies over the last 4 years in Christchurch suggest that Legionellosis is a leading cause of pneumonia.

In the hospital acquired pneumonia studies, where an identifiable cause was found, 11% and 13% were attributed to Legionella of varying species. Roslyn also covered the laboratory diagnosis.

South Island Parasitology. Graham Paltridge, Canterbury Health.
(presented by Janet Wilson.)

A case study of a woman who had recently returned from Peru diagnosed with a case of cutaneous myiasis due to "*Dermatobia hominis*".

Janet Wilson. Southern Community Laboratories.

The second case was of a coughed up adult female *Ascaris lumbricoides*. The question was asked why are there so few *Ascaris* ova found in routine O&P examinations compared to adult *Ascaris* submitted to laboratories for identification?

Hep B or not Hep B. Rubee Yee, Hutt Hospital.

A discussion topic.

Nocardia. Michelle Dougherty, Med Lab Hamilton.

A case report of two recently isolated cases of *Nocardia*. The first from a non-healing leg ulcer and the second from an elbow wound. The difficulty of susceptibility testing was discussed plus the identification of *Nocardia* in a clinical laboratory.

Post operative complications. Della Smith, Greenlane Hospital.

A presentation of the history, life cycle and control of hydatid disease in New Zealand. A recent case report of a patient who underwent an aortic repair but after 2 weeks of complications had a laparotomy which showed 15-20 hydatid cysts. Microscopy on the tissue from theatre showed *Echinococcus* scoleces.

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Biosciences



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CDC Group EF4. Brett Guillard, Healthcare Hawkes Bay.
A case report from a patient with a dog bite which grew a CDC group EF4. The laboratory diagnosis was discussed in addition to commenting on the identification and differentiation of other CDC groups.

CO₂ dependent *Staph aureus* from CF patients. Sharon Wallace, Healthcare Hawkes Bay.
A discussion paper relating to the problem of obtaining reliable sensitivity results on a *Staph aureus* which was CO₂ dependent.

Erythromycin sensitivities to streptococci. Ruby Yee, Hutt Hospital.

This was a discussion topic asking if other laboratories had difficulty interpreting NCCLS guidelines when reading zone sizes of erythromycin to *Streptococci*.

Salmonella. Jackie Wright, ESR, Porirua
In 1994, Public Health Commission Officials estimated that foodborne illness cost New Zealand in excess of 50 million a year in 1991, and it's increasing!
The purpose of the ESR surveillance programme was outlined with laboratory methods of serotyping and phage typing being discussed.
The importance of collating the *Salmonella* data was outlined showing infection trends nationally and globally.

Standard of bulk supply media. Anne McCarthy, Starship Auckland.
A fairy story was told at the end of the day! With pretty pictures but an underlying message.

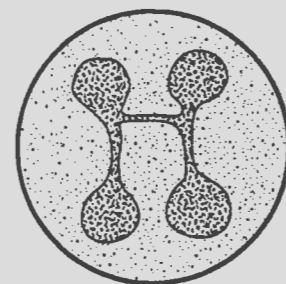
Questions regarding EIA testing for *Giardia* and *Cryptosporidium*. Mary Lorney.
***Haemophilus influenzae* and its isolation from urine samples in pre-pubertal girls.** Jo Matthews
A discussion topic.
The prize for the best presentation was awarded to Della Smith for her talk on Post Operative Complications.



Haematology

Special Interest Group

Convenor: Ross Anderson
c/o Diagnostic Laboratory,
Symonds Street,
AUCKLAND



HSIG would like to take this opportunity to farewell Kathryn Schollum and Marilyn Eales from HSIG. Both Marilyn and Kathryn were founding members of HSIG as it evolved from the Haematology Charge Technologist Group. We acknowledge their contribution to the Standardized Nomenclature And Reporting In Haematology handbook and the Blood Cell Morphology Transparency Set. As well as being circulated within New Zealand these haematological guides have been requested by laboratories throughout the Pacific Islands and as far as Med Lab Ghana. Kathryn and Marilyn have made significant contributions to the HSIG seminars which are held in Auckland each year and been a considerable force in shaping haematology through their work with AIT and Massey University. Kathryn has retired to a life of leisure and Marilyn is now manager of Laboratory Clinical Support Services at Middlemore Hospital and continuing her work with The Pacific Way.

We would like to remind haematology staff of the excellent Morphology and Malaria Workshops held by the RCPA. Linda Kape of Diagnostic Laboratory and Pip Anderson of Med Lab have just recently returned from a Malaria workshop and are now well versed in the use of Fields Stain for thick and thin films and parasite loading counts which are becoming very much a part of a routine haematology

laboratory. The next RCPA Morphology Workshop is the 2nd/3rd August. For further information contact QAP laboratory (612) 845 7038 Sydney.

In the present climate many Haematology departments have been reevaluating workflow with the introduction of computer algorithms to improve efficiency. This is one of the topics for discussion under Proffered Papers at the upcoming NZIMLS Scientific Meeting in August. An outline of the entire programme appears below.

Thursday 29th August Ellerslie Racecourse

0900-1000 Proffered Papers
Chairperson: John Peters

1030-1230 Haemophilia
Chairperson: Kerry Belton
Haemophilia management – Dr E Berry
Blood Products in haemophilia – Dr E Theakston
The role of the haemophilia centre – S Forde, Charge Nurse
Inhibitors a case history – C Bowering, Technologist
Molecular Genetic of haemophilia – Dr N Van de Water
Is it haemophilia – Mr A Day
Haemophilia, a costly business – Dr P Ockleford

1330-1520 Leukaemia
Chairperson: Mark Kilgour

1330-1400 Acute leukaemia
Dr L Teague

1400-1430 Bone Marrow Transplantation
Haematologist

1430-1450 Cell Markers
Jan Nelson, Technologist

1450-1510 Cytochemistry
K Kelly, Technologist

1510-1520 Case history
P Franklin

1600-1710 Lymphoproliferative Malignancies
Chairperson: Bernard Chambers

1600-1630 Multiple Myeloma
Dr H Blacklock

1630-1700 Lymphoproliferative Disorders
Dr R Henderson

1700-1720 Case Histories
J Williams, Technologist
A Bunker, Technologist

Looking forward to seeing you at conference.



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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



You will note from the list above that Sue Baird has moved back to her home town in the deep south. Her place at Rotorua is being filled by Raewyn Clark. This is only one of many changes to Blood Banking people in the last year. Judith Palea'ae has moved from Wanganui to Ashburton – also following the southward migration trend. Would the last one out of the North Island please unplug the power cable!

Continuing Education Opportunity – Clinical Update

With the demise of the Transfusion Medicine Audio Updates we have been looking for a continuing education programme to replace them.

One opportunity which is available is from the University of South Australia. Called "Clinical Update", this is a series of 22 one-hour lectures on videotape at a cost of Aus\$300. The series begins on 2 July, and videotapes are mailed two each week, about a week after each lecture. Subjects covered include: legislative requirements, current best practice, red cell antigens, transfusion in critical care, transfusion ethics, HLA antigens, automation, adverse reactions, platelet transfusion, neonatal transfusion, autologous transfusion and special blood products.

At the end of the course, those who satisfactorily complete written answers to set study questions covering the whole lecture series will receive a certificate of achievement. This is a one-off opportunity, as different disciplines are featured each year.

You can get information about this programme directly from Dr Flower at the School of Pharmacy and Medical Sciences, University of South Australia, North Terrace, Adelaide. Sue Baird is planning to get the course, so perhaps she will be able to tell us a bit more about it later.

Continuing Education Opportunity – Quality and Blood Transfusion

Gerry Heta (North Shore Hospital Blood Bank), Bob Coleman (Auckland Regional Blood Service) and Diane Whitehead (Christchurch Hospital Transfusion Medicine) attended the "Quality and Blood Transfusion" seminar in Melbourne during May. A selection of the presentations are available on computer disc. I believe you need PowerPoint to access the slides, but if you are interested, contact Gerry or Diane for more information. There is no charge for the information, but please cover the cost of the disc itself.

Abbott Users Group Meeting

Report from Bronwyn Kendrick, Donation Accreditation Section, Palmerston North Hospital:

I attended an Abbott User Group Meeting in Auckland on 28 May 1996 for a demonstration of the Total Processing Centre – the latest upgrade of our current Commander system which performs anti-HIV, anti-HCV and Hepatitis B ELISA assays.

The system was demonstrated by David Ackeroyd and Nicole Higgie. It allows total traceability of the operators' steps throughout the entire assay. All operators have a unique barcoded identification card which is input at each step. Every reagent is entered into the computer system upon arrival of a new batch of kits. No errors can then occur with the use of a wrong reagent because of the computer barcode checking. This will also alert the operator to an expired reagent. All reagents have barcoded positions to prevent incorrectly positioned reagents. Incubation times are monitored by

a computer link-up to the dynamic incubators – any time over the allowed time limit will void the assay in progress.

This system should be foolproof and will comply with GMP expectations. Human operator error should no longer occur.

A general discussion followed to allow the interchange of problem solving for all Abbott users. Some subjects discussed were:

Water contamination problems are nationwide and have been resolved by autoclaving water supplies. A new machine enzyme detergent available now in New Zealand was discussed.

Intermittent contamination of some assay wells was resolved by a participant who suggested wiping the tray tops prior to OPD addition.

Hepatitis C lookback talk by Andrew Mills from Waikato

Declining HCV positive control values, due to contaminated conjugate dispenser. Washing with acid resolved this problem.

Out of hours service report.

Commander PPC and FPC reliability data June 95 to May 96 and the mean time between service calls.

Thank you to Abbott for arranging and funding this useful meeting.



Histology

Special Interest Group

Convenor: Elaine Mullins
Contract Address: C/o
Pathology, Taranaki Base
Hospital, Private Bag, New
Plymouth
Phone: 06 7536139 Ext 7874
Fax: 06 7532956

As you can see, we now have our own logo, thanks to Bill Croasdale from Hutt Hospital.

By now registrations for the 1996 HSIg seminar in Christchurch should have been completed. Any inquiries to Robyn

George at Christchurch Hospital, please.

The seminar on Saturday the 5th of October promises to be well worthwhile with a number of papers to be presented.

Please also consider any items

concerning HSIg matters for discussion, for the business part of the program, and let me know these prior to the meeting. My fax number of 06 753 7713, or phone 06 753 7764.

See you in Christchurch!



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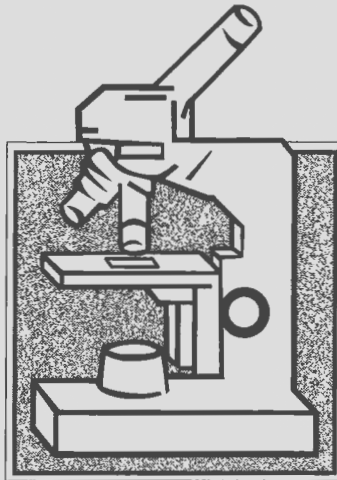
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JC Mann, Honorary Executive Officer

As you no doubt are aware, the Palmerston North Hospital Pathology department has now been "Privatised" which means we can no longer use that address for mail coming to Colvin or myself on Trust Board business.

Accordingly, the address for this will have to be:

c/- C.H. Campbell

282 Railway Road

R.D. 10

PALMERSTON NORTH

Quality Award goes to Healthcare

Greater demands for efficiency have given impetus to the introduction of Quality Improvement concepts into a number of Healthcare organisations. As a result, at the New Zealand Organisation for Quality Conference recently, recognition was given to **Maureen Whineray** for her work in **researching ways to reduce the number of patients not turning up for appointments in a large hospital's Outpatients Clinics**, as part of her Post Graduate Diploma in Quality Assurance.

Missed appointments are a major problem because they are a social and financial cost. Failure rates have been reported as high as fifty-two percent. The research led to trialling interventions to reduce missed appointments and approaches taken to get staff to recognise there was a problem, to guide them towards taking ownership, and solving it.

The findings were presented at the 1995 NZOQ Conference, published in 'Quality New Zealand' and requested for publication in the Australasian Association for Quality in Healthcare Newsletter.

The 1996 Carter Holt Harvey Quality Award was given to Mrs Whineray for the project mentioned. The award is for the best practical paper demonstrating successful quality improvement interventions published in the New Zealand Organisation for Quality publications in the previous 12 months.

Maureen Whineray has worked, most recently, as Quality Manager for the Mercy Hospital, Auckland, and prior to that, as Quality Manager for Wairarapa Health based at the Masterton Hospital. As part of her role she has facilitated into these organisations, Quality Improvement Programmes with the focus on Customer Service, using consultation and training to convert quality 'words' in action, and to help bring about significant behavioural and operational change.

Maureen is now an *independent* Quality Action Adviser in Healthcare, and will be facilitating **KiwiHost in the Health Environment** later this year. **KiwiHost in the Health Environment** is a customer service training course customised to the Health Professional's experience. Maureen describes this one-day course as "the first step in the Quality Improvement process" for any healthcare provider. She is also a course leader for New Zealand Organisation for Quality's 'Introduction to Quality in Health Care', a practical, 'How to'

course which offers understanding and skills to make Quality Action a reality.

KiwiHost has been the customer service training course used by a number of health providers over the past few years, including, most recently, the Dunedin CHE, Otago RHA, Christchurch, Nelson and Hutt Valley Health.

Maureen Whineray can be contacted by phoning **KiwiHost** on (09) 412 8486, or (09) 479 4432.

This press release has been provided by **KiwiHost – Kay Bazzard**, 74 Awa Road, RD 1, KUMEU, and enquiries should be directed to either of the two telephone numbers above.

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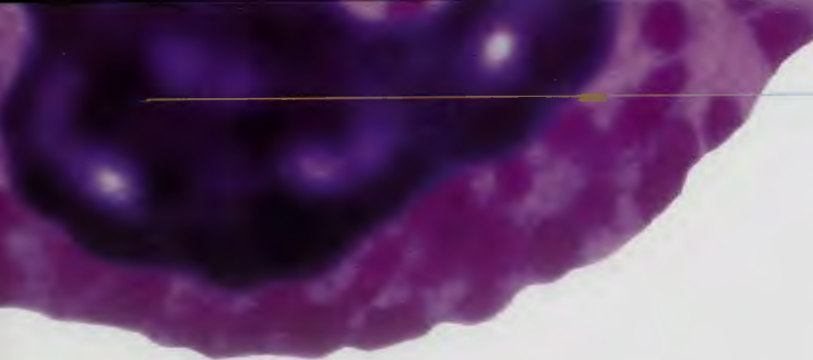
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