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MEDICAL LABORATORY SCIENCE



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NEW ZEALAND INSTITUTE OF MEDICAL
LABORATORY SCIENCE INCORPORATED

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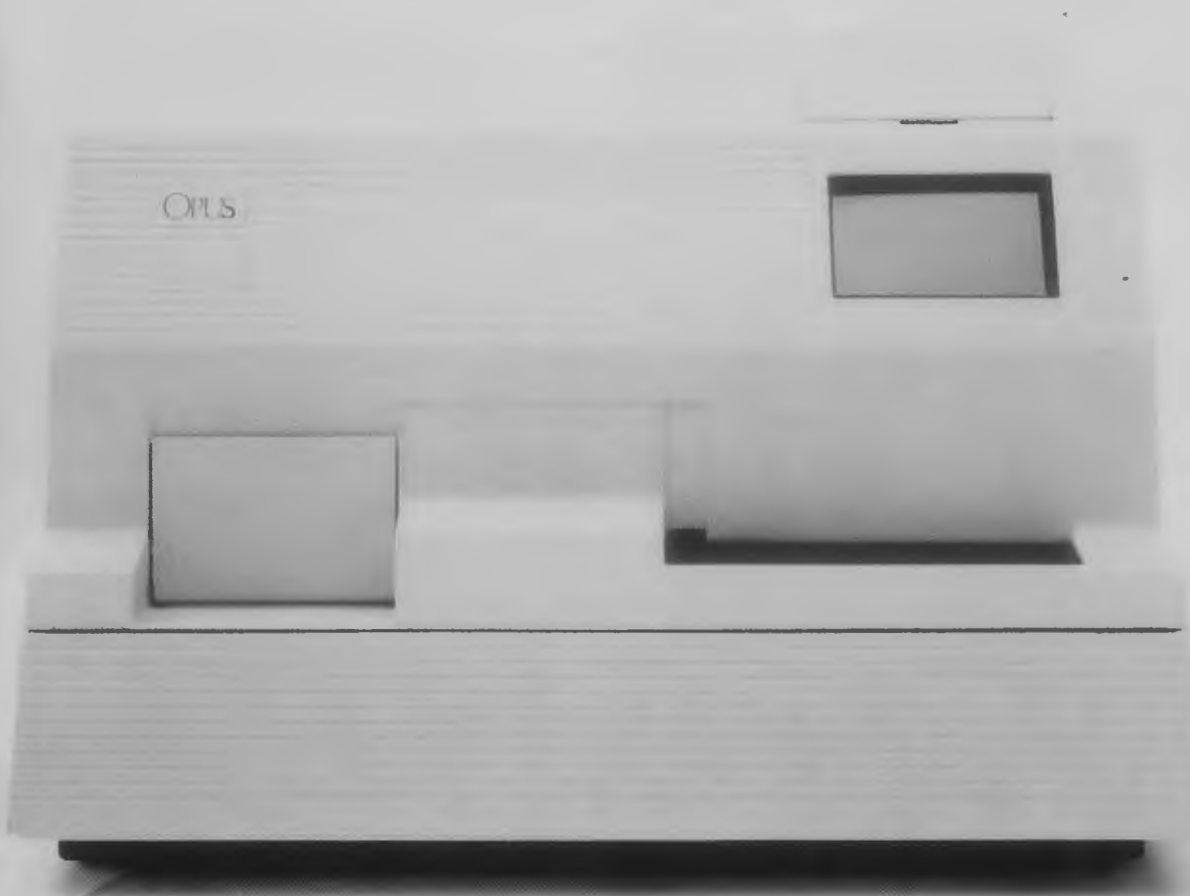
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DIRECTIONS FOR CONTRIBUTORS

From Vol. 36 No. 1 all papers published will be in the form known as "Vancouver Style" or Uniform Requirements for Manuscripts submitted to Biomedical Journals. Full details may be found in the New Zealand Journal of Medical Laboratory Technology, Vol. 42 No. 2, page 54 to 60 or from the Editor.

Intending contributors should submit their material to the Editor, M. Gillies, Microbiology Laboratory, Princess Mary Hospital, Auckland, New Zealand, or the Editor, P.O. Box 9095, Newmarket, Auckland, New Zealand. Acceptance is at the discretion of the Editor, and no undertaking is given that any article will be published in a particular issue. The copy deadline for each issue is the first of the month prior to the month of publication.

ADVERTISER INQUIRIES

Inquiries regarding advertising rates and copy or blocks for advertising should be addressed to the Advertising Manager, Trish Reilly, M.N.Z.I.M.L.S., 48 Towai St, St Heliers, Auckland 5, Phone 555-057.

DATES OF PUBLICATION

The months of publication for 1991 are March, May, August and November.

This Journal is abstracted by: Biological Abstracts, Chemical Abstracts, Cumulative Index to Nursing & Allied Health Literature, Current Clinical Chemistry, Hospital Abstracts, Institutnautchnoi informatsii.

Contributions to the Journal do not necessarily reflect the views of the Editor, nor the policy of the Council of the Institute.



3RD SOUTH PACIFIC CONGRESS ON MEDICAL LABORATORY SCIENCE



Programme Summary

Tuesday 27 August

- *Immuno-haematology workshop on Issues concerning Autologous and Designated Donor Transfusions, Compatibility Testing and Immuno-haematologic Tests in the Diagnosis of Autoimmune Haemolytic Anaemia* — Dr Lawrence Petz.
- *Workshop on Identification of Medically Important Saprophytic Fungi.*
- NZIMLS Annual General Meeting (afternoon — Kupe Room).
- Wine and Cheese Icebreaker (evening).

Wednesday 28 August

- South Pacific Congress on Medical Laboratory Science — Opening Ceremony and Address.
- *Evolution of M.L.T. in Developing Countries* (Monica Cheesbrough).
- General Forum on *Medical Ethics*.
- Concurrent Fora
 - : Biochemistry
 - : Haematology/Society of Haematology (Dr Ken Bradstock, Dr Helen Heslop).
 - : Immunology
 - : Microbiology
 - : South Pacific Forum
- Evening Meal and entertainment — NZ Expo Centre.

Thursday 29 August

- Plenary Session — *AIDS* — Prof. D. Sutherland (WHO), Prof. Ron Penny.
- Concurrent Fora
 - : Haematology/Soc. Haematology
 - : Immunology
 - : Immuno-haematology
 - : Biochemistry (Dr Garth Cooper)
 - : Education (Peter Bruhn)
 - : Microbiology
 - : Histopathology
- Conference Dinner.

Friday 30 August

- Plenary Session — *Recombinant DNA Technology* — Dr Tom Gillis.
- Multidisciplinary Session on Applications of DNA Diagnostics.
- South Pacific Forum.
- Concurrent Fora
 - : Microbiology
 - : Biochemistry
 - : Immuno-haematology (Dr Lawrence Petz)
 - : Haematology/Soc. Haematology (Dr Max Wolf, Dr Sally Kinsey)
 - : Management
 - : Immunology (Special Interest Group Harbour Cruise)
- Closing Ceremony.

HARBOUR CRUISE

The Auckland members of the Immunology Special Interest Group (ISIG) are arranging, under the auspices of the NZIMLS, a "Floating Seminar" on Friday 30 August 1991. 1030 to 1500 hours, as part of the programme for the South Pacific Congress.

Come and see our beautiful Waitemata harbour, meet your colleagues involved in immunodiagnosis from New Zealand and overseas, and have the opportunity to discuss matters of common interest.

Lunch and refreshments will be provided. You may know of others who would be interested in the seminar. They will be very welcome. There will be a charge of \$25.00 per head.

As numbers are limited, please could you fill in the form below, detach and send to me as soon as possible.

FLOATING SEMINAR

Friday 30 August 1991 1030 - 1500 hours

Name:

Numbers of persons attending:

I enclose \$ (\$25.00 per person)

Return to: Gillian McLeay — ISIG Convener,
c/o Laboratory Training Centre, Building 18,
Auckland Hospital, Park Road, AUCKLAND.

PROGRAMME OVERVIEW — WEDNESDAY 28 AUGUST 1991							
	0830-1015		1100-1230		1330-1500		1530-1700
ASB THEATRE	0830-0900 Registration 0900-0945 Maori Welcome 0945-1015 Opening Address	MORNING TEA	-	LUNCH	-	AFTERNOON TEA	-
KUPE ROOM	-		1100-1145 Evolution of M.L.T. in Dev. Countries M. Cheesbrough 1145-1230 Overview of Medical Ethics Pauline Kingi		GENERAL FORUM Medical Ethics Carol Whitfield Dr Sharon Kletchko Dr Freddie Graham		SYMPOSIUM Malignancy Dr Bruce Baguley Dr Vernon Harvey Dr Graham Finlay (BIOCHEMISTRY)
HAURAKI ROOM	-		-		BAYER DIAGNOSTICS FREE COMMUNICATION (HAEMATOLOGY)		SYMPOSIUM Antiphospholipid Antibody Syndrome (IMMUNOLOGY)
KAIKOURA ROOM	-		-		ORAL PRESENTATIONS Changing Patterns (MICROBIOLOGY)		ORAL PRESENTATIONS Changing Patterns (MICROBIOLOGY)
GOODMAN-FIELDER-WATTIE ROOM	-		LEUKAEMIA AND BLOOD FOUNDATION FORUM Novel Therapies for Leukaemia (SOC. HAEMATOLOGY)		SYMPOSIUM Chronic Lymphocytic Leukaemia towards the year 2000 (HAEMATOLOGY)		FREE COMMUNICATION (SOC. HAEMATOLOGY)
AEPB ROOM	-		-		-		SYMPOSIUM The Pacific Way of Teaching (SOUTH PACIFIC)

1715 — 1815 Roche Chemistry Analysers Users Group.
Evening Meal and Entertainment — NZ Expo Centre.

PROGRAMME OVERVIEW — THURSDAY 29 AUGUST 1991							
	0830-1015		1100-1230		1330-1500		1530-1700
ASB THEATRE	-		-		-		-
KUPE ROOM	PLENARY SESSION AIDS Prof. D. Sutherland Prof. Ron Penny Dr Mark Thomas		BOEHRINGER MANNHEIM SYMPOSIUM Diabetes Dr Garth Cooper Dr Bob Elliott Dr David Scott (BIOCHEMISTRY)		SYMPOSIUM On Job Assessment Peter Bruhn Andrew Thakurdas (EDUCATION)		SYMPOSIUM AIDS Prof. D. Sutherland (IMMUNOLOGY)
HAURAKI ROOM	-	MORNING TEA	ORAL PRESENTATIONS Non Bacterial Pathogens (MICROBIOLOGY)	LUNCH	ABBOTT DIAGNOSTICS SYMPOSIUM Mucosal Immunity and Allergic Response (IMMUNOLOGY)	AFTERNOON TEA	-
KAIKOURA ROOM	CONTINUING EDUCATION Diagnosis, Classification and Biology of Leukaemia (HAEMATOLOGY) (SOC. HAEMATOLOGY)		CONTINUING EDUCATION Diagnosis, Classification and Biology of Leukaemia (HAEMATOLOGY) (SOC. HAEMATOLOGY)		CONTINUING EDUCATION Diagnosis, Classification and Biology of Leukaemia (HAEMATOLOGY) (SOC. HAEMATOLOGY)		CONTINUING EDUCATION Diagnosis Classification and Biology of Leukaemia (HAEMATOLOGY) (SOC. HAEMATOLOGY)
GOODMAN-FIELDER-WATTIE ROOM	(HISTOPATHOLOGY)		SYMPOSIUM Practical Transfusion (IMMUNOHAEMATOLOGY)		ORAL PRESENTATIONS General Papers (IMMUNOHAEMATOLOGY)		ORAL PRESENTATIONS General Papers (IMMUNOHAEMATOLOGY)
AEPB ROOM	-		SYMPOSIUM Comparison of Training Systems Peter Bruhn Andrew Thakurdas Dr Colin Watt (EDUCATION)		-		-

1700 — 1800 Immunohaematology Poster Session Guided Tour.

Evening — Conference Dinner, Kupe Room, Aotea Centre.

PROGRAMME OVERVIEW — FRIDAY 30 AUGUST 1991							
	0830-1015		1100-1230		1330-1500		1530-1700
ASB THEATRE	-	MORNING TEA	-	LUNCH	-	AFTERNOON TEA	-
KUPE ROOM	PLENARY SESSION Recombinant DNA Technology — An Overview Dr Tom Gillis		SYMPOSIUM DNA Diagnostics — Applications (MULTIDISCIPLINARY)		SYMPOSIUM DNA Diagnostics — <i>Mycobacterium leprae</i> (MICROBIOLOGY)		CLOSING CEREMONY Details to be Advised
HAURAKI ROOM	-		ORAL PRESENTATIONS (BIOCHEMISTRY)		SYMPOSIUM Immune Disorders Dr Lawrie Petz (IMMUNOHAEMATOLOGY) (HAEMATOLOGY) (SOC. HAEMATOLOGY)		-
KAIKOURA ROOM	BRISTOL MYERS SQUIBB SYMPOSIUM New Approaches to the Management of Lymphoma (SOC. HAEMATOLOGY)		ORAL PRESENTATIONS Bone Marrow Transplantation — the patient without a donor (SOC. HAEMATOLOGY)		SYMPOSIUM Coping With Change Martien Kilderman (MANAGEMENT)		-
GOODMAN-FIELDER-WATTIE ROOM	CHRISTINE ELLIS MEMORIAL HAEMOSTASIS FORUM Haemostasis 0800-1030h (HAEMATOLOGY)		SYMPOSIUM Appropriate Technology — the Pacific Way (SOUTH PACIFIC)		SYMPOSIUM Appropriate Technology — the Pacific Way (SOUTH PACIFIC)		-
AEPB ROOM	BIOTEK SYMPOSIUM Haemolytic Anaemias (HAEMATOLOGY)		FREE COMMUNICATION (HAEMATOLOGY)		FREE COMMUNICATION Haemostasis (HAEMATOLOGY)		-

OVERSEAS GUEST SPEAKERS — PERSONAL PROFILES —

DR THOMAS P. GILLIS

Dr Gillis received the B.S. degree in Biology from Indiana State University in 1971 and the M.S. and Ph.D. (1978) degrees in Microbiology from Louisiana State University Medical Centre in New Orleans, LA. His graduate work was directed at understanding basic immunologic mechanisms operative during chronic bacterial infections.

Upon completion of his graduate training, Dr Gillis was awarded a three year fellowship from the Victor-Heiser Foundation for Leprosy Research to continue his studies at the University of Washington, Seattle WA, in the area of humoral and cellular immune responses in leprosy. This work led to the discovery of *M.leprae* specific epitopes on *M.leprae* protein antigens as defined by monoclonal antibodies.

Dr Gillis has been working in the area of chronic mycobacterial infections for 13 years and is now employed by the U.S. Public Health Service at the National Hansen's Disease Centre in Carville, LA, studying the pathogenesis of leprosy, including the host's immunologic response to *Mycobacterium leprae*.



Dr Thomas P. Gillis

DR SALLY KINSEY

A Senior Registrar in Haematology at the University College Hospital and the Hospital for Sick Children, London, England, Dr Kinsey is a graduate of Liverpool University Medical School.

Her Haematology interests include:

- Bone Marrow Transplants in Adults and Children.
- Infection problems of the immunocompromised host.
- Coagulation abnormalities during neutropenia, particularly contact system activation in relation to infection and ARDS/multiple organ failure.

DR GARTH COOPER

Garth's background includes both Medical Technology and Chemical Pathology training in New Zealand.

He left New Zealand to study at Oxford, where he continued to work into the pathogenesis of diabetes, elucidating the structure and function of *Amylin*, a compound antagonising the action of insulin.

Garth is now based in San Diego, where he is the Chief Scientific Officer for the Amylin Corporation.



Dr Sally Kinsey

PROFESSOR RON PENNY

As the Clinical Director of the Clinical Immunology Unit, St Vincents Hospital, Sydney, Australia, Professor Penny is well experienced in all aspects of AIDS. His interests in immunology are extensive and include Immune Deficiency States, Complement, Allergic Problems and Cellular Immune Responses.

PROFESSOR DAVID SUTHERLAND

Professor Sutherland is the Clinical Director of the Hunter Immunology Unit, Department of Pathology, The Royal Newcastle Hospital, N.S.W. Australia and is responsible for one of the largest acute inpatient AIDS units in Australia. He is heavily involved in planning the response to the epidemic at the state level and was recently appointed WHO consultant to the Global Program on AIDS in Asia and the Pacific. Professor Sutherland is well known as a very lucid, and at times provocative, speaker.

DR HELEN HESLOP

Dr Heslop is Senior Research Fellow in the Department of Haematology/Oncology, St Jude Children's Research Hospital, Memphis, Tennessee. A graduate of the University of Otago Medical School, Dr Heslop trained in Haematology at Christchurch Hospital and since that time has worked in clinical and experimental haematology, initially at the Royal Free Hospital School of Medicine, London, and now at St Jude Hospital. Her research and clinical interests include:

1. The role of cytokines in the treatment of haematological malignancies.
2. Bone marrow transplantation.
3. Cytokines and the regulation of haemopoiesis.



Dr Garth Cooper

DR LAWRENCE PETZ

Presently Director of Transfusion Medicine at the UCLA Medical Centre in Los Angeles USA, Dr Petz is a well respected authority on auto-antibody mediated anaemias.

The book he co-authored with George Garrity, "*Acquired Immune Hemolytic Anemias*" is considered the reference text for autoimmune investigation.

DR KEN BRADSTOCK

Dr Bradstock is Senior Staff Specialist in Haematology, and Head of the Bone Marrow Transplant Unit at Westmead Hospital, Sydney, Australia.

His Clinical Research interests include:

1. Bone marrow transplantation, particularly autologous and the use of marrow purging techniques.
2. Peripheral blood stem cell autotransplants.
3. Monoclonal antibody therapy in haematological malignancies.

Laboratory Research interests revolve around factors regulating proliferation of acute lymphoblastic leukaemia, and characterisation of leukaemias with monoclonal antibodies.

MR PETER BRUHN

Mr Peter Bruhn is currently Manager, Curriculum Development (Technical and Further Education) at the Royal Melbourne Institute of Technology, Victoria, Australia. Peter has undergraduate qualifications in Applied Science, as well as post graduate qualifications in Educational Technology. He is in his final semester of postgraduate studies in publishing.

Peter has worked as a medical technologist in medical research and in clinical and diagnostic pathology. Having held a senior position in the laboratory, he is well acquainted with the education and training needs of medical laboratory personnel.

Exchanging the laboratory for a classroom in 1978, Peter became a lecturer and educational media producer at the Lincoln Institute of Health Sciences, Melbourne. In 1982 he joined RMIT and since that time has worked as an instructional designer, curriculum specialist and education and training consultant to Higher Education, TAFE, the secondary sector and to industry. He has been a major contributor to the development of the Associate Diploma in Applied Science (Medical Laboratory) and other Applied Science courses at RMIT.

Peter's current areas of interest include: Problem solving/ problem-based learning; games and simulations; instructional strategies and methods; interactive media; student assessment; student learning; science and mathematics education; publishing.

Peter is married (his wife Tonia is a Principal Nurse Educator), with two children. Although New Zealand and Australia are close geographically, this is Peter's first trip to New Zealand.

MONICA CHEESBROUGH

Monica is a fellow of the UK Institute of Medical Laboratory Sciences. Since 1968 she has been actively involved in laboratory services and training in tropical Africa of laboratory and health workers for district hospitals and rural health clinics. In 1979-1980 she evaluated laboratory practice and training requirements in India, South-East Asia, Papua New Guinea, Solomon Islands and Fiji as part of an ODA project. Monica has participated in World Health Organisation meetings concerned with laboratory services and training in developing countries, appropriate technology and the strengthening of district health systems.

In 1982, Monica formed *Tropical Health Technology*, a non-profit organisation to promote the sharing and transfer of appropriate medical laboratory technology to developing

countries and to design and distribute equipment for use in district laboratories, such as the solar powered Tropical Medicine Microscope. She has written and published several laboratory training manuals and more recently produced a range of training aids and slides to help those working in overseas laboratories. These are also distributed with a range of other tropical medicine and laboratory publications at low cost through Tropical Health Technology.

Monica continues to write and travel extensively. She is currently involved with WHO and health officials in Nigeria in establishing laboratory support for primary health care.

Monica's presence at the Congress will enable all those interested in the problems of Pacific Island laboratories to share their experiences with her. As Monica says "it is only by sharing our knowledge and resources with another that the vision of the World Health Organisation, to bring health and care to all by the year 2000 will become a reality".

DR MAX WOLF

Dr Max Wolf is a staff Specialist in Haematology and Oncology at the Peter MacCallum Cancer Institute, Melbourne, Australia. Dr Wolf is an active member of the Australian-New Zealand Lymphoma Study Group. His research interests include therapeutic trials for Lymphoma and Leukaemia.



Mr Peter Bruhn



Monica Cheesbrough

— LIST OF ABSTRACTS RECEIVED TO DATE (BY DISCIPLINE) —

PLEASE NOTE: This is not yet a complete list of Abstracts for the Congress. We are still awaiting abstracts from some confirmed presentations.

BIOCHEMISTRY

Speaker	Format	Country	Title	Abstract #
Finlay Dr G.	Oral	NZ	Control of Cell Growth and its deregulation in neoplastic disease	BC1
Baguley Dr B.	Oral	NZ	The scientific basis of Cancer chemotherapy	BC2
Harvey Dr V.	Oral	NZ	Management of Patients with Cancer in New Zealand	BC3
Cooper Dr G.	Oral	USA	Amylin, Insulin resistance and diabetes mellitus	BC4
Reilly D.	Oral	NZ	An Evaluation of the Fructosamine Assay on the Technicon Chem 1 Analyser	BC5
Watson F.	Oral	Aus	TSH — A good model for Immunoassay Commutability	BC6

EDUCATION/MANAGEMENT

Speaker	Format	Country	Title	Abstract #
Thakurdas A.	Oral	NZ	Quality Assurance and Accreditation	EM1
Thakurdas A.	Oral	NZ	Accreditation and Training	EM2
Harrison K.	Oral	Aus	Responsibilities of Authors and Editors	EM3
Douglass G.	Oral	Aus	Does leader behaviour of hospital laboratory managers effect unit outcomes?	EM4
Bruhn P.	Oral	Aus	Exploring the options: Future directions for the Education and Training of Medical Laboratory Scientists and Technicians	EM5
Bruhn P.	Oral	Aus	Developing Competency in the workplace: On the Job assessment of Medical Laboratory Science trainees	EM6
Watts Dr C.	Oral	NZ	A University Education in Medical Laboratory Science. The Otago Model	EM7
Kelderman M.	Oral	NZ	Coping with Change	EM8

HAEMATOLOGY

Speaker	Format	Country	Title	Abstract #
Crowe D.	Oral	Aus	Is microscopy alive and well today?	HM1
Matthews B.	Oral	Aus	A Case of Pyropoikilocytosis	HM2
McVeigh D.	Oral	Aus	Influence of Microcytes on Platelet counts from Four Haematology analysers	HM3
Smith J.	Oral	Aus	A Review of the Royal College of Pathologists of Australasia Quality Assurance Programme in Haematology	HM4
Peterson D.	Oral	NZ	Acute fatty liver of Pregnancy	HM5
Rockman S.	Oral	Aus	CD56 — Clinical relevance as defined by flow cytometry	HM6
Bowlen C.	Oral	Aus	Iron depletion in non-anaemic women	HM7
Balloch A.	Oral	Aus	Haematology reference ranges in Pregnancy derived from stored patient data	HM8
Elms M.	Oral	Aus	Prothrombin fragment 1 + 2	HM9
Hanlin H.	Oral	Aus	Two reliable methods for the detection of terminal deoxynucleotidal transferase (TdT)	HM10
O'Malley C.	Oral	Aus	A case of an inhibitor to Protein C	HM11
O'Malley C.	Oral	Aus	The simultaneous Quantitation of total and free Protein S by ELISA	HM12
Rutherford J.	Oral	NZ	New mutation in Codon 22 of α Spectrin is associated with structurally and functionally abnormal α Spectrin (SP α I/74 in Hereditary Elliptocytosis	HM13
Kershaw G.	Oral	Aus	A computerised algorithm for handling the output of modern Full Blood Count analysers	HM14
Kelly K.	Oral	NZ	Initial Performance Studies of Plasminogen Activator Inhibitor Kit	HM15
Madgwick J.	Oral	NZ	Haemostasis Screening in patients presenting with Gastro-Intestinal Bleeding	HM16
Bluck R.	Oral	NZ	Clinical Evaluation of an Erythropoietin Assay (ELISA) as an ancillary diagnostic test for Polycythaemic Patients in South Auckland	HM17
Allen J.	Oral	Aus	Cryohaemolysis: A New Diagnostic Test for the detection of Hereditary Spherocytosis	HM18
Johnston A.	Oral	Aus	Evaluation of an RIA Erythropoietin Assay	HM19
Glogoski L.	Oral	NZ	Transient myeloproliferative syndrome in a baby with Trisomy 21	HM20
Blacklock Dr H.	Oral	NZ	Thalassaemia and other Haemoglobinopathies in South Auckland — Clinical Implications of Recent Migration Patterns	HM21
Stunzner H.	Oral	NZ	A case of precipitating Haemoglobin	HM22

Speaker	Format	Country	Title	Abstract #
Siebers R.	Poster	NZ	Haematologic parameters in borderline hypertensive men	HM30
Grispo L.	Poster	Aus	Development of a simple ELISA based collagen binding assay permits sensitive discrimination between Type I and Type II Von Willebrand's Disease	HM31
IllesMann J.	Poster	Aus	Abnormal scatterplots on Coulter STKS: Relationship to Clinical abnormality	HM32
Grispo L.	Poster	Aus	Evaluation and comparison of Coagulation Quality Control plasmas	HM33
Coleman R.	Poster	Aus	An evaluation of the Sysmex R-3000 Reticulocyte Counter, and its Usefulness in predicting Bone Marrow Regeneration	HM34
Pegler I.	Poster	Aus	Fixed white cells for use in a secondary standard on whole blood analysers	HM35
Seeley D.	Poster	Aus	Comparative evaluation of 3 heterophile antibody tests in the diagnosis of Infectious Mononucleosis	HM36
Allen J.	Poster	Aus	Evaluation of the Cobas Argos 5-Diff Haematology Analyser	HM37

HISTOPATHOLOGY

Speaker	Format	Country	Title	Abstract #
Chew S.	Oral	Aus	The use of Ultrasound in Immunoperoxidase staining	HP1

IMMUNOHAEMATOLOGY

Speaker	Format	Country	Title	Abstract #
Stern D.	Oral	Aus	HDNB associated with anti-BLO	IH1
McLoughlin K.	Oral	NZ	Chimerism — a twin dilemma	IH2
Culverwell E.	Oral	NZ	Cell separators: An evaluation of current New Zealand practice	IH3
Carter R.	Oral	Aus	Experience with direct flow cytometric measurement of Platelet associated Immunoglobulin	IH4
Rimmer L.	Oral	NZ	QC ing Hemocues	IH5
Dunstan Dr R.	Oral	Aus	The use of acid treatment to eliminate HLA Class I antigens from neutrophils	IH6
MacDonald B.	Oral	Aus	The estimation of Ferritin levels in Brisbane blood donors	IH7
Henry S.	Oral	NZ	Analysis of Polynesian Lewis Glycolipids. New Evidence for the Se ^W Gene	IH8
Petz Dr L.	Oral	US	Blood Transfusion in Autoimmune Hemolytic Anaemia	IH9
Petz Dr L.	Oral	US	Pathophysiology and Laboratory Diagnosis of Acquired Hemolytic Anemias	IH10
Petz Dr L.	Oral	US	Conceptual Approaches to the Management of Immune Cytopenias	IH11
Petz Dr L.	Oral	US	Immune Haemolysis associated with Transplantation	IH12
Dent A.	Oral	NZ	A Six Month Experience with the Polyethylene Glycol Indirect Antiglobulin Technique	IH13
Pinder L.	Oral	NZ	Chimera — A twin dilemma Part II	IH14
Wilson W.	Oral	NZ	Auto ID in Blood Management System	IH15
Stern D.	Poster	Aus	The first Australian case of an unpublished Miltenberger Class	IH30
Stern D.	Poster	Aus	A comparison of commercial Monoclonal Anti-D reagents	IH31
Thakurdas A.	Poster	NZ	Australasian Hepatitis Marker Testing Quality Control Programme	IH32
Thakurdas A.	Poster	NZ	Coagulation Testing Quality Control Programme	IH33
Ball S.	Poster	Aus	An assessment of monoclonal anti-A, anti-B and Anti-A,B/A+B as reagents for routine use	IH34
Phillips A.	Poster	Aus	Evaluation of Olympus PK7100 over twelve months	IH35
Khull S.	Poster	NZ	Automated Blood Grouping Systems — One Buyer's perspective	IH36

IMMUNOLOGY

Speaker	Format	Country	Title	Abstract #
Siebers R.	Oral	NZ	Attitudes and concerns regarding HIV specimen handling. A survey of the Wellington Area Health Board Laboratory Staff	IM1
Thakurdas A.	Poster	NZ	Serology, Immunology Quality Control Programme	IM30
King Dr M.	Poster	Aus	Monitoring circulating B cells in patients with Multiple Myeloma at diagnosis or in Plateau Phase. How prevalent is Light Chain Isotope Suppression?	IM31

MICROBIOLOGY

Speaker	Format	Country	Title	Abstract #
Bricknell A.	Oral	NZ	One year's experience with routine use of Bactec TB system in a Clinical Microbiology Laboratory	MB1
Oakes A.	Oral	Aus	Development of the McDonnell Douglas Clinical Laboratory Information System (CLIMS) within a Diagnostic Microbiology Laboratory	MB2
Wright J.	Oral	NZ	Non-01 <i>Vibrio cholerae</i> in the Eastern Bay of Plenty	MB3
Wright J.	Oral	NZ	Cryptococcal Septic Arthritis — A case report	MB4
Wright J.	Oral	NZ	Unusual Pseudomonads in clinical disease: Two case reports	MB5
Gharavi Dr M.	Oral	Iran	Determining the prevalence of Parasites in Vegetables by using various isolation techniques	MB6
Gharavi Dr M.	Oral	Iran	Isolation of <i>Toxoplasma gondii</i> from domestic birds	MB7
Paterson A.	Oral	NZ	The incidence of <i>Helicobacter pylori</i> in Non ulcer Dyspepsia: A Dunedin study	MB8
Craighead L.	Oral	NZ	The carriage of Giardia by sheep, cattle, hares, possums and ducks: A Preliminary Study	MB9
Kohnamouii Dr	Oral	Iran	Laboratory Diagnosis of <i>Pneumocystis carinii</i>	MB10
Kahnamouii Dr	Oral	Iran	Comparative study of two tests: Indirect haemagglutination test and Indirect Fluorescent Antibody test for Detection of <i>Toxoplasma gondii</i> antibodies ...	MB11
Mitchell J.	Oral	NZ	Paperless Microbiology	MB12
Weekes K.	Oral	Aus	The Diagnostic Use of the Polymerase Chain Reaction (PCR) for the detection of <i>Mycobacterium tuberculosis</i>	MB13
Cornere B.	Oral	NZ	Nosocomial strains of Antibiotic Resistant <i>Staphylococcus epidermidis</i> in a Cardiac Surgery Unit	MB14
Koroivueta Dr J.	Oral	NZ	Teicoplanin and Enterococcal Endocarditis	MB15
Van-de-Water Dr N.	Oral	NZ	Application of DNA Technology to Haemophilia in New Zealand	MB16
Lal V.	Poster	Fiji	The sensitivity of Urine samples compared to Urethral Swabs for the detection of <i>Chlamydia trachomatis</i> Infection in Males by Enzyme-Immunoassay (Chlamydiazyme)	MB30
Ghazi F.	Poster	Iran	Maltase activity in <i>Ustilago violacea</i>	MB31

NEW ZEALAND SOCIETY FOR HAEMATOLOGY

Speaker	Format	Country	Title	Abstract #
Inglis M.	Oral	NZ	Detection and analysis of EBV and HTLV-1 genomes in human lymphoproliferative disease	SH1
Nimmo J.	Oral	NZ	Flow Cytometric characterisation of Leukaemic cells	SH2
Morison Dr I.	Oral	NZ	Ph negative, M-bcr rearrangement negative chronic myeloid leukaemia: A Case report	SH3
Belton K.	Oral	NZ	Blood Group Type in Von Willebrand's Disease (vWD)	SH4
Thula Dr R.	Oral	NZ	Is Electron Microscopy helpful?	SH5
Finlay Dr G.	Oral	NZ	Oncogenes	SH6
Nelson J.	Oral	NZ	Clonality in Haematological Malignancies — Application of X-Chromosome Linked Probes	SH7
Nelson J.	Oral	NZ	The role of Immunophenotyping in the Diagnosis of Acute Leukaemia	SH8
Ward Dr C.	Oral	NZ	HIV related Lymphomas — An emerging problem	SH9
Kinsey Dr S.	Oral	UK	Autologous Bone Marrow Transplantation for Leukaemia — The UCH and EBMT Experience	SH10
Bradstock Dr K.	Oral	Aus	Peripheral Blood Stem Cell Autografts in Leukaemia	SH11
Bradstock Dr K.	Oral	Aus	The New Immunotherapy: The Role of Monoclonal Antibodies in the Treatment of Haematological Malignancies	SH12
Bradstock Dr K.	Oral	Aus	Diagnosis and Biology of Acute Mixed Leukaemias	SH13
Henderson R.	Oral	NZ	Acute Promyelocytic Leukaemia and the t(15:17) Translocation	SH14
Browett Dr P.	Oral	NZ	The Philadelphia Chromosome — From Cytogenetics to Oncogenes	SH15
Van de Water N.	Oral	NZ	The Tools of the New Genetics	SH16
Browett Dr P.	Oral	NZ	The Immunoglobulin and T Cell Receptor Genes: Application to the Diagnosis of Leukaemia	SH17
Belton K.	Oral	NZ	vWF:Ag Estimation by Latex Agglutination	SH18
Ockleford Dr P.	Oral	NZ	LMW Heparinoid in Thromboprophylaxis for Cancer Surgery	SH19
Hart Dr D.	Oral	NZ	Current Concepts in Chronic Lymphatic Leukaemia	SH20
Browett Dr P.	Oral	NZ	Differentiation Inducing Agents: Modulation of the Growth and Development of Leukaemic Cells	SH12
Royle Dr G.	Oral	NZ	Tumour Suppressor Genes and Leukaemia	SH22
Royle Dr G.	Oral	NZ	The Re-Emergence of Cytogenetics	SH23
Crosier Dr K.	Oral	NZ	Manipulating Blood Cell Growth	SH24

Speaker	Format	Country	Title	Abstract #
Matthews Dr J.	Oral	NZ	The FAB Classification	SH25
Palmer Dr S.	Oral	NZ	Mismatched Bone Marrow Transplant and Matched Unrelated Transplant	SH26
Hart Dr D.	Oral	NZ	Cellular Protein Profiles of the Hodgkin's Disease Cell Lines suggest a unique haemopoietic (Dentritic Cell?) Origin	SH27
Heslop Dr H.	Oral	NZ	Effect of Alpha Interferon on Autocrine Growth Factor Loops in B-Lymphoproliferative Disorders	SH28
Kinsey Dr S.	Oral	UK	Autologous BMT for Lymphoma	SH29

SOUTH PACIFIC FORUM

Speaker	Format	Country	Title	Abstract #
Cheesbrough M.	Oral	UK	Evolution of Medical Laboratory Technology in Developing Countries	SP1

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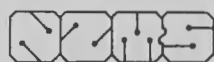


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FELLOWSHIP COMMITTEE

Members of the Committee are: J. Le Grice (Convener), K. McLaughlin, H. Potter.

Jacqueline M. Wright from the Laboratory at the Whakatane Hospital was admitted as a Fellow to the NZIMLS for passing the Fellowship Examination in Microbiology. In doing so, she has proved that the Institute's highest academic qualification is not necessarily the domain of those in large centralised laboratories.

Interest in Fellowship is steady although very few continue right through to present for the qualification.

CONTINUING EDUCATION COMMITTEE

Dennis Reilly (Convener).

Without doubt the Special Interest Groups have been a success. They are still in an embryonic stage but already they have made a significant contribution to our Continuing Education during the past year.

SIGs were set up to enhance the overall knowledge of technologists and assistants, and to advise Council on matters pertaining to their discipline.

Many SIGs have a network of technologists throughout the country who are working together to improve Continuing Education, by staging workshops and Journal Clubs.

Two workshops were held during the year, Paediatric Biochemistry, and Nosocomial Acquired Infections.

The funding of SIGs comes out of members subscriptions, the policy being that, Registration fees be kept to a minimum to ensure that as many as possible may attend.

Special thanks go to the SIG members who have given their time freely so that all Institute members will benefit.

OVERSEAS AID COMMITTEE

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

During the 1990-91 year the committee has concentrated on acting as a liaison between the Institute and the P.P.T.C.

Financial aid has been in the form of the donation of an Elisa plate reader and of a contribution toward the cost of running of the Pacific Island Quality Assurance Programme.

Because of its involvement in the Q.A. Programme the centre has now been designated as a collaborating centre of the World Health Organisation.

Once again the committee acknowledges with thanks the many individual members who have supported the P.P.T.C. during the year.

PUBLICATIONS COMMITTEE

Maree Gillies (Convener).

There were 19 papers proffered for publication in 1990. The majority (10) were from the Auckland Region but there were a pleasing number from other major centres and the smaller rural areas. The South Island was poorly represented — perhaps 1991 will reverse this situation.

In 1989 there were 9 papers proffered, 17 in 1988, 14 in 1987 and 13 in 1986. The increase in 1990 was a welcome sight to your new Editor and I would like to think that the continued support of the membership will give an equally pleasing report at the end of 1991.

I would like to appeal to all those presenting papers at Regional Seminars and the National Conference to consider submitting your work for publication. Oral presentations are heard by a few, but a Journal article is available to all members as a permanent record.

I would like to record my thanks to the previous Editor, Dennis Dixon Mclver, for his help in the transition period, to Trish Reilly the Advertising Manager, to Maurice Sheppard of Institute Press and the Royal NZ Foundation for the Blind for their continued assistance and support.

MEMBERSHIP COMMITTEE

Geoff Rimmer (Convener).

Total membership of the Institute has been maintained. A purge for non-payment is due which will remove approximately 120 giving a total paid-up membership of just over 1200.

This year the membership category names were changed, Associate becoming Member and Member, Associate. In the table the numbers for previous years have been renamed as well to maintain comparability.

A major project for the coming year will be the transfer of membership records to our Executive Officer.

	1990/91	89/90	88/89	87/88	86/87
Membership from previous year	1709	1709	1465	1536	1792
Less deletions	547	547	87	340	454
	1315	1162	1378	1196	1338
Plus applications	95	153	331	269	198
Membership as at 31st March	1331	1315	1709	1465	1536
Membership Composition:					
Life Members	17	17	17	16	14
Fellows	22	23	29	30	39
Members	725	688	781	752	785
Associates	476	503	741	579	625
Complimentary					
Member	—	—	43	123	168
Non-practising					
Members	61	53	68	58	55
Honorary					
Members	30	31	30	30	18

EDUCATION COMMITTEE

Anne Paterson (Convener).

FORMAL EDUCATION

The formal education and training of future Medical Laboratory Technologists has not yet been clarified.

The various options

- National Diploma Medical Laboratory Technology (AIT) (N.D.M.L.T.) (CIT)
- Bachelor of Medical Laboratory Science (Otago) (B.M.L.Sc.) (Massey)

are still being considered under **BOTH** the academic and funding processes.

Updates are and will continue to be published in the *Institute News*.

EXAMINATIONS

Specialist Certificate Examination:

The Specialist examinations have been administered by Council for the past year and a half. Through the motion passed at the 1990 AGM, Council, as the examination administrator, has (re)set the following criteria:

1. Closing date for application to sit — 31 May annually.
2. Withdrawal from the exam closing date — 14 June annually. Fees will be refunded minus \$20 administration fee, for withdrawals prior to 14 June.
3. No refund of fees will be given after 14 June if a candidate withdraws.
4. The aegrotat pass facility will not be available. On submission of a medical certificate, the candidate has the options of:
 - i. 50% refund or
 - ii. rolling fees over to following year.

Applications for this must be received within 7 days of the examination.

In 1990, there were 40 candidates in the following subjects:

Discipline	No. of Candidates	No. of Passes
Clinical Biochemistry	7	3
Cytogenetics	1	1
Haematology	11	7
Histology	5	3
Immunology	3	2
Medical Cytology	3	3
Microbiology	10	5

At the time of writing, the closing date for Specialist Level 1991 has not passed.

Qualified Technical Assistants Examinations:

Candidates have applied to sit QTA as follows:

Clinical Biochemistry	12
General	4
Haematology	18
Histology	5
Immunohaematology	4
Immunology	3
Medical Cytology	15
Microbiology	22
Museum Technology	1
Radioisotopes & Radioassay Technique	1

The results are not yet available.

AWARDS COMMITTEE

Anne Paterson (Convener).

Awards for the top examination candidates are given on the following criteria:

1. Membership of the NZIMLS.
2. The grade achieved is B+ or better.

The current values of the awards are set at:

- Specialist Level \$200
- Certificate Level \$100
- QTA \$100
- Journal Awards \$200

Our sincere thanks and appreciation go to the following companies for their generous support of our profession in these difficult economic times:

- Amersham Australia Pty Limited
- Biotek Supplies
- Hoechst (NZ) Limited
- Intermed Scientific Limited
- Life Technologies Limited
- Organon Technica/General Diagnostic
- Pacific Diagnostics
- Roche Products (NZ) Limited
- Sci Med (NZ) Limited
- Watson Victor Limited
- Biolab Scientific

Thanks also go to the New Zealand Blood Foundation who have sponsored QTA Haematology and Immunohaematology for many years and are continuing to do so.

There will be several new sponsors at this year's Award Ceremony within the AGM. We can confirm the following new sponsors to whom we are grateful for their recognition and sponsorship of our profession:

- Bayer Diagnostics Limited
- Medlab South Limited
- Scientific Supplies

A completely new award will be offered for the first time at this year's conference:

- The Boehringer-Mannheim Biochemistry Travel Award

All authors presenting Biochemistry papers at the NZIMLS Annual Scientific Meeting will be eligible for this award.

TREASURER'S REPORT

The past financial year has ended with a deficit of \$324. During the year, the Institute has bought several major capital items, employed an Executive Assistant and made a substantial donation to the Para Pacific Training Centre.

Subscription income is down as expected due to a 15% reduction in membership fees. Membership files are now held on our own computer, maintained by the Membership Convenor and has resulted in a saving of \$6,641. The Executive Officer will soon take over this responsibility.

The Newsletter, a new feature this year, has increased Journal Expenditure, but has improved communication and is an effective way of keeping everyone up to date.

The PPTC benefited by a donation of \$6,020 which was used to purchase a tray reader for their training laboratory.

This certainly has been an exceptional year for expenditure, but it is pleasing to finish the year with such a small deficit.

D.M. Reilly
HONORARY TREASURER

NEW ZEALAND INSTITUTE OF MEDICAL LABORATORY SCIENCE INC. CONFERENCE ACCOUNT FOR THE YEAR ENDED 31 MARCH 1991

	1991 \$	1990 \$
INCOME FOR THE YEAR WAS DERIVED FROM:		
Registration	11,448	14,437
Trade rentals, advertising and donations	22,998	23,962
Social functions and lunches	11,920	13,583
Bank interest	691	—
Other income	1,575	1,145
	48,632	53,127
FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MET:		
Advertising	1,023	—
Travel, accommodation and meals	7,940	11,383
Social function costs	20,887	15,467
Rentals	2,069	2,320
Postage, stationery and administration	6,738	4,623
Other expenditure	3,723	5,289
	42,380	39,082
TOTAL EXPENDITURE	42,380	39,082
Which leaves an excess of income over expenditure transferred to the Statement of Income and Expenditure	\$6,252	\$14,045

The attached notes form part of this Statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED 31 MARCH 1991**

	1991 \$	1990 \$
INCOME FOR THE YEAR WAS DERIVED FROM:		
Conference surplus (as per statement)	6,252	14,045
Examination surplus (as per statement)	9,065	11,358
Interest received	7,274	3,482
Miscellaneous income	4,580	3,916
Subscriptions and levy	64,828	81,029
Refunds	851	8,834
Donations	1,500	1,300
TOTAL INCOME	94,350	123,964
FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MET:		
Accommodation, etc	8,486	6,855
Accountancy, and audit fee	3,000	3,000
Computer services	565	7,206
Fees — IAML	2,926	2,787
Honoraria, gratuities and prizes	5,231	1,800
Journal cost (as per statement)	20,142	10,497
Secretarial fees	2,115	—
Post Graduate Education and Pacific Training	2,247	1,050
Postage and tolls	6,749	2,801
Printing, stationery and typing	8,809	2,565
Sundry expenses	7,685	9,216
Travelling expenses	17,862	12,540
Depreciation	2,837	1,151
TOTAL EXPENDITURE FOR YEAR	88,654	61,468
Excess of Income over Expenditure	5,696	62,496
Gift to NZ Medical Laboratory Trust	—	13,431
Donation to PPTC	6,020	—
Surplus/(Deficit) for the year	\$(324)	\$49,065

The attached notes form part of this Statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
STATEMENT OF FINANCIAL POSITION
AS AT 31 MARCH 1991**

	1991 \$	1990 \$
ACCUMULATED FUNDS		
Balance 1 April 1990	85,560	36,495
Surplus/(Deficit) for the year	(324)	49,065
Balance at 31 March 1991	<u>\$85,236</u>	<u>\$85,560</u>
Represented by:		
CURRENT ASSETS		
Cash at bank	68,141	92,486
Sundry debtors	7,277	9,637
GST	2,661	(1,403)
TOTAL CURRENT ASSETS	<u>78,079</u>	<u>100,720</u>
LESS CURRENT LIABILITIES		
Sundry Creditors	23,037	23,125
Examination Fees in Advance	4,980	20,196
South Pacific Congress Registration Fee and Deposits in Advance	4,257	—
TOTAL CURRENT LIABILITIES	<u>32,274</u>	<u>43,321</u>
NET CURRENT ASSETS	45,805	57,399
INVESTMENTS (Note 2)	20,000	20,000
FIXED ASSETS (Note 3)	19,431	8,161
	<u>\$85,236</u>	<u>\$85,560</u>

Treasurer — D.M. Reilly

President — P. McLeod

The attached notes form part of this Statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
JOURNAL ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1991**

	1991 \$	1990 \$
INCOME FOR THE YEAR WAS DERIVED FROM:		
Advertising revenue	22,676	28,989
Subscriptions	1,592	1,762
IAMLT Newsletter	4,721	—
TOTAL INCOME	28,989	30,751
FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MET:		
Printing — journal and newsletter	38,224	32,493
Postage and stationery	6,469	5,046
Sundry expenses	4,438	3,709
TOTAL EXPENDITURE	49,131	41,248
Which leaves an excess of expenditure over income transferred to the Statement of Income and Expenditure	\$20,142	\$10,497

The attached notes form part of this Statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
EXAMINATION ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1991**

	1991 \$	1990 \$
INCOME WAS DERIVED FROM:		
Examination enrolments	21,608	14,347
Interest	1,534	341
	23,142	14,688
FROM THIS INCOME THE FOLLOWING EXPENDITURE WAS MADE:		
Examiners fees	5,254	1,545
Withholding Tax	1,820	445
Printing and stationery	285	604
Secretarial fee	6,345	—
Sundry expenses	373	736
	14,077	3,330
Which leaves an excess of expenditure over income transferred to the Statement of Income and Expenditure	\$9,065	\$11,358

The attached notes form part of this Statement.

**NEW ZEALAND INSTITUTE OF
MEDICAL LABORATORY SCIENCE INC.
NOTES TO THE 1991 FINANCIAL STATEMENTS**

1. STATEMENT OF ACCOUNTING POLICIES

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

Particular accounting policies:

(a) Fixed assets and depreciation

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

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

2. INVESTMENTS

Term Investment

National Mutual Finance \$20,000 @ 13.0% matures on 21/08/1991.

3. FIXED ASSETS

	Cost	Accumulated Depreciation	Net Book Value
Office Equipment	10,449	4,991	5,458
Computer Equipment	15,068	2,644	12,424
Office Furniture	1,632	83	1,549
31 March 1991	<u>\$27,149</u>	<u>\$7,718</u>	<u>\$19,431</u>
31 March 1990	<u>\$13,042</u>	<u>\$4,881</u>	<u>\$8,161</u>

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

We have audited the financial statements on pages 1 to 5 in accordance with accepted auditing standards and have carried out such procedures as we considered necessary.

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

The institute has not provided a Statement of Cash Flows in accordance with Statement of Standard Accounting Practice No. 10 issued by New Zealand Society of Accountants.

Except for the omission of a Statement of Cash Flows and the possible effect of the limited control over income referred to in the preceding paragraphs, in our opinion the financial statements give, using the historical cost method, a true and fair view of the financial position of the Institute as at 31 March 1991 and the results of its activities for the year ended on that date.

1 July, 1991.
MANUKAU CITY, NZ.

Deloitte Ross Tohmatsu
CHARTERED ACCOUNTANTS



3RD SOUTH PACIFIC CONGRESS ON MEDICAL LABORATORY SCIENCE



ABSTRACTS FROM OVERSEAS GUEST SPEAKERS

IMMUNE HAEMOLYSIS ASSOCIATED WITH TRANSPLANTATION.

IH12

Lawrence D. Petz, M.D.

University of California, Los Angeles, California, U.S.A.

Immune haemolysis may occur following bone marrow transplantation (BMT) when there is blood group incompatibility between the donor and recipient, especially when it is within the ABO blood group system. With a major ABO blood group mismatch (e.g., group A donor and group O recipient), haemolysis may occur at the time of infusion of the donor marrow product or may occur as the newly engrafted marrow produces RBC of the incompatible type.

Haemolysis following minor ABO mismatched transplants (e.g., group O donor and group A recipient) is particularly significant and occurs as a result of production of antibody by lymphocytes in the donor marrow ("passenger lymphocyte syndrome"), usually in patients receiving cyclosporine for post-BMT prophylaxis of graft-versus-host disease. Haemolysis typically begins near the end of the first week following BMT, is usually acute in onset, and may be severe with haemoglobinemia, haemoglobinuria and a marked fall in haematocrit. Haemolysis has been particularly severe in patients transplanted with marrow from unrelated donors. In addition, the haemolysis of transfused group O RBC has been observed in this setting, apparently as a result of "bystander haemolysis."

CONCEPTUAL APPROACHES TO THE MANAGEMENT OF IMMUNE CYTOPENIAS.

IH11

Lawrence D. Petz, M.D.

University of California, Los Angeles, California, U.S.A.

The two principle modes of therapy in immune cytopenias involve decreasing the amount of antibody available for reaction with the target cells or decreasing the rate of destruction of cells effected by the antibody. Several methods of doing each of these are available and successful therapy often results from the application of more than one such method. A decrease in antibody production can be effected either by decreasing the number of antibody-producing cells or by altering the control mechanisms which regulate antibody production. Corticosteroid drugs reduce IgG antibody production but have less effect on IgM production. Immunosuppressive chemotherapy may be effective but is associated with a tendency to increase the incidence of leukemia after chronic administration. Removal of antibody by plasmapheresis is only effective if antibody production does not immediately replace antibody that is removed. Methods for the diminution of destructive processes include splenectomy and down-regulation of immunoprotein receptor function. The latter may be accomplished by modification by drugs, modification of the receptor by alternative occupancy or immunologic down-regulation.

PATHOPHYSIOLOGY AND LABORATORY DIAGNOSIS OF ACQUIRED HAEMOLYTIC ANEMIAS.

IH10

Lawrence D. Petz, M.D.

University of California, Los Angeles, California, U.S.A.

Red blood cells can be destroyed by activation of the complement system leading to intravascular haemolysis, by cellular mechanisms leading to extravascular haemolysis, or by a combination of these mechanisms. There are two pathways by which the complement system may be activated, the classical and alternative pathways. Some antibodies and most immune complexes are capable of activating the classical complement cascade which leads to formation of a transmembrane channel resulting in disruption of the cell. Fundamental to cell-mediated destruction of RBC is immune adherence, the process by which the phagocytic or destructive cell is attached to the target cell. Consequences of immune adherence include phagocytosis and antibody-dependent cellular cytotoxicity.

Warm antibody AIHA, cold agglutinin syndrome and paroxysmal cold haemoglobinuria are distinguished by use of monospecific antiglobulin reagents and characterisation of the responsible antibody. Diagnosis of drug-induced immune haemolytic anemias involves recognition of "drug-dependent antibodies" and/or drug-induced autoantibodies and may require the use of drug metabolites.

BLOOD TRANSFUSION IN AUTOIMMUNE HAEMOLYTIC ANEMIA.

IH9

Lawrence D. Petz, M.D.

University of California, Los Angeles, California, U.S.A.

Indications for transfusion in patients with autoimmune haemolytic anemia (AIHA) must be carefully considered because of unique risks. The autoantibody often complicates the compatibility test and may make it difficult to detect co-existing alloantibodies thereby increasing the risk of an alloantibody-induced haemolytic transfusion reaction. Secondly, the autoantibody itself may cause marked shortening of the survival of donor red cells.

The selection of donor units frequently requires the use of special serologic procedures for red cell typing and especially for alloantibody detection. In warm antibody AIHA, the warm autoabsorption and homologous absorption procedures are the methods of choice for detecting alloantibodies in the presence of autoantibodies. Clinically important autoantibody specificity may be determined using a small panel of phenotyped RBC. In the cold agglutinin syndrome, compatibility testing strictly at 37°C without using potentiating media usually suffices. An "in vivo compatibility test" has limited value in selection of donor units. The volume of blood transfused should be minimised so that one avoids increasing the amount of haemolysis due to an increased RBC mass.

DIAGNOSIS AND BIOLOGY OF ACUTE MIXED LEUKAEMIAS.**SH13****Ken Bradstock**

Haematology Department, Westmead Hospital, NSW, Australia.

Acute leukaemias showing evidence of lineage infidelity (expression of differentiation markers characteristic of another haemopoietic lineage) are an increasingly recognised entity. Among several hundred cases of acute leukaemia tested in our laboratory, expression of the myeloid differentiation antigens CD-11b, CD-13, and CD-33 was detected on 5-11% of cases of precursor-B a11. In AML, expression of the "lymphoid" markers CD-7 and TdT was commonly seen, (28% and 22% of cases). A subgroup of AML cases had more extensive evidence of lineage infidelity, with expression of other lymphoid surface antigens (CD-2, CD-10, and CD-19). Proposed mechanisms include abnormalities in the structure of regulation of genes coding for key lineage markers, and amplification of rare progenitor cells with "cross-lineage" features ("lineage promiscuity"). In recent studies of cases of CD-2⁺ AML, no evidence of amplification or structural abnormality in the CD-2 gene was seen, suggesting that the second explanation is more likely. The clinical significance of lineage infidelity remains uncertain. Reports of myeloid antigen-positive ALL vary widely, ranging from no independent prognostic significance to a major adverse factor in both paediatric and adult patients. Lymphoid antigen expression in AML is of dubious clinical significance, although cases with extensive lymphoid antigen expression appear to have a poor outlook. Further improvement in understanding of this phenomenon depends on (a) basic studies of the molecular mechanisms (b) phenotyping in large clinical trials.

THE NEW IMMUNOTHERAPY: THE ROLE OF MONOCLONAL ANTIBODIES IN THE TREATMENT OF HAEMATOLOGICAL MALIGNANCIES.**SH12****Ken Bradstock**

Haematology Department, Westmead Hospital, NSW, Australia.

Monoclonal antibodies (Mabs) directed at surface membrane differentiation antigens on tumour cells offer an attractive method of targeting specific therapy to a variety of malignancies, including leukaemias and lymphomas. Although none are tumour specific, certain Mabs can nevertheless be effectively directed at malignant cells by virtue of tight restriction of antigen expression to limited maturation stages in normal cell development. Numerous formidable technological obstacles have limited progress, but recent advances allow some cause for optimism. In vivo therapy with Mabs activating host cytotoxic mechanisms (complement lysis, ADCC, anti-idiotypic pathways) has demonstrated some efficacy in lymphoid neoplasms, particularly the "humanised" CAMPATH-1 antibody (CD-52). Data on the in vivo use at Westmead Hospital of 2 murine Mabs, WM-63 (CD-48) and WM-66 (unclustered panleucocyte) in CLL will be presented. The use of Mabs coupled with toxic molecules (radio-isotopes, drugs, biological toxins) is under active investigation. Clinical responses to radio-iodinated Mabs in B lymphoma have been documented, and encouraging results with CD-19 and CD-22 Mabs conjugated with ricin have been reported in a variety of B cell malignancies. Data will be presented on the production of ricin conjugates with Mabs directed at myeloid leukaemia antigens, for potential clinical use in AML and CML.

PERIPHERAL BLOOD STEM CELL AUTOGRAFTS IN LEUKAEMIA.**SH11****Ken Bradstock and Christopher Juttner, on behalf of Australian PBSCT Group.**

Haematology Department, Westmead Hospital, NSW, Australia.

Following the observation that large numbers of haemopoietic progenitor cells circulate in the blood of AML patients recovering from induction chemotherapy, peripheral blood stem cells (PBSC) have been used for autotransplantation for a variety of malignant diseases. Advantages of PBSC rescue as opposed to bone marrow cells include avoidance of general anaesthesia for collection, faster engraftment, availability in patients with marrow infiltration or prior pelvic radiotherapy, and potentially lower contamination with clonogenic tumour cells. We have conducted a pilot study of PBSC autotransplantation in early first remission of AML to determine the effectiveness of collection of progenitor cells, the pattern of engraftment, and antileukaemic effect of the procedure. Adult AML patients received standard induction chemotherapy, and PBSC collected by leukaphoresis during recovery phase in early first remission. After one course of consolidation therapy, patients received high dose Busulphan and Cyclophosphamide, followed by infusion of cryopreserved PBSC. Data on 35 patients treated on this protocol will be presented.

EXPLORING THE OPTIONS: FUTURE DIRECTIONS FOR THE EDUCATION AND TRAINING OF MEDICAL LABORATORY SCIENTISTS AND TECHNICIANS.**EM5****Mr Peter Bruhn** (Manager, Curriculum Development-TAFE, RMIT) and **Mr Bruce Watson** (Head, Department of Health Sciences, School of Information and Health Sciences, RMIT).

This paper will explore the trends in education and training from selected countries which, if implemented, offer the greatest potential for knowledge acquisition and the development of technical/management skills by medical laboratory science trainees and graduates.

Initiatives which appear to offer the most benefits are:

1. Innovative curriculum development processes which incorporate one or more of the following features: the new teaching/learning technologies, competency-based training, workplace (on-the-job) assessment, research into student learning, alternative instructional strategies, course structures and course delivery modes.
2. Cooperative learning ventures between educational institutions and the employers.
3. A greater emphasis on post-graduate continuing professional education.

This paper will also address the apparent decline, observable in Australia and elsewhere, in the numbers of students undertaking science-based subjects at secondary and tertiary level. This trend has significant implications for educators in the way they select students and design courses.

A brief discussion on establishing mechanisms to compare educational programmes between countries is included.

DEVELOPING COMPETENCY IN THE WORKPLACE: ON-THE-JOB ASSESSMENT OF MEDICAL LABORATORY SCIENCE TRAINEES.**EM6**

Mr Peter Bruhn (Manager, Curriculum Development-TAFE, RMIT) and **Mr Bruce Watson** (Head, Department of Health Sciences, School of Information and Health Sciences, RMIT).

High quality and reputable on-the-job assessment is crucial to the success of the workplace training component of formal educational programmes. Initiatives in competency-based training and assessment, currently being undertaken in Australia, provide some guidance to the development of reliable and valid assessment standards and methods. These can be adapted for workplace assessment of medical laboratory science trainees.

This paper will present the experiences of the authors and others in Australia in the development of workplace assessment schemes and the factors that are critical for their success.

AUTOLOGOUS BMT FOR LYMPHOMA**SH29****S.E. Kinsey** and **A.H. Goldstone**

Department of Haematology, University College Hospital, London.

The role of marrow transplant in lymphoma is already changing. Undoubted cures occur following high dose therapy and autologous bone marrow transplantation for relapsed high and intermediate grade lymphoma still responding in some way to conventional salvage therapy, but ABMT for refractory or resistant NHL now appears contraindicated without a new approach. First remission ABMT for poor prognosis NHL is becoming more fashionable and appears safe but such cases are difficult to identify and it will require many additional transplants to produce few extra cures. Allogenic transplant for NHL does not appear superior to ABMT for the vast majority of patients but may have something to offer for the very young recipient in whom toxicity is low, or the very occasional patient with excellent performance status and minimal disease save modest marrow involvement. The low grade lymphoma data for ABMT still appear unclear but the ability to detect very minimal disease by PCR for the bcl-2 oncogene may be a significant advance. In Hodgkin's disease amongst relapsed patients, even refractory patients may sometimes be converted by ABMT to CR; Hodgkin's disease remains a prime indication for ABMT.

AUTOLOGOUS BMT IN THE MANAGEMENT OF AML — THE UCH AND EBMT EXPERIENCE.**SH10****S.E. Kinsey** and **A.H. Goldstone.**

Department of Haematology, University College Hospital, London.

Three main pieces of data will be discussed, (1) the UCH experience with the double autograft protocol, (2) the EBMT Registry data of ABMT in AML and (3) the current structure and status of the MRC AML-10 randomised trial of ABMT in AML. The UCH data have now close on 100 patients treated on the 'double autograft' protocol for adult AML and shows a significantly improved survival for those 40% of patients going on to receive the double transplant. Since there are a variety of reasons for not going on to receive the double transplant including early relapse and slow haematological recovery, the only useful comparison that can be done is between those patients achieving the double transplant and those patients who would have been eligible to go forward to BMT but refused. Making this comparison, leukaemia free survival of the double transplant group remains between 65 and 70% (median follow up >4 years) whilst that of the eligible group having only a single transplant is close to 35%, ie: not significantly different from that achievable by conventional chemotherapy. There is a significant statistical difference in the leukaemia free survival between the two groups. From the EBMT Registry data, it seems that adult patients transplanted in first remission with a regimen containing TBI have leukaemia free survival of over 50% with a plateau at around 2 years with no significant relapse beyond that point. There is some circumstantial evidence that for patients transplanted during the first three months from attaining remission with a TBI containing regimen, purging with a cyclophosphamide derivative might significantly improve leukaemia free survival. This superiority of leukaemia free survival does not extend to patients transplanted later in the first remission, ie: after 3 months, and has not been substantiated in a single centre or by a randomised trial. The British Medical Research Council AML trial randomising both adult and paediatric patients who achieve remission to auto-BMT versus no further therapy (if no allogenic donor available) has now accrued more than 770 patients. The remission rate in adults is 75% and in children is 92%. These excellent remission rates are obtained in a multi-centre study involving over 140 leukaemia centres. An update on the current status of this trial will be given. It is proposed that the trial will go on to accrue 1200-1300 patients.

AMYLIN, INSULIN RESISTANCE AND DIABETES MELLITUS.**BC4****Garth J.S. Cooper**

Amylin Corporation, 9373 Towne Centre Drive, San Diego, CA 92121, U.S.A.

Recent studies have shown that the major protein present in the islet amyloid associated with type 2 diabetes mellitus is a hormone-like peptide, amylin¹, which is normally secreted from the islet B-cells synchronously with insulin. Amylin exerts regulatory effects on important pathways of carbohydrate metabolism consistent with it being a newly discovered hormonal regulator of intermediary metabolism. Amylin is also able to induce, in experimental systems, insulin resistance consistent with that seen in type 2 diabetes.

We have recently proposed a unifying hypothesis for the molecular basis of type 2 diabetes. According to this hypothesis, increased amylin secretion occurs in genetically predisposed individuals, in response to environmental factors, thus setting in train a process which gives rise to: (i) — progressive deposition of islet amyloid, (ii) insulin resistance in liver and skeletal muscle, (iii) consequent hypersecretion of insulin, (iv) gradual loss of islet B-cells and progressive islet dysfunction, (v) ultimate restriction of insulin and amylin secretion, and (vi) deterioration in carbohydrate metabolism (consequent on (iii), (iv), and (v)), which progresses through impaired glucose tolerance (IGT) to type 2 diabetes.

¹ Cooper GJS, Day AJ, Willis AC, Roberts AN, Reid KBM, Leighton B. *Biochim Biophys Acta* 1989; 1014: 247-258.

EFFECT OF ALPHA INTERFERON ON AUTOCRINE GROWTH FACTOR LOOPS IN B-LYMPHOPROLIFERATIVE DISORDERS.

HE Heslop, JE Reitti, ACM Bianchi, FT Cordingly, AV Hoffbrand, MK Brenner.

Division of Bone Marrow Transplantation, Department of Haematology/Oncology, St Jude Childrens Research Hospital, Memphis TN. and Department of Haematology, Royal Free Hospital School of Medicine, London UK.

Autocrine production of growth factors to which a malignant cell expresses receptors is a mechanism of tumor growth that may operate in several haematological malignancies. We and others have shown that the B lymphoproliferative disorders B-CLL and hairy cell leukemia (HCL) produce a number of growth factors including TNF, IL6 and IL1, all of which may induce autocrine feedback loops. If such malignancies depend on these autocrine growth loops for survival interruption may be therapeutically valuable. Alpha interferon (α IFN) has been shown to block TNF or BCDF induced proliferation of HCL or B-CLL cells *in vitro* and has activity in these diseases *in vivo*. Incubation of purified CLL or HCL cells *in vitro* with α IFN inhibits the expression of TNF, IL1 and IL6 mRNA normally induced by culture with TNF protein. There is also a fall in serum TNF and IL6 levels in patients with HCL during α -IFN therapy. Therefore α IFN may mediate its therapeutic effects in HCL and B-CLL by blocking autocrine growth factor loops. The antiproliferative effect of α IFN may potentially be augmented by the administration of other agents antagonising growth factor action such as antibodies to cytokine proteins or receptors. To investigate this possibility we have examined the effect of anti-TNF antibody in a Phase I-II trial in patients with HCL or B-CLL.

EVOLUTION OF MEDICAL LABORATORY TECHNOLOGY IN DEVELOPING COUNTRIES.

Monica Cheesbrough FIMLS.

Director Tropical Health Technology, 14 Bevills Close, Doddington, March, Cambridgeshire, PE15 OTT, UK

Overview

National health services in developing countries face the difficult challenge of how to resource increasing health demands:

- low GNP
- man-made and natural disasters
- population migration
- malnutrition
- inadequate water supplies and sanitation
- low immunisation coverage
- poor infrastructure and lack of appropriately trained personnel
- unhelpful international policies,

these and other factors have been, and continue to be, powerful selection forces in the evolution of all aspects of health care in developing countries, including medical laboratory technology practice.

Limited resources call for greater care in their allocation and utilisation. Causes of illhealth and ways of promoting total health, need to be clearly defined, managed, and monitored in communities.

What of the past?

In the past, laboratory services in most developing countries have had only a limited impact on the health of most of the population but not just because of under-resourcing. Laboratories were established mainly in hospitals in the cities and in university training hospitals as part of national health policy. Furthermore, laboratory personnel were trained overseas, often inappropriately, or were trained internally following overseas training curricula. Few countries had their own national Association of Medical Laboratory Technology. But this is now changing.

What of the present?

The current pattern of evolution for medical laboratory practice in developing countries is characterised by INDIGENISATION with expectations of a more equitable distribution and accessibility of essential laboratory facilities. The laboratory is becoming important and increasingly used to provide accurate data on the prevalence and incidence of endemic and epidemic disease, emergence of drug resistance, and safety of water supplies. Community health laboratory training programmes are being developed to support district primary health care systems. Existing curricula are being reviewed and indigenised to meet national health policies with technologies that are matched to available resources and working environments. National Associations are being formed to support laboratory workers, set standards, issue certificates of practice to practising personnel, and liaise with Ministry of Health officials. Such Associations are also enabling links to be formed with international professional bodies.

What of the future?

The more indigenous medical laboratory medicine becomes in developing countries:

- The more successful will be the use of financial and human resources in achieving national health targets.
- The more effective laboratory services will become in community health care, rapid investigation of epidemics, control and surveillance of communicable disease and collection of reliable data for health planning.
- The greater will be the care with which laboratories select and apply new technologies.
- The more laboratory services will seek to become self-sufficient by creating the demand for local production and control of reagents and the design and field-testing of equipment that will "live" in developing countries.
- The greater will be the recognition and support of Ministry of Health departments for national training, continuing education, grading and appropriate salary structure for all laboratory personnel.

Summary: Medical laboratory practice is needed more than ever before in health care in developing countries. Every effort should be made to generate indigenous technology laboratories that are accessible, reliable, adequately resourced, and staffed by well trained and motivated personnel, licensed to practise and supported by a national Association of Medical Laboratory Technology. Only then will laboratory practice become integrated fully into national health programmes and provide the scientific basis for cost- and care-effective community health care. In developing countries, laboratory medicine is following a pattern of evolution which is bringing it closer to the patient and the achievement of its professional objectives.



The Pacific Way

South Pacific Congress

The following sessions will be of interest to Pacific Island delegates and to those who have worked in laboratories without sophisticated technology and for those who may have an interest in doing so.

Evolution of Medical Laboratory Technology in Developing Countries — Monica Cheesbrough

Wednesday, 28th August, 1991. 1100-1230 hours

Monica summarises her paper as follows:

"Medical laboratory practice is needed more than ever before in health care in developing countries. Every effort should be made to generate indigenous technology laboratories that are accessible, reliable, adequately resourced and staffed by well trained and motivated personnel, licensed to practice and supported by a National Association of Medical Laboratory Technology. Only then will laboratory practice become integrated fully into national health programmes and provide the scientific basis for cost — and care — effective community health care. In developing countries, laboratory medicine is following a pattern of evolution which is bringing it closer to the patient and the achievement of its professional objectives".

Teaching the Pacific Way

Wednesday, 28th August, 1991 1530-1700 hours

Peter Bruhn, a guest speaker from the Royal Melbourne Institute of Technology, Australia, will be discussing instructional strategies and teaching methods. Monica Cheesbrough who has wide experience in training in laboratory services in developing countries will outline training aids and laboratory manuals available through Tropical Health Technology at low cost to help those working in the Pacific Islands and other countries.

Appropriate Technology — the Pacific Way

Friday, 30th August, 1991 Two sessions: 1100-1230 hours
1330-1500 hours

The two symposia on "Appropriate Technology — the Pacific Way" are intended for Pacific Island delegates, for those who have worked in laboratories without sophisticated technology and for those who may have an interest in doing so.

Discussion will be informal. Each topic will be introduced briefly by a speaker with relevant experience. Topics for discussion will include *basic* problems encountered in haematology, immunohaematology, biochemistry and microbiology.

APPROPRIATE TECHNOLOGY IS

What is appropriate technology?

"It is a way of thinking of technological change, recognising that tools and techniques can evolve along different paths towards different ends. It includes the belief that human communities can have a hand in deciding what their future will be like, and that the choice of tools and techniques is an important part of this. It also includes the recognition that technologies can embody cultural bias and sometimes have political and distributional effects that go far beyond a strictly economic evaluation. Appropriate technology therefore

involves the search for technologies that have, for example, beneficial effects on income distribution, human development, environmental quality, and the distribution of political power — in the context of particular communities and nations".

Appropriate Technology Source Book. Vol. 2. K. Darrow, 1981.

"An appropriate technology is the one that is the most effective and acceptable in any given social, economic and ecological context. Manual or inexpensive technologies are not *universally* appropriate for those of us living in the third world, and high tech, capital technologies are not *always* appropriate for the people living in industrialised countries. Any technology might be appropriate, depending upon the situation in which it will be used".

IWTC Newsletter, 44, March 1990.

"A lot of attention is now being paid to "appropriate" technology or intermediate technology, which are popular terms used to refer to technology which is suited to the conditions of the countries in which the technology is used. Technology which is easy to use and simple to repair, which does not cost too much, and which enables people to make better use of their own resources are points advocated by those recommending use of appropriate technology".

Knowing and Knowing How — a self help manual for women in the Pacific. The Griffin, USP, 1981.

Monica Cheesbrough — precis of work activities

Monica is a fellow of the U.K. Institute of Medical Laboratory Sciences. Since 1968 she has been actively involved in laboratory services and training in tropical Africa of laboratory and health workers for district hospitals and rural health clinics. In 1979-1980 she evaluated laboratory practice and training requirements in India, South-East Asia, Papua New Guinea, Solomon Islands and Fiji as part of an O.D.A. project. Monica has participated in World Health Organisation meetings concerned with laboratory services and training in developing countries, appropriate technology and the strengthening of district health systems.

In 1982, Monica formed Tropical Health Technology, a non-profit organisation to promote the sharing and transfer of appropriate medical laboratory technology to developing countries and to design and distribute equipment for use in district laboratories, such as the solar powered Tropical Medicine Microscope. She has written and published several laboratory training manuals and more recently produced a range of training aids and slides to help those working in overseas laboratories. These are also distributed with a range of other tropical medicine and laboratory publications at low cost through Tropical Health Technology.

Monica continues to write and travel extensively. She is currently involved with WHO and health officials in Nigeria in establishing laboratory support for primary health care.

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

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Membership Sub-Committee Report — May 1991

Since the February meeting there has been the following changes.

	23.5.91	28.2.91	7.11.90	27.8.90
<i>Membership:</i>	1202	1277	1272	1315
less resignations	37	10	3	19
less G.N.A.	7	11	5	35
less deletions	—	116	—	—
less deceased	2	—	—	—
less duplications	—	—	—	9
	1156	1140	1264	1252
plus applications plus reinstatements	24	61	3	9
	116	2	1	11
	1296	1202	1268	1272
<i>Composition:</i>				
Life Member (Fellow)	12	12	12	12
Life Member (Member)	5	5	5	5
Fellow	20	22	22	22
Member	711	679	724	721
Associate	461	399	424	425
Non-practising	57	56	60	56
Honorary	29	30	30	31
Total	1295	1202	1277	1272

Applications for Membership

Associate: Kim DAVIES, Gisborne Laboratories; Paula WACKROW, Rotorua Med Lab; Sarah WOOD, Med Lab South; Sharron ANDERSON, New Plymouth Med Lab; Karen CURD, New Plymouth Med Lab; Erlinda OMAHOY, ARBC; Oloitefu PESE, Wellington, Haem; Emily EULINK, Wellington, Histo; Justin MORGAN, Northland Path Lab; Annabeth ALLUM, Northland Path Lab; Rachael HELLOWELL, Med Lab; Erika SHARSHOLT, Diagnostic; Amanda HUGHES, Diagnostic; Michael BONNEY, Diagnostic; Daphne JAMES, Tauranga Med Lab; Megan HEATT, ARBC; Susan ROBERTS, Wellcome; Judith MILLER, NZ Communicable Disease Centre; Raewyn McLEAN, Diagnostic. *Member:* Angela BRICKNELL, Diagnostic; Alastair LANDER, Invercargill; Sandra BROCKIE, Wellington, Chem; Chitra SUBRAMANIAN, Med Lab. *Non-Practising:* A. RIOSA.

Deceased

Fellow: Frederick DIXON; *Honorary Member:* Peter BOOTH.

Resignations

Associate: Heather VAN VOORNVELD, Taranaki; Frances NICHOLLS, Auckland, Med School; Sandra TIMPANY; Manjula RAY; Sara McKENDRY, Pearson; Maxine HOLLEY, Valley Diagnostic; Heidi MENNEER, Napier Med Lab; Margot COOKE, Royston; Donna RAY; Royston; Jacqueline PIERCY, Dunedin Med Lab; Gillian STARR, Dunedin Med Lab; Tanya STAPLEY, Dunedin Med Lab; Paula HOLT, Valley Diagnostic. *Fellow:* Maurice JENNER; Alex SCHWASS, Wellington Med Lab. *Member:* Kenneth COUCHMAN, Palmerston North; Janice GARNER, Auckland, Micro; Bevan HOKIN, Sydney Adventist; Rhonda LUCAS, Dunedin, Haem; Lesley JENNER; John REES, Dunedin Med Lab; Ross RICHARDS; Sharon WEASTELL, Christchurch, Chem; Patricia WHELAN, Christchurch, Histo; Anne DERVAN, National Womens; Ann-Marie MOORE, Auckland, Haem; Anne Reed, Med Lab; Kerrian BURGESS; Invercargill; Susan MAHAR; Cheryl MELVILLE, Diagnostic; Levonnie McNEIL, Taranaki; Robyn ASHTON, Dunedin, Immunohaem; Patricia JOHNSTON, Timaru; Murray SMITH, Tauranga. *Non-Practising:* Lynne WHITTINGTON; Peter RICHES; Janice BARNES.

Gone No Address

Associate: Rochelle FERGUSON; Kathryn POWELL, Hamilton Med Lab. *Member:* Dean NIXON, Greenlane; David OWEN, Greenlane; Margaret DIXON, Greenlane. *Non-Practising:* Gary BEATTIE; Nicola CRONIN.

TRAINEE TECHNOLOGIST OR LABORATORY ASSISTANT POSITION WANTED

A Filipina trained technologist with 12 years experience is seeking a position in a New Zealand laboratory which would allow her to seek limited registration. Her most recent experience is in HIV -1 and Hepatitis detection.

A C.V. and reference is available on request.

Please write to: Clarita S. Tenmatay,
920 Don Quijote Street,
Sampaloc Manila,
PHILIPPINES.

INSTITUTE BUSINESS

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For Fellows — \$88.40 GST inclusive.

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

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

OBITUARY — CHRISTINE ELLIS



Christine Ellis at her desk in the Coagulation Unit, Middlemore Hospital.

Christine Ellis, Technologist in Charge, Coagulation Unit, Middlemore Hospital died on June 12th 1991, after a five year battle with cancer. Christine was 43 years of age.

Born in Gisborne in 1948 after an initial struggle to survive Christine contracted life-threatening laryngitis at the age of three. Of the 10 infants in the Gisborne area to contract this only two survived, Christine was one of them. Then in the 1955 poliomyelitis epidemic in New Zealand Christine had the misfortune to be one of the victims. Whilst in hospital with poliomyelitis Christine also contracted tuberculosis.

Christine wanted to be a physiotherapist and help others who had been afflicted like herself but when her surgeon, the late Mr William Park, suggested a career in medical laboratory technology might be a better option for her, she decided to pursue this course in life.

Unable to obtain a trainee position in Gisborne in 1966, Christine went to Kaitaia Hospital to begin her training. She later returned to Gisborne for three years before completing her training at the Mater Hospital in 1969 under the tutelage of Sister Paula, whom many senior technologists will remember with respect and affection. From 1972-74 Christine was a staff technologist at the Mater Hospital in Auckland.

In 1974 Christine was appointed a Staff Technologist in the Haematology Department at Middlemore Hospital, and in 1980 she became the first Graded Technologist in charge of the emerging and growing Coagulation Unit at Middlemore Hospital.

Christine was awarded a Queen Elizabeth II Technician's Study Award in 1983. This award was established following the visit of Her Majesty to New Zealand in 1970 to enable interested persons to pursue full time study in an occupation of a technical nature from which people of New Zealand may benefit. Christine studied at the Royal Free Hospital, The Royal Infirmary of Edinburgh and The Sick Children's Hospital, Great Ormond Street London, under Professor Hoffbrand, Professor Hardisty and Drs. Ludlam and Hutton.

In summary of her award Christine stated: "This award has allowed me to consolidate my knowledge of haemostasis, thrombosis and coagulation technology. The lectures, tutorials, printed materials and charts plus all the new books purchased will assist me in my teaching duties. I hope other Medical Laboratory Technologists will be encouraged to apply for similar awards".

This attitude to her work was followed through in other aspects of her life. She took an active interest in singing, public speaking, and on a more personal level, encouraging others to be confident in themselves and reach their potential in life.

In 1968 when only 20 years of age she won the Gisborne Professional Women's League Ideal Business Girl of the Year Contest, and challenged adults to provide leadership, inspiration and example to young people.

Christine in her life provided just that. Although handicapped from poliomyelitis, she gave skiing "a go"

and obtained immense pleasure from doing so and gave encouragement to others with similar handicaps to "give it a go".

Only months before her final illness Christine moved into her new home. This home was her pride and joy as she planned the interior decorations and in particular, the garden.

During her long illness Christine was an inspiration to colleagues and friends as she faced each stage with courage and determination. She loved life and encouraged others to do likewise. Christine will be remembered by many with gratitude and respect.

LETTERS TO THE EDITOR

Dear Editor,

I wish to correct several anomalies that were recently mis-reported in North Island papers regarding an increase in Malaria cases on the West Coast (South Island), including a recent fatality.

While it was correctly reported that there has been a relative increase in the number of Malarial cases presenting over the last couple of years there is a clearly defined reason for this. The recent decline in gold prices has seen a number of local alluvial Gold Miners seeking more lucrative areas overseas, especially in Northern Papua New Guinea. Some of these itinerants have then presented with Malaria upon their return home, and not as has been reported, contracted it locally. (I am sure all NZIMLS readers are aware that the Anopheles Mosquito is not resident in New Zealand). All of these cases so far have been *Plasmodium vivax*.

The fatality involved an English female tourist who, accompanied by her husband, visited Sumatra, Bali and rural West Timor in transit to New Zealand on holiday. Neither party took any Malarial Prophylaxis as their original itinerary included only urban areas and also the wife had, on a previous trip, encountered an adverse reaction to anti-malarial drugs.

Upon arrival in Auckland a week after departing Asia, she became generally unwell and was attended by a General Practitioner, who prescribed Augmentin and generally discounted the possibility of Malaria. A period of improvement was then experienced, but a further week later upon arrival in Greymouth she was admitted to Hospital with an acute febrile illness, after having visited a local General Practitioner.

The on-duty Physician, who had a number of years experience in Tropical Medicine, tentatively diagnosed the patient as having *Plasmodium falciparum* infection with advanced cerebral involvement. Subsequent blood tests confirmed this finding, with up to 10% of RBC containing small Trophozoites (ring forms) including a number of cells containing multiple infestations. None of the characteristic Gametocyte forms could be found in either thick or thin blood films.

One of the essential points in this unfortunate incident was that it is necessary to give immediately I.V. Quinine, which was not readily available at Greymouth Hospital. A small quantity of I.V. Quinine was flown from Christchurch which was sourced from Napier Hospital, but that was the entire complement available in the South Island.

The day following the initial administration of Quinine the patient showed some improvement in condition, which was also reflected in her blood film, as only a very occasional RBC could be found containing Malarial Parasites. While awaiting the arrival of a further supply of I.V. Quinine from Auckland there was a marked deterioration in her condition, with unfortunate fatal consequences.

The husband of the deceased became ill at this point in time with obvious Malarial symptoms warranting hospital admission, with confirmed *P. falciparum* infection. As a supply of I.V. Quinine was now to hand and the husband was in the early stages of the Malarial process, it enabled a successful treatment.

In hindsight, two valuable lessons should be learned from this experience —

- [i] It is imperative that travellers visiting Malarial infested countries should take Malarial Prophylaxis. While this cannot be guaranteed to prevent Malaria, it will at least prevent the full clinical expression of the condition, including death. Any Prophylaxis is better than no Prophylaxis at all.
- [ii] While it is probably not practical for all hospital Pharmacies to stock I.V. Quinine because of expiration date, it would be preferable if all main centre Hospital Pharmacies kept some supply to prevent this situation recurring.

Yours sincerely,
PHILIP CLARK
Charge Technologist.

SOUTH ISLAND SEMINAR REPORT

Anne Paterson

History has been made: The 1991 South Island Seminar was held on the West Coast for the first time.

Greymouth hospitality was superb! They even arranged for a hot sunny weekend while the rest of the South Island was bathed in drizzle/rain.

Most South Island laboratories were represented with people travelling from both the extremities of Blenheim and Invercargill. All categories of laboratory workers attended with a quarter of registrants being trainees, laboratory assistants or recently qualified technologists.

Paul McLeod, President of the NZIMLS, gave an update on the *Education issue* — please see separate report.

This year, Med-Bio Enterprises generously offered a prize of \$250 (GST included) to be awarded to the best presentation by a trainee or assistant at the South Island Seminar. The prize, to be used to assist with costs in attending the South Pacific Congress in Auckland later this year, was won by Scott McCulloch, a fourth year trainee from Kew Hospital in Invercargill.

With a paper entitled, 'Q Probes in the Hospital', Scott successfully examined the subject of Quality Assurance at Kew Hospital. An overview of the basic principles and objectives of Quality Assurance led into the programme under way at Kew Hospital. A very positive aspect was the recognition of successful Q.A. already in practise both outside and within the laboratory.

This was a deserving win for Scott and will be a valuable paper at conference this year.

Med-Bio Enterprises have already offered the same prize for the 1992 South Island Seminar to be held at Hamner Springs and organised via the Nelson Laboratory.

Giardia is regularly in the news these days, especially around Oamaru. Two Dunedin technologists have been looking for it in the "sheep and waterways in the Waitaki District".

Lorriane Craighead of Dunedin Hospital presented her initial findings, looking for the epidemiological link between humans and various endemic animals of the area. To date opossums do not seem to be a reservoir while sheep appear to be a more likely source.

Tom Henderson of Zentec Corporation discussed the problems of screening large volumes of (often dirty) water for Giardia cysts and the dangers of misidentification of Giardia species specific to other animals, e.g. frogs!

This was a well received joint presentation and promoted discussion of the pros and cons of media driven issues such as that of Giardia in human water supplies.

Athletics and physical fitness was given a laboratory perspective by Jim Le Grice of Christchurch. An amusing (slightly tongue-in-cheek) series of cases and their laboratory

findings was used to show that Biochemical tests such as iron status analysis are more reliable for the early diagnosis of anaemia in the tired athlete, than waiting for the haematological picture to change. A clear message was 'normal ranges' are useful but maybe/ or are quite different for the fit athlete. It was suggested test results should sometimes be viewed more subjectively if abnormalities are to be detected early.

Gerald Verkaaik of Blenheim gave an update (to his conference paper 1990) on the Blenheim Mobile Laboratory Specimen Collection Service and the developing role it has within the Blenheim community.

Warren Dellow of Christchurch gave a paper on DNA probes. This overview covered historical development of DNA probes, the principles and processes used in DNA technology, test probes currently available and then looked into the future impact of DNA technology(s) on our profession.

Warren gave a second paper reviewing syphilis serology and highlighted trends of infection in different parts of the world.

Anne Paterson of Dunedin briefly presented a problematic endocarditis case history as the lead in to identifying an underlying malfunction in the Blood Culture machine, the Bactec NR730.

The desirability of C.E.R. was questioned by Geoff Mills of Ashburton after a patient presented with a kangaroo tick infestation. The undesirable implications of this insect taking up residence in New Zealand were examined.

The scientific session concluded with an open forum on Extra Laboratory Testing or N.P.T. (Near Patient Testing) as it is becoming known. With this challenging new area it was generally agreed that the latter part of the N.Z.I.M.L.S. mission statement should be kept in mind.

"..... for the ultimate benefit of the patient".

INTERNATIONAL ASSOCIATION OF MEDICAL LABORATORY TECHNOLOGISTS (IAMLT) AWARDS

Baxter-Dade Inc. 1992 IAMLT Award for "Outstanding Services to Medical Laboratory Technology"

Eligibility: 1. Membership of at least 5 years of one of the national associations. 2. Full-time occupation in a medical laboratory. 3. Proper professional qualifications. 4. Activity in own professional organisation.

Election: 1. Each national committee may designate one candidate for the prize. 5 copies of the proposal must be sent to: IAMLT, Executive Director, Östermalmsgatan 19, S-114 26 Stockholm, Sweden, accompanied by 5 copies of the following: (a) Curriculum vitae of the candidate including publications if any (please mention any teaching activity and private hobbies); (b) Certificate by the employer; (c) Name and address of two referees able to give information about the candidate; (d) Detailed information from the national committee regarding the standard of work, personal qualities and special considerations for recommending the candidate for the prize.

A member of a national committee assisting in the election of a candidate is not allowed to enter for the award, but may be replaced in the committee in order to participate in the contest.

2. Previous applications which fulfill the conditions may be reconsidered on the recommendation of the national society.

Deadline: Names of candidates for the prize along with all supporting documents must be sent to the Executive Office by November 1 of the year preceding the IAMLT Congress.

A copy of all information will be sent to the designated representative of Baxter-Dade Inc. by December 31 of the same year. The IAMLT Awards Committee and Baxter-Dade Inc. will jointly select the award recipient.

The prize is given by Baxter-Dade Inc. every two years on the occasion of the IAMLT Congress and consists of SFR 3,000. The Award will be presented at the IAMLT World Congress in Dublin, Ireland, 26-31 July 1992, by a representative of Baxter-Dade Inc. in presence of the IAMLT Awards Committee.

Biomérieux 1992 IAMLT Award

Purpose: to stimulate and encourage work in research and experimentation in all areas of clinical diagnosis: Microbiology, Immunology, Clinical Chemistry, Coagulation, Radioimmunology; to develop the communication of new methods and the presentation of articles covering these different areas of study.

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

Application: The candidates should submit their paper in English (with a summary in French if possible) and enclose a Curriculum Vitae and a recommendation from the constituent society of IAMLT of which he/she is a member. 5 copies of the manuscript must be sent to: IAMLT Executive Office, Östermalmsgatan 19, S-114 26 Stockholm, Sweden.

Deadline: Deadline for receipt of applications by the Executive Office is the 1st of November 1991.

Prize: The prize consists of 8,000 F.F. The prize will be presented at the IAMLT World Congress in Dublin, Ireland, 26-31 July 1992, by a representative of bioMérieux in presence of the IAMLT Awards Committee.

Special Condition: The award will not be granted for any study involving the use of competitors' reagents or systems.

Boehringer Mannheim GmbH 1992 IAMLT Award

1. **Purpose:** To recognise outstanding work in the field of Clinical Chemistry and Immunodiagnosics.

2. **Eligibility:** The applicant must have evidence of active membership in a constituent society of IAMLT.

3. **Application:** The candidates should submit their paper in English and enclose a Curriculum Vitae and a recommendation from the constituent society of IAMLT of which he/she is a member.

4. 5 copies of the manuscript must be sent to: Mrs Margareta Haag, IAMLT Executive Office, Östermalmsgatan 19, S-114 26 Stockholm, Sweden.

5. Deadline for receipt of applications by the Executive Office is the 1st November 1991.

6. One prize of DM 5,000 may be awarded by Boehringer Mannheim GmbH. If more than one author contributes to the paper, the prize can be divided.

7. The prize will be presented at the IAMLT World Congress in Dublin, Ireland, 26-31 of July 1992 by a representative of Boehringer Mannheim GmbH in presence of the IAMLT Awards Committee.

IAMLT Scholarship 1992

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

Application: The candidate should submit their application in English and enclose a Curriculum Vitae and a recommendation from the constituent society of IAMLT of which he/she is a member. The application should explain the need for the scholarship. 4 copies of the manuscript must be sent to: IAMLT Executive Office, Östermalmsgatan 19, S-114 26 Stockholm, Sweden.

Deadline: Deadline for receipt of applications by the Executive Office is 1st of November 1991.

The prize consists of SFR 1,200 and may be divided. The prize will be presented at the IAMLT World Congress in Dublin, Ireland, 26-31 July 1992 by the Chairman of the Awards Committee.

Immuno Ag 1992 IAMLT Award

1. **Purpose:** To recognise outstanding work in the field of: (a) Lipoprotein Metabolism; (b) Artherosclerosis; (c) Coagulation and Fibrinolysis.

2. **Eligibility:** The applicant must have evidence of active membership in a constituent society of IAMLT.

3. **Application:** (a) The candidates should submit a paper in the area of Lipoprotein Metabolism or Artherosclerosis or Coagulation and/or Fibrinolysis dealing with — Routine Diagnostic — Problems and Experiences and/or — Research Papers will be accepted. (b) The candidates should submit their paper in English and enclose a Curriculum Vitae and a recommendation from the constituent society of IAMLT of which he/she is a member.

4. 5 copies of the manuscript must be sent to Mrs Margareta Haag, IAMLT Executive Office, Östermalmsgatan 19, S-114 26 Stockholm, Sweden.

5. Deadline for the receipt of applications by the Executive Office is the 1st of November 1991.

6. Two prizes may be awarded by Immuno Ag: 1. 2000 DM; 2. 1000 DM.

7. The prizes will be presented at the IAMLT World Congress in Dublin, Ireland, 26-31 July 1992, by a representative of Immuno Ag in presence of the IAMLT Awards Committee.

Nordic Award 1992

Purpose: To enable an official representative from a constituent society of IAMLT with economical difficulties to attend the General Assembly of Delegates.

Eligibility: The applicant must be officially appointed by his/her society to be the chief delegate at the General Assembly of Delegates.

Application: The constituent society of IAMLTL must send a letter in English explaining the need for the award. 4 copies of the letter must be sent to: IAMLTL, Margareta Haag, Executive Director, Östermalmsgatan 19, S-114 26 Stockholm, Sweden.

Deadline: for receipt of applications by the Executive Office is 1st of November 1991.

The Prize consists of 15,000 Swedish crowns and may be divided. The IAMLTL Awards Committee will be responsible for choosing the recipient.

The IAMLTL society, holding the secretariat for the Nordic Group of Medical Laboratory Technologists (NML), will present the prize at the IAMLTL Congress in Dublin, Ireland 27 July 1992 in presence of the IAMLTL Awards Committee.

Ortho Diagnostic Systems Educational Award

Purpose: To further the education of qualified technologists who are active members of IAMLTL by sponsoring their attendance at a one-week Applied Transfusion Medical course.

Eligibility: The applicant must have evidence of active membership in a constituent society of IAMLTL and possess the prerequisite academic as well as professional experience to attend the one-week Applied Transfusion Medicine course at Ortho Diagnostic Systems Inc., Raritan, New Jersey, USA.

The applicant must have at least two years experience in blood banking. Because the courses are highly technical in

nature and given entirely in English, a complete understanding of English is essential.

Application: The candidates must submit application forms, available at the Executive Office of IAMLTL, explaining their background, qualifications and experience in blood banking. This application must be accompanied by: (a) A letter and 4 copies from their employer verifying their years of blood banking experience. (b) A recommendation with 4 copies from the President of the IAMLTL constituent society.

Deadline: Deadline for receipt of applications by the Executive Office is the 1st of November 1991.

Awards: Three awards are available, one of which is offered to an individual from a developing country according to instructions from Ortho Diagnostic Systems Inc.: Kenya, Korea, Malaysia and Singapore. The Awards Committee composed of members of IAMLTL, appointed by the President of that organisation, will be responsible for choosing the recipients.

The Awards are offered by Ortho Diagnostic Systems Inc. every two years on the occasion of the IAMLTL Congress. The Awards will be presented at the IAMLTL World Congress in Dublin, Ireland, 26-31 July 1992, by a representative of Ortho Diagnostic Systems Inc. in presence of the IAMLTL Awards Committee. Applications forms available from: IAMLTL Executive Office, Östermalmsgatan 19, S-114 26 Stockholm, Sweden.

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BEHRING DIAGNOSTICS a division of Hoechst NZ Ltd announces the launch of 'OPUS' the first immunoassay system that makes low-volume testing cost-effective.

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For further information please contact: Behring Diagnostics, Division of Hoechst New Zealand Ltd, P.O. Box 67, Auckland. Telephone 527-8068.

LEALAND TECHNICAL SERVICE

Lealand Technical Services, in Christchurch, are now offering a specialist rebuild service for microscopes, keratometers, ophthalmoscopes and refractors.

The recent budget restraints in medical services has meant that Capital Expenditure has been deferred. Lealand Technical Services (LTS) are able to rebuild older but sound optical equipment to the exacting standards required for professional laboratories. LTS have recently engaged further specialist staff, Mr Vince Moroney who was, until recently, Ground Safety Advisor (Southern) Air New Zealand. He has had a long history of technical work in the aviation instrument field, has joined the staff to provide high quality technical assurance on product repairs and rebuilds.

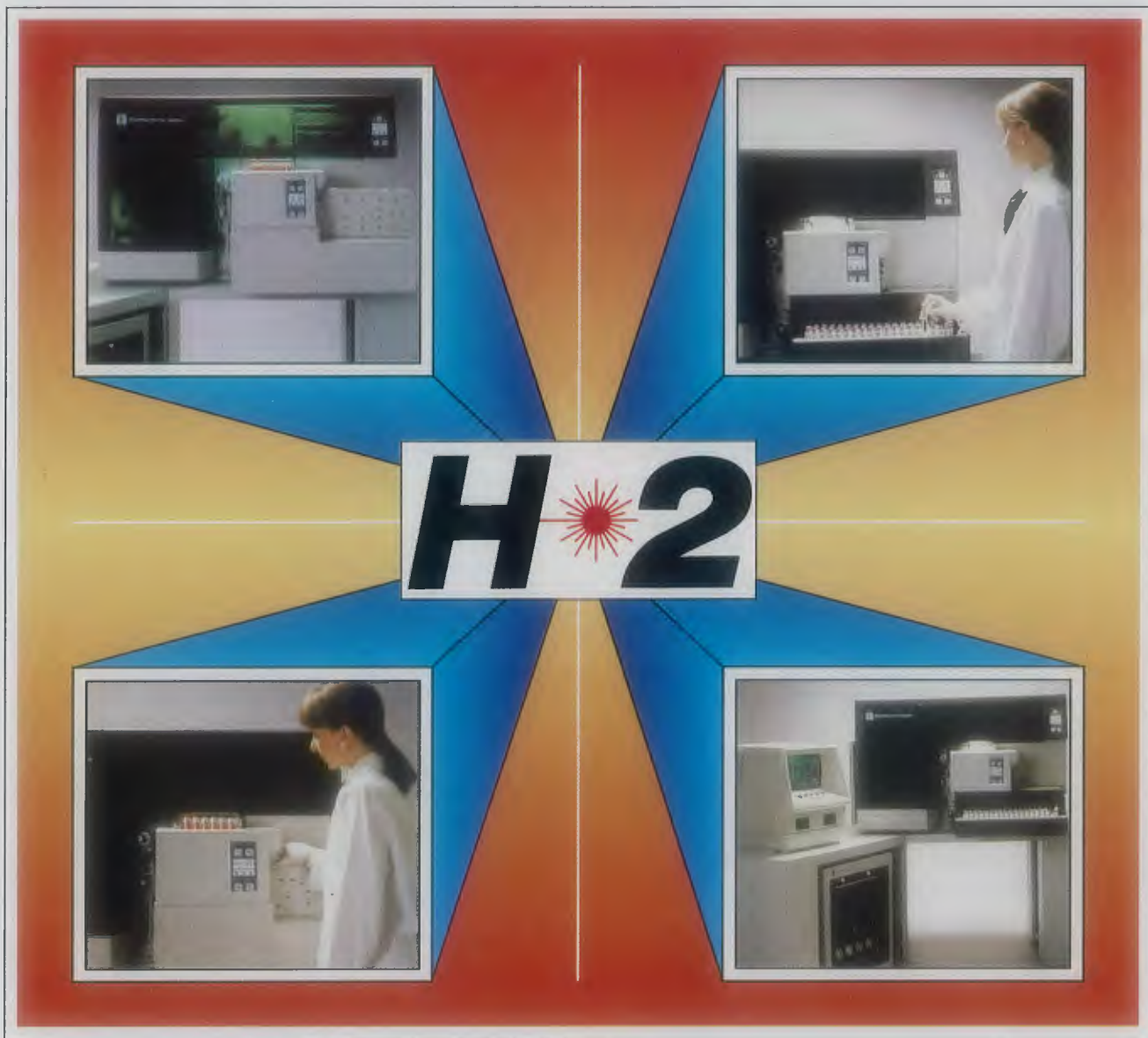
A new laser system has also recently been installed to ensure accurate optical alignment in optometric equipment, and this is working well.

For further information contact: Lealand Technical Services, 26 Marriner Street, Sumner, Christchurch 8. Telephone (03) 266-433. Fax (03) 265-035.

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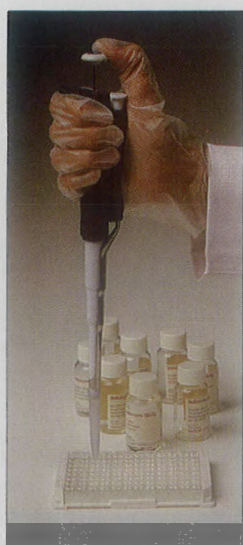
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