

INTERNATIONAL
DIABETES
INSTITUTE 

2001-2002

Annual Report

INTERNATIONAL DIABETES INSTITUTE

Our mission

To excel as a leading national and international centre for diabetes research, education and care.

To provide diabetes industry leadership and excellence through our:

- commitment to innovative research
- provision and promotion of expert care coupled with clinical research
- provision of leadership in education, training and consultancy, and the
- promotion of healthy lifestyles

Our vision

To develop the capacity to prevent and cure diabetes and its complications through integrated research, education and care

and

to find a cure for diabetes and contribute to its worldwide prevention.

Our values

reflect our values and commitment to:

- a dedicated consumer focus
- integrity
- teamwork
- professional development
- leadership
- astute business orientation
- highly qualified staff
- corporate and individual excellence

Our aim

Translating research into prevention, care and innovation in diabetes management.

CORPORATE AND ORGANISATIONAL STRUCTURE 2001/2002

PATRON

Mr Leon Mow AM (Died 28 January 2002)

BOARD OF DIRECTORS

Ms Helen Maxwell-Wright (President)

Professor Robert Atkins

Hon Neil Batt AM

Ms Fiona Bennett

Hon Geoffrey Connard AM (Immediate Past President)

Mr Michael Danby MHR

Mr Ian Davis

Mr Gavan Disney

Mr H Neil Hewitt OAM (Hon Treasurer)

Ms Sue Natrass

Professor Joanne Wilkinson (Vice-President)

AUDITORS

MGI Meyrick Webster

SOLICITORS

Deacons

PROFESSOR/DIRECTOR

Professor Paul Zimmet AO

CHIEF EXECUTIVE OFFICER

Mr Malcolm Kinloch

DIRECTOR SERVICE DEVELOPMENT

Ms Virginia Hagger

DIRECTOR MEDICAL SERVICES

Dr Matthew Cohen

DIRECTOR CORPORATE SERVICES

Mrs Joan Hoskins (to 29 March 2002)

MANAGER BUSINESS DEVELOPMENT

Ms Louise Lyons (to 1 February 2002)

Mr Gary Layton (from 6 May 2002)

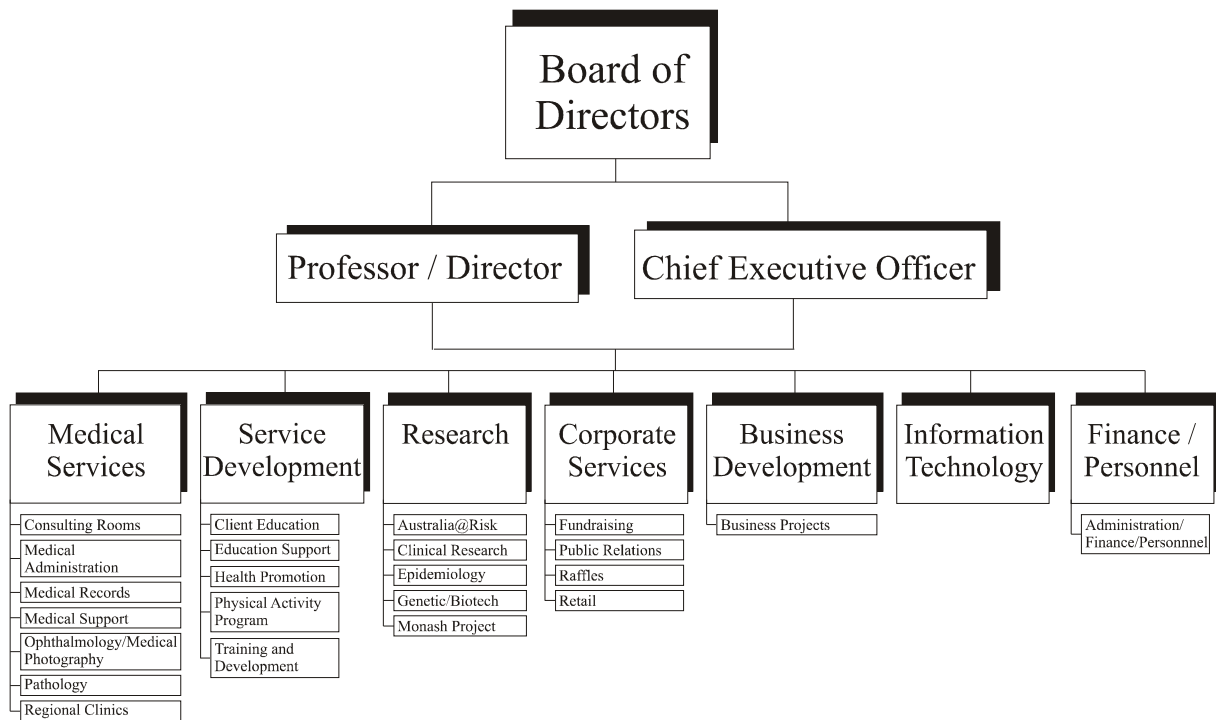
INSTITUTE FOR DIABETES DISCOVERY/ DIRECTOR OF CLINICAL RESEARCH

Dr Jonathan Shaw

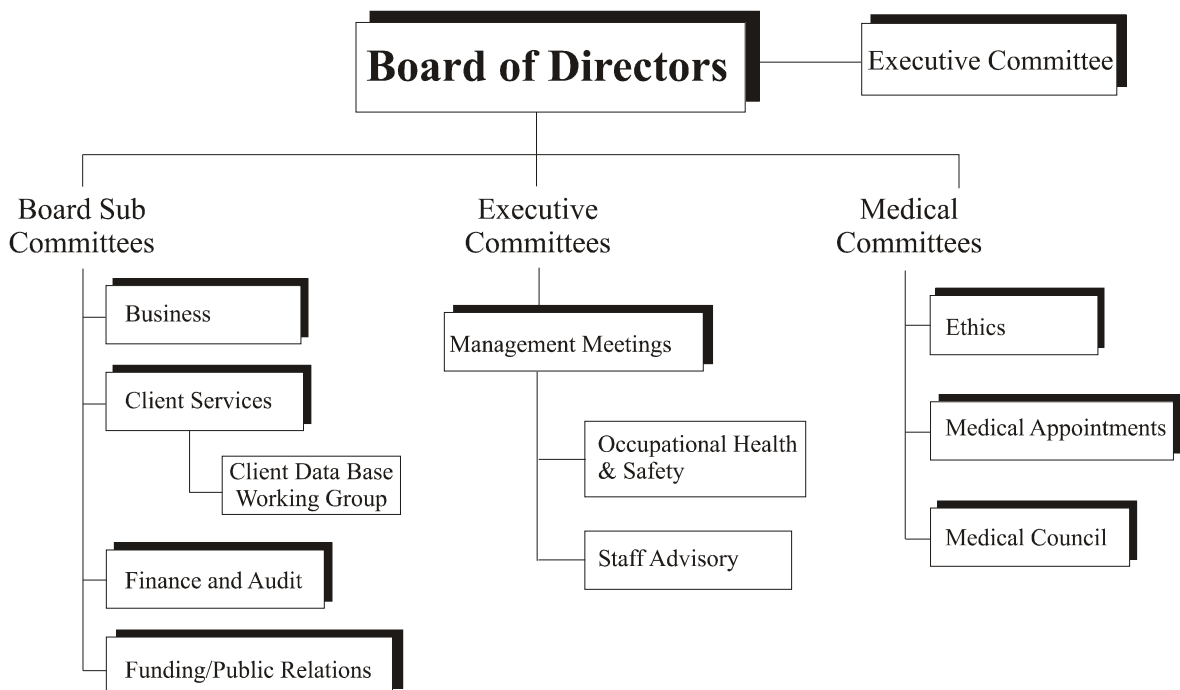
MANAGER FINANCE/HUMAN RESOURCES

Mr Arthur Walmsley

INTERNATIONAL DIABETES INSTITUTE ORGANISATION STRUCTURE



COMMITTEE STRUCTURE



PRESIDENT'S REPORT

This has been another busy year.

The view from the President's chair is one of a vital and visionary organisation. Not content with the important contribution that we made through the AusDiab study, we have now sought funding to continue that work with [Australia@Risk](#). We hope to follow-up the 11,000+ people who participated in AusDiab by re-surveying them five years after their original inclusion in the study. The resulting data will help health economists and planners as well as researchers and clinicians.

Our Lift for Life™ program is another example of our vision and leadership. We believe we are the only diabetes centre in the world to have incorporated a model for exercise in its case planning for people with diabetes and then provide a supervised program. It is one thing to ask people with diabetes to include exercise in their daily regime and quite another to show them how to do it and to measure the results.

Genetics research, funded by Autogen, continues in our laboratory at Deakin. Results of that work will soon be published in the peer-reviewed scientific media.

At the request of referring general practitioners, more than 8,000 clients received individual personalised care from our medical and education team this year.

Funding is an ongoing challenge and we are most grateful to the organisations and individuals who support our research, education and health promotion activities. Without this support we could not continue this important work. My thanks also to members of my executive, Professor Joanne Wilkinson, Neil Hewitt OAM, and the Hon. Geoffrey Connard AM and to all members of the Board who give of their time and talents to serve the Institute and those in the wider community who have diabetes.

Finally, my thanks to Professor Zimmet AO and the talented, dedicated and hardworking team that he inspires and leads. Each strives for excellence in their daily work and is committed to making a difference for people with diabetes. It is our people that make us special and help deliver our mission. It is a pleasure to work with them.

Helen Maxwell-Wright
President
30 June 2002

REPORT FROM THE PROFESSOR DIRECTOR PAUL ZIMMET AO

The Annual Report can be a real headache for any Institute Director! But then again it is an ideal opportunity to review the successes and the disappointments of the last year. As with every year, a major frustration has been the fact that while IDI is seen from outside Australia as one of the world's leading centres for diabetes, we seem to always have difficulty gaining the same recognition within our own country.

Much of my time is spent lobbying and espousing the cause of diabetes within Australia. Internationally, we are a major vehicle for the International Diabetes Federation (IDF) activities. Just a few of our activities are:

- Coordinating the IDF Epidemiology Task Force
- Producing statistics and predictions of the number of people with diabetes and prediabetes in every nation and globally
- Co-authoring the International Diabetes Federation Expert Consensus on impaired glucose tolerance. This provides an authoritative view on opportunities to prevent Type 2 diabetes. I co-chaired the Expert Committee with Professor Sir George Alberti, President of the International Diabetes Foundation and Dr Jonathan Shaw was co-secretary.

It is frustrating that our international role and recognition isn't being translated into appropriate financial support from our State and Federal Governments. Too often, I feel like the beggar at the gate!

We were saddened during the year by the death of Mr Leon Mow AM, one of our strongest friends and certainly our largest financial supporter. The eulogy I gave at his funeral is reproduced elsewhere in this report.

Despite this low point, big things are happening in diabetes. While we continue to be frustrated in our attempts to prevent Type 1 diabetes, studies now show that lifestyle measures and certain drugs can prevent or delay the onset of Type 2 diabetes. IDI is involved in what I consider to be one of the most exciting projects in Type 1 diabetes causation.

Along with Drs Mark Myers and Ian Mackay at Monash University, we have implicated microbial (bacterial) infections of common garden vegetables as a possible source of a toxin which damages the insulin-producing islet cells in the pancreas. In a genetically susceptible child, this could precipitate Type 1 diabetes. Here again, we are frustrated because of the difficulty in obtaining funds which would allow us to tackle one of the most promising leads to the cause of this disorder.

Another area where we are providing leadership is in examining the relationship between exercise and diabetes. Dr David Dunstan is undertaking important research in this area and developing programs for integrating exercise into our diabetes education and treatment programs.

Our other research activities are discussed in detail in Dr Shaw's report. IDI provided national leadership with the AusDiab study. As a follow-up to AusDiab, we have established Australia@Risk, one of the largest consortia ever put together in Australia to tackle diabetes.

This was originally done in response to an NH&MRC call for applications for funding for the Type 2 diabetes partnership grant - \$2.5 million over 5 years. Although we were short-listed, we were frustrated by the NH&MRC's failure to proceed with funding and are currently in the process of appealing.

Despite this disappointment, we have held the partnership together and have also submitted an NHMRC Project Grant for funding for 2003-7. We have raised more than \$1.8 million from the pharmaceutical industry, Diabetes Australia and the Australian Kidney Foundation to match the Commonwealth funds should our appeal be successful.

[Australia@Risk](#) Partners

Abbott Australasia

Alphapharm

Anti-Cancer Council

AstraZeneca

Australian Institute of Health & Welfare

Australian Kidney Foundation

Aventis Pharma

Bio-Rad Laboratories

Bristol-Myers Squibb

Centre for Eye Research Australia

Community Health, Aboriginal Health & Hospital Services

CRC for Aboriginal and Tropical Health

Department of Health and Human Services

Department of Rural Health

Diabetes Australia

Diabetes Australia Northern Territory

Eli Lilly Australia

GlaxoSmithKline

Health Information Centre

Heart Foundation of Australia

Janssen Cilag

Menzies Centre for Population Health Research

Menzies School of Health Research

Merck Sharpe & Dohme

Monash Medical Centre

Monash University

National Aboriginal Community Controlled Health Organisation

National Heart Foundation

North Western Adelaide Health Service

Norvartis Pharmaceuticals Aventis Pharma

Novo Nordisk Pharmaceuticals

Pfizer

Pharmacia Australia

Roche Diagnostics Australia
Royal Australian College of General Practitioners
Sanofi-Synthelabo Australia
School of Health Sciences
Sir Charles Gairdner Hospital
The Prince of Wales Hospital
Top End Division of General Practitioners

From a purely personal point of view, I must say that this year could not have been better. I received an Honorary Doctorate from Spain's leading university, the Complutense University in Madrid. An earlier recipient, Alfred Einstein, may not have been impressed! I also received the American Diabetes Association's 2002 Harold Rifkin Award for contributions to the international diabetes arena.

During the year, we strengthened our biotechnology collaboration with Autogen by establishing one of Australia's leading gene technology facilities at the Deakin University campus in Toorak. Another biotechnology agreement has been finalised with Cardia to fund the development of a new drug for Type 2 diabetes. The concept arose from my own PhD thesis work and is a joint project between Monash University and IDI. Cardia had committed to raise \$1.7 million to fund the 2-year development program but the events of 11 September 2001 put paid to that. However, in the first instance, Cardia has provided almost \$500,000 and the project is underway.

Finally, I want to thank the President of our Board, Ms Helen Maxwell-Wright; our Vice-President, Professor Joanne Wilkinson; our Treasurer, Mr Neil Hewitt, and our Board of Directors for their advice and support to the Institute. It can be a thankless task with the extra burdens placed on such busy and talented people, but their dedication is greatly appreciated.

Paul Zimmet AO
MB, BS, MRACP, PhD, FRACP, FAID, FACN, FACE, MD, FAFPHM, FRCP (UK)
Doctor Honoris Causa (Spain)
Director

EPIDEMIOLOGY

The Team

Professor Paul Zimmet AO
Dr Jonathan Shaw
Ms Lesley Anderson
Mr Adrian Cameron
Ms Marita Dalton
Dr David Dunstan
Ms Sue Fournel
Mr Adam Meehan
Ms Shirley Murray
Dr Richard Sicree
Dr Ravi Singh
Dr Stefan Soderberg
Ms Robyn Tapp
Ms Julie Yallop

The highly successful Australian Diabetes and Lifestyle (AusDiab) study is now being recognized nationally and internationally as a landmark study in diabetes. Over 11,000 people around the country were included in this major health survey, which found that 1 in 13 Australian adults has diabetes (although half of them did not know they had it), 1 in 5 are obese, over half have high cholesterol levels, and almost 50% are not exercising enough. Papers have now been accepted in a number of international medical journals reporting on the results of AusDiab. Reports from AusDiab have also been presented at major international diabetes meetings in America and Europe.

We hope to continue this important work over the next few years and to re-survey the participants five years after their original inclusion in the study. Funding applications have been made and I hope to be able to report on their success soon.

We have also been involved in a related project in northern Victoria. The Crossroads study, headed by Professor David Simmons in Shepparton, focuses on diabetes and other health issues in rural Victoria. This study of over 1,200 people will provide the opportunity to examine these key issues in an often-neglected segment of the population.

In addition to studying the epidemic of diabetes in Australia, IDI has now become the major co-ordinating centre for a world atlas of diabetes, which collects and analyses information on diabetes rates worldwide. This is a project run by the International Diabetes Federation, and IDI has been providing estimates of the numbers of people with diabetes and its complications country by country for the whole world.

We have continued to use our wealth of data collected over previous years from Mauritius and various Pacific Island populations. This year, we were fortunate to have been joined by Dr Stefan Soderberg on a sabbatical from Sweden, who wanted to expand his previous work on leptin (a fat regulating hormone) and cardiovascular disease. Using information from Mauritius, Stefan has established the importance of leptin in predicting diabetes. Although Stefan has now returned to Sweden, he will continue his links with IDI, and has been appointed an Honorary Fellow of the Institute.

CLINICAL RESEARCH

The Team

Professor Paul Zimmet AO
Dr Jonathan Shaw
Dr Neale Cohen
Dr Carol Delaney
Ms Maria Lawton
Ms Nicole McBain
Ms Libby Prior

Dr Delaney continues to receive support from the Juvenile Diabetes Federation and has recently achieved a considerable increase in her grant. Her work is now focussing on the fascinating possibility that C peptide (a fragment of insulin usually thought of as having no function and not a part of the insulin given by injection) has an important role to play, and that replacing it could ameliorate some of the complications of diabetes.

In other activities, the clinical research team has been involved in several international multi-centre trials which are evaluating new drugs for diabetes. These have included new treatments for Type 2 diabetes and a treatment for diabetic neuropathy – one of the most debilitating complications of diabetes.

A major focus this year has been on studies of how Type 2 diabetes can be prevented. We are taking part in two major international diabetes prevention studies – DREAM and NAVIGATOR. Professor Zimmet and Dr Shaw are on the international steering committee for DREAM, and IDI is the co-ordinating centre for the 14 Australian sites involved with the study. This exciting international study will evaluate the ability of two drugs to prevent diabetes in people at high risk.

In a forward-looking move, we have encouraged physicians to take an active part in research, and Dr Neale Cohen and Dr Ravi Singh have both joined the team. Dr Cohen is examining the impact of resistance training on endothelial function (the ability of blood vessels to adapt to changing requirements – often abnormal in diabetes), while Dr Singh is compiling a report on Type 2 diabetes in adolescents.

Dr Jonathan Shaw MD MRCP (UK)

Director Clinical Research

GENETICS RESEARCH

The Team

Dr Jeremy Jowett (Director)
Mrs Hoki Beckham-Sionetali
Mr Kiyemet Bozaoglu
Dr Joanne Curran
Ms Sally Dennis
Dr Kate Elliott
Ms Kristi Gluschenko
Ms Nicola Hunt
Mr Stewart Huxtable
Ms Claire Proietto
Dr Jianmin Wang

The goal of our genetics research program is to provide a better understanding of the disease causation process by identifying participating genes, the genes' products and how those products interact with other elements in the cell; and in turn how the cell's function is affected by these genes in its physiological role within the body. We anticipate that this will lead to the development of more accurate diagnostic tests and improved therapeutic drugs to ameliorate or prevent the development of Type 2 diabetes, obesity and related metabolic conditions.

This year also saw good progress made on our major research projects. The field study collection in Tasmania was completed and a new initiative to further boost the power of the study by collection of large families was initiated. The laboratory phase of the Mauritian genome wide scan has now been completed in our genetic analysis facility (see below) and we expect the results from the complex statistical analysis early in the new year. We are fortunate to have the assistance of Dr John Blangero, a world leading statistical geneticist, through an alliance with our funding company Autogen. Dr Blangero will provide state of the art statistical support in analysing this and other complex datasets, thereby further improving our chances of success.

The laboratory research program for gene discovery that was based on the technique called amplified fragment length polymorphism (AFLP) analysis provided some interesting genetic variants that were associated with Type 2 diabetes and obesity. However, upon examination of these variants in separate population groups, the association was not replicated. Given the enormous cost involved in analysing genomic regions, we felt there was not sufficient evidence to warrant proceeding with these regions. Instead, we have decided to focus our resources on the second part of our gene discovery project – the genome wide scan in families to provide us with stronger evidence for a genomic region containing disease genes.

This year also saw us expand our facilities to include two automated high throughput DNA sequencing and genotyping machines. This has allowed us to proceed with our work faster and spread our research dollars further by performing the work in-house instead of contracting it out. Additionally, Autogen independently purchased a MassArray system (the first in the Australia), to complement the above equipment and provide the fastest and most accurate technology available for genotyping small genetic variations. Ours is now the most comprehensive high throughput DNA analysis facility dedicated to genetics research in Australia and ranks among the best in the world.

Some exciting results have been obtained since the facility began operation in March 2002. A region of chromosome 19 was reported in the literature to be harbouring a gene that can influence various measures of obesity including cholesterol levels. Our colleagues at Autogen had identified a gene influencing development of obesity in the Israeli Sand Rat (an animal model of Type 2 diabetes and obesity). We determined that the human version of this same gene called “beacon” was identical to the Israeli Sand Rat version and was located on chromosome 19. After an exhaustive analysis of genetic variation, we established that the gene also influences obesity related measures in humans. This gene may therefore become a valuable drug target for developing therapies to combat obesity. We are currently working on several other genes found in the Israeli Sand Rat that are in different regions of the genome. A full report on beacon is soon to be published in the peer reviewed scientific media.

Our excellent research progress was presented at both national and international conferences by our research staff during the year. The highlights were another four presentations made at the 2002 Lorne Genomics conference, and one at the International European Association for the Study of Diabetes held in Glasgow, Scotland. We look forward to an even more exciting year ahead and to making the most of our new research facilities.

Jeremy B. M. Jowett D.Phil.
Director Genetics Research Division

LIFT FOR LIFE

Physical Activity – Research & Clinical Programs

The Team

Dr David Dunstan
Ms Karen Kent
Ms Denise Kosmina-Dixon
Ms Elena Lekhtman



In a world-first initiative, we have developed a physical activity program called 'Lift for Life™' for people with diabetes. This program, which is based on our own research, seeks to give people a taste of the significant health benefits associated with strength training.

During the year, approximately 120 people with diabetes participated in the initial eight-week introductory course in which they were taught how to perform strength training safely and effectively. Each participant was given an individualised training schedule which they completed in a group setting twice a week at our Physical Activity Centre.

In an exciting development, we also forged an alliance with the Ashburton Pool and Recreation Centre so that participants in the Lift for Life™ program can continue strength training after completing their introductory course.

Institute staff have worked closely with health and fitness staff at the Ashburton Pool and Recreation Centre providing seminars and education sessions on how to conduct the Lift for Life™ program and assisting participants to continue their strength training program beyond the initial eight week introductory program.

We will now build on this experience by working closely with other community health and fitness facilities throughout Melbourne to enable the Lift for Life™ program to be offered to a wider audience.

Here is a snapshot of some of the other exciting Lift for Life™ initiatives:

- A pilot project with the Dandenong Division of General Practice that aims to incorporate the Lift for Life™ strength training program into a community-based program for people with newly diagnosed diabetes living in the Dandenong area. As part of this project, the Institute will be involved in

training health and fitness staff at community health and fitness facilities in the Dandenong area.

- The Institute has been funded by the Department of Veterans' Affairs to conduct a pilot project involving the establishment of a mobile gymnasium to service 12 communities in the Grampians Pyrenees region. The Institute has purchased a commercial vehicle that will house a large quantity of strength training equipment such as dumbbells and ankle weights. The van will travel to the communities on a fortnightly basis to raise awareness among veterans and other older people with Type 2 diabetes of the enormous health benefits that can be gained from participation in strength training.
- In collaboration with Arthritis Victoria, the Institute is currently working with community health and fitness facilities in Warrnambool to provide the Lift for Life™ program for older people with diabetes and arthritis living in the region.
- Preliminary discussions have been held with a health and fitness centre in Brisbane to establish the first facility outside Victoria to offer the Lift for Life™ program to people with diabetes.

Dr David Dunstan
Director – Lift for Life
Physical Activity Program

SERVICE DEVELOPMENT DIVISION

The Team

Director of Service Development

Ms Virginia Hagger

Education Services Staff

Melissa Jones (Dietitian Coordinator)

Tracy Orr (Nurse Coordinator)

Eileen Collins

Gabrielle Davis

Dianne Harvey

Marie Lebrasse

Nicole McBain

Seona Powell

Mary Storey

Louis Vecchie

Catherine Wallace

Megan Wilson

Health Promotion Officer

Noelle Wengier

Training and Development Manager

Janet Haynes

Helen M Schutt Diabetes Information Centre

Veronica Speirs – Librarian

Special Projects (Child Nutrition)

Karen Edis

Robyn Perlstein

Food Industry Partnership Program

Carolyn Hines

The Service Development Division comprises client education, health professional and health industry training and consultancy services, health promotion and special projects. This year the Division has concentrated on strengthening partnerships and participating in government primary care initiatives, pursuing new initiatives and redefining how we respond to our clients. The education service has continued to strive towards providing excellent and compassionate care to people with diabetes and their families, and to the community. Some new initiatives

were developed in response to the changing needs of our clients, in particular to the changing demographics of our client base:

- A Diabetes Seminar Series increased choice and flexibility of program selection for clients with diabetes.
- The 'recently diagnosed clinic' that was established in 2000, has continued to offer a unique opportunity for newly diagnosed clients to see a physician and an education staff member on their first visit. The aim of this service is to give clients answers to their immediate questions, address their anxieties and concerns, and inform them of the IDI services available to them.
- A 6 week 'WISE UP' program which incorporates the information needed to self manage diabetes with the skills and strategies to help achieve successful long term behaviour change.
- Continuation of our highly successful supermarket tours and cooking demonstrations.
- Regular health updates – covering various topics, such as "Diets Don't Work".
- Health Promotion: Information displays for "Healthy Bones Week", "Heart Week" and "No Tobacco Day" in our reception foyer.
- An inaugural event was the Open Day held during Diabetes Week to promote awareness of the risk factors for diabetes, healthy eating and physical activity. Food tastings, information on the benefits of strength training, meter checking and cleaning and promotion of the Diabetes Resource Centre and door prizes attracted about 60 people.
- The publication of a range of online education resources (fact sheets) has been well received by both clients with diabetes and other health professionals, attracting almost 16,000 hits to the site each month.

We have maintained a strong commitment to the professional development of our staff who have participated in a training program in counselling skills with Cairnmillar Institute, advanced presentation skills, regular scientific meetings and journal reviews. Several members of the education team attended the Australian Diabetes Society and Australian Diabetes Educators' Association National Conference at Surfers Paradise in September 2001. Carolyn Hines presented an abstract on "Food the Flipside", based on an evidence-based approach to food selection criteria, prepared by IDI dietitians. Tracy Orr presented a clinical decision tool provided on CD which was developed in conjunction with Medseed. Both presentations were well received.

Quality improvement has been a focus this year with a comprehensive audit conducted of our group programs. This will guide the planning of future programs. The Institute has committed to the Quality in Community Health Services Accreditation program (QICSA) which will result in a quality plan, a review of policies and procedures and internal and external review of our performance as a comprehensive service.

Helen M Schutt Diabetes Information Centre

The Diabetes Information and Resource Centre has a membership of 70 clients who regularly borrow books and videos. A part-time librarian and a loyal team of volunteers staff the Centre.

Training & Consultancy

Opportunities for professional education expanded during the year. A strong collaboration between Diabetes Australia – Victoria (DAV) and IDI was forged with the success of the Symposium “Finding the Right Key – Modern Concepts in Insulin Therapy” held at the Melbourne Convention Centre in May. Feedback from the 180 participants was overwhelmingly positive. We look forward to the continuing success of this collaboration with DAV annually.

The nutrition seminar conducted in August 2001 attracted 100 dietitians and diabetes educators to Eden on the Park to hear a mix of nationally renowned speakers presenting on topical subjects in current nutritional management. This is planned to be an annual program for rural and metropolitan dietitians.

IDI provided over 300 hours of external training which included a 5 day program in Horsham in partnership with Ballarat University for the Wimmera region’s health professionals. Programs have also been provided for Aged Care Facilities, the Royal District Nursing Service (with the Heart Research Centre) and as lecturers to student diabetes educators and certificate IV nurses at the Mayfield Centre. We ran two programs for nurses working in general practice and continued our 2 day program for GPs in conjunction with divisions of general practice.

Dietitian Melissa Jones took part in a joint IDI and Monash University diabetes education program for general practitioners and dietitians in Sharjah, in the United Arab Emirates. This is part of an ongoing collaboration with Monash University to provide a distance education program for GPs.

VicHealth Health Promotion Partnership

We demonstrated our strong commitment to, and were involved in, many health promotion events during the year. In partnership with other organisations, we participated in developing and implementing health strategies which focus on lifestyle-related health behaviours and risk factors.

These have included a partnership with VicHealth, Diabetes Australia –Victoria and several State sporting associations to create healthy sporting environments particularly in providing healthy food choices and community activities which raise awareness about risk factors associated with Type 2 diabetes. Noelle Wengier also initiated a staff well-being activities and communication program including seated neck massages, exercise and social activities.

Child Nutrition Program

This is a two-year, Commonwealth funded research and resource development project which aims to identify strategies and resources for teachers and parents to improve the nutrition and eating habits of primary school children. The project is due for completion in March 2003 and is timely, given the recent recognition that childhood obesity is becoming a problem in Australia.

Virginia Hagger
Director Service Development

MEDICAL SERVICES

Consultants in diabetes:

Professor Paul Zimmet AO
Dr Matthew Cohen
Dr Neale Cohen
Dr Leon Chapman
Dr Ravi Singh
Dr Jonathan Shaw

Ophthalmologists:

Dr John Sutton
Dr Pradeep Madhok
Dr Mark McCombe

Paediatrician:

Dr Joseph Mel

Optometrist:

Ms Rashelle Cohen

Clinical Support Staff:

Ms Mary Pagett, Practice Manager
Ms Erin Boyle
Ms Helen Chait
Ms Lieba Cohen
Ms Mary Geraghty
Ms Debbie Joseph
Ms Chris Lalor
Ms Kim Mawson
Ms Janet Sephton

The year saw several major changes in Medical Services. A new version of VIP, the computer system we use in the Clinic, was installed in January 2002. Our doctors and educators have been busily entering all clinical information and we are gradually dispensing with the traditional written record. Computer prescriptions are a boon to both doctors and pharmacists, and reduce errors that could result from misreading handwritten ones. The program also enables the correct scheduling of the various tests that need to be done regularly for people with diabetes. Once completed, the data can also be used for valuable research purposes, eg finding people with a particular problem who might benefit from a new treatment.

The other major change involved medical staff. Contractual matters resulted in the departure of 1 full time and 3 sessional physicians. The Institute would like to thank Drs Andrew Lang, Richard Arnott, Jane Wischusen and Serge Tang Fui for their contribution over many years, and wish them well for the future. Two diabetes specialists who have been employed full time have replaced them.

Dr Ravi Singh, originally from the UK, joined us from Perth in January and has rapidly built a reputation as a gentle and caring doctor. He has a special interest in

diabetes and pregnancy, and - by arrangement with Monash Medical Centre- conducts a clinic in diabetes and pregnancy there once a fortnight.

Dr Jonathan Shaw, also from the UK, joined our clinical team in October 2001. Jonathan is no stranger to the Institute, having previously worked in our research section for 2 years. Jonathan has also been appointed Director of Clinical Research.

Unfortunately, the shortage of diabetes specialists in Victoria meant that we could not continue our regional services to Geelong and Frankston. However, the consulting rooms at the Institute continue to grow, and the past year saw the registration of our 15,000th patient. Our pathology laboratory again received annual accreditation. The convenience of providing “on the spot” results from a finger prick has made the laboratory a popular alternative to using external laboratories.

We are the only centre in Australia, and possibly in the world, that enables people with diabetes to have their pathology tests, consult a diabetes specialist, have their eyes checked, see an educator, obtain their supplies and have a cup of coffee all at the same place.

Supporting Medical Services is the staff (listed) who work in pathology, reception, medical records, and ophthalmology. They are co-ordinated by our efficient and popular Practice Manager, Mary Pagett. Two staff members have reached their 10 years' service to the Institute and receptionist Margaret Tasker reached 15 years. Last year saw the addition of Janet Sephton and Helen Chait in the reception/secretarial area, and Erin Boyle and Debbie Joseph in the Pathology Department.

The Medical team looks forward to continuing to make the best and latest treatments available to our patients.

Matt Cohen FRACP
Director Medical Services

CORPORATE SERVICES

The Team

Ms Joan Hoskins (to 29 March 2002)
Mr Darrin Grech (to 18 December 2001)
Mrs Golde Jones
Mrs Karola McGeehan
Ms Diann Pattison
Ms Katrina Polderman

Corporate Services supports all the core activities of the Institute. Our main focus is on raising funds to contribute to the Institute's research projects, education services and patient care. This involves creating successful marketing initiatives to encourage public support, and our database of supporters and potential supporters continues to grow.

Income from philanthropic individuals, trusts, foundations, governments, clubs and private supporters increased substantially during the year.

We ran six raffles this year with the major prize either a \$ 50,000 shopping vouchers or a BMW. We are most grateful to Myer Grace Bros and Bib Stillwell BMW for their support of this important program. Our net income from raffles exceeded \$500,000 and we express our sincere thanks to all who support our raffles.

A donation to charity in lieu of flowers as an 'In Memoriam' or special occasion gift is becoming more popular in the community. We are most grateful for all the donations that we received.

Another important fundraising initiative is our retail activity. This includes our One Stop Shop, Opportunity Shop and Christmas Shop, as well as our on-line shop, which is increasingly the 'shop of choice' for those who buy our products. Our Opportunity Shop and Gift Shop are managed purely by volunteers and have been a constant source of valued income. Special thanks to our loyal volunteers.

The Institute newsletter continues to inform clients, supporters and volunteers. The success of our newsletter appeals together with our tax and Christmas appeals reminds us again of the generosity of our clients and supporters.

Our Funding Committee, a sub-committee of the Board of Directors, meets regularly to help identify new opportunities and strategies to maximise the Institute's financial position.

We express our very special thanks to the Diabetes Support Association, which is an auxiliary of the Institute. Its members' tireless work on our behalf is a constant inspiration. With the support of our major and loyal donors we look forward to a bright and successful future.

Karola McGeehan
Fundraising Officer

MAJOR DONORS

Mr Robert Whyte
J B Were & Sons Charitable Fund P/L
Kennedys Solicitors
William Angliss (Vic) Charitable Foundation
ANZ Executors & Trustee Co Ltd
Lord Mayor's Charitable Fund
Macquarie Bank Foundation
Mr & Mrs F & A Agar
Kagan Bros Consolidated P/L
Mr Rodney Kagan
Abbott Australasia P/L
The Jack Brockhoff Foundation
Mr Mark Munzer
Prof Paul Zimmet P/L
Elsternwick Park Women's Golf Club
Mr Andrew Croft

GlaxoSmithKline
Leon Mow Nominees P/L
City of Glen Eira
Helmsmen Kiosk Auxillary
Rotary Club of Glen Eira
Diabetes Support Association
Ms Helen Maxwell-Wright
Affinity3 Pty Ltd
Ms Sophie Weinberg
Mrs Phyllis Boyd
Mr & Mrs I & A Burke
Mr Alan Hunt AM
Victorian Lions Foundation
Bib Stillwell BMW
Ms Joan Kiely
Mr Martin Burman

PROJECT DEVELOPMENT REPORT

The Team

Louise Lyons (to 1 February 2002)
Carolyn Hines
Robyn Perlstein
Gary Layton (from 6 May 2002)

This year, the Institute continued to progress current research projects, explore collaborative opportunities and create new commercial offerings. This progress has been underpinned by our strength as Australia's leading centre for diabetes care, education and research. Moreover, our success continues to be driven by the exceptional quality and highly specialised skills of our staff in diabetes care, education and research.

Education and research is the major focus of Project Development attention. Within education we have maintained our position as a leading provider of advisory services for people with diabetes. Our consumer initiatives include Food the Flipside, an informative dietary advice resource for patients, and the Shop for Gold program, an endorsement program that helps consumers make healthy food choices. In this past year, our efforts to promote healthy eating have been enhanced by our industry partnership initiatives. These include our nutritional consultancy services to food manufacturers, consultancy advice on product formulations and glycemic index testing services.

Through collaboration with others such as Monash University, RMIT University, and Deakin University, the Institute has established a range of synergistic research partnerships. These include our work with Cardia Technologies Ltd and Monash University to find new therapeutic compounds for the treatment of diabetes.

Looking forward, Project Development will continue to take a portfolio planning approach to identifying, developing and implementing new opportunities. For each of the following areas, visions have been articulated and each project has been designed for optimal fit with the Institute's charter and competencies.

Physical Activity Centre

The Lift for Life™ brand, evidence-based exercise programs for preventing and managing diabetes and related diseases, will be established by developing a working model of the Institute's Physical Activity Centre complete with a network of accredited gymnasiums in Victoria by June 2003.

Education and Training

A range of education and training offerings will be made to general practitioners, diabetes specialist nurses, diabetes educators, nutritionists, pharmaceutical company management and pharmaceutical representatives.

Sponsorships

Organisations with compatible goals to the Institute will be invited to take advantage of promotional opportunities within Institute initiatives, functions and events.

Consultancies

Specialist advice, consulting and product testing services will be provided to organisations marketing products for consumption or use by people with diabetes.

Glycemic Index Testing

The Institute will be established as a leading provider of glycemic index testing services to food manufacturers.

Shop for Gold

The Institute's Shop for Gold endorsement program, for manufacturers of food products that meet the IDI healthy food choice criteria, will continue to acquire new partners throughout 2002/2003.

E-Commerce

Our website (www.diabetes.com.au) has become a major success story as a provider of diabetes educational information to the public. In fact, it was recently ranked as the second most popular online diabetes resource in the world.

Research Projects

This year has seen the launch of a new collaborative study partnership involving the Institute, Monash University and Cardia Technologies Limited. This collaboration, together with our other ongoing research, has reinforced the Institute's position as a leading diabetes research and WHO collaborating centre.

Importantly, each of the project areas described here is at the early stages of its lifecycle with significant growth potential. This augurs well for an exciting project and business development future for the Institute.

Finally, none of these projects would be possible without the generous support of our many sponsors. These include Jockey Australia, Steric, Pomodori, Low Carb Condiments and our website sponsor Roche Diagnostics Australia.

Together with our sponsors we look forward to building on the successes of the past year and to continuously improving as a leading provider of care, education and support to people with diabetes.

Gary Layton

Manager Project Development

FINANCE/HUMAN RESOURCES

The Team

Ms Laura Collins
Ms Joyce Cordingley
Mr Rodney Grigoleit
Mr Don McDermott
Ms Nina Marich
Ms Judith Preston
Mr Arthur Walmsley

The Institute recorded a surplus in excess of \$1.3 million for the year ended 30th June 2002, thus marking a major recovery that is most timely.

This result has been measurably assisted by \$470,000 from the Commonwealth as a final payment for the AusDiab Study.

Further to this, funds in excess of \$500,000 that have been received and recorded as income for research are to be placed aside for the purchase of fixed assets.

While these two major adjustments have impacted positively on our financial performance for the year, the Institute's diverse divisional activities assist in providing more financial stability for the organization.

The Research, Clinical Trials and Education Divisions continue to provide exciting developments as well as a strong financial base.

In addition, our very generous donors have provided the Institute with much needed funds through donations, bequests and the sale of raffle tickets.

The Finance Department is reviewing new accounting software systems with the objective of moving in the new year, to a project costing system more suited to the Institute's changing needs. It is envisaged that project accounting will enable greater accountability of each of the operating divisions/projects.

My thanks and gratitude to the staff of the Finance/Human Resources Division, who have continued to serve with loyalty, professionalism and a positive attitude.

Arthur Walmsley
Manager Finance/Human Resources

INFORMATION TECHNOLOGY

The Team

Stephen Russell
Bibra Staskowski

The role of the Information Technology (IT) Department is integral to the Institute's day-to-day operations. Responsibilities of the department include computer hardware and software support, the administration of computer network, systems integration, telecommunications, training, graphic design and web page design and maintenance.

In view of the Institute's Mission, we have been concentrating on the Integrated Patient Management System (IPMS) so that there is consistent and secure storage of patient information. Greater efficiencies from this system have been identified through accurate reporting, consistent information between staff and departments, and less reliance on paper-based records. The information in the system is vital to identifying models of care for our clients.

Our website (www.diabetes.com.au) is very popular with Australian and overseas visitors. We are averaging 18,000+ visitors every month. The fact sheets are an important source of comprehensive information on diabetes and by far the most popular section on the site. We were recently honoured when the British Journal of Diabetes and Vascular Disease identified the Institute's website as the second most frequently visited diabetes site in the world!

The IT Department looks forward to the coming year when our focus will be on maintaining the high level of support that is needed to keep the Institute operating smoothly. Further development and refinement of the IPMS will be of prime importance, along with internal training for staff efficiencies. We are also constantly identifying and, where appropriate, implementing strategies and technologies to allow for the efficient running of the Institute.

In our case, having a low profile means we are accomplishing our tasks. It is only when there are problems that people notice us!

Stephen Russell
IT Manager

EULOGY FOR MR LEON MOW AM (*)

It's been a long journey from a desperately poor background in Bialystok in Poland to Melbourne, Australia via South Africa. Leon Mow led an extraordinary life spanning 82 years – a life dedicated to giving to others.

Despite a list of illnesses that would have flattened an army, Leon lived a full life until the last minute. Like the Frank Sinatra song – Leon Mow did it his way.

His life and generosity touched many hundreds of thousands of people from many ethnic groups, many religions and many countries. Despite his slight build and his quiet and gentle nature, here was a giant of a man in terms of intellect, business acumen and deep social conscience.

Leon was warm, humble, humorous, generous, philosophical, caring, thoughtful, inspiring, a great counsellor, conciliator, consoler and a soldier. He was a man whose cup was always overflowing with humanity and philanthropy.

In 2001 he was awarded the order of Australia. It amused him enormously that a boy from Bialystok had been honoured by her Majesty the Queen with one of the highest honours of the Nation! He said that if he went back to Bialystok, who would believe it.

His citation went:

For service to the community through financial and administrative support for health research institutes, particularly the International Diabetes Institute, and social welfare and educational organizations.

If it wasn't for Leon, it is possible that Australia would never have had an International Diabetes Institute. Over the years since its opening in 1985, it has become one of the leading world centres for diabetes research, treatment and education. One day in 1980, a Mr Mow walked off the street into my office in an old Edwardian house in Kooyong Road, Caulfield. He asked to see me and fortunately, for what was to later happen, I made myself immediately available to talk with this pleasant unassuming man who posed a challenge – “*what research would you do if I gave you a donation of \$10,000?*” I asked him to give me a few days to think about it. He came back a few days later and I explained a research project I had in mind that would benefit people with diabetes. He liked it and handed over a cheque for the said amount. It was the first of many donations that would follow to establish the International Diabetes Institute.

Leon was not just a passive donor. Leon served as a Board Member and was Vice-President. He provided much wisdom and advice as the Institute grew. He was always willing not only to advise on strategy and planning, but also on practical aspects such as new buildings and renovations. There is no question that had it not been for his vision and his generosity, there would be no International Diabetes Institute. It was one thing for me to have a vision, it was another thing to have this “White Knight in Shining Armour” to provide the means to translate that vision into a major international health institution.

Leon Mow was a major supporter of many other charities beside the Institute. He has been a major supporter of aboriginal and Torres Strait Island causes and charities. He

was one of the main fundraisers behind the building of the Victorian Aboriginal Resource and Cultural Centre in Preston/Northcote in the early 1980s. Other charities he supported substantially included Cornerstone Contact Centre, Cornerstone Legal & Counselling Service, Mount Scopus College, Gateway Counselling, Yooralla, National Heart Foundation, Sacred Heart Mission, Jewish Holocaust Centre, INF Environment Fund, WIZO, Scholem Aleichem College, Astronomical Society Victoria, Monash University, Arthritis Foundation, Gawler Foundation, Alzheimer Association, RSPCA, United Jewish Education Board, Montefiore Homes, Vision Australia, ARAVA Australia, Plan International, Centre for Eye Research, Cabrini Medical Research Foundation, Epworth Medical Foundation, MS Society, Sacred Heart Mission and many charities in Israel.

A leading figure once said: “my main aim in life was to be a legend in my lifetime, but all I did was create an unsubstantiated rumour”! Leon Mow had no desire but became a legend to those who knew him and many others who did not meet him but benefited from his generosity and advice.

To his partner and wife for 35 years, Pam, his first wife, Rosalind, Raymond, Leah and David, Elisabeth and Tony, his many nieces, nephews, grand nieces and nephews and the rest of the family, our most heartfelt condolences.

Tonight, when you look to the sky, look for the most brilliant star you can see. It will remind you of our dearly loved Leon. He was indeed a bright star whose glow, whose influence and whose compassion for mankind will never fade.

Professor Paul Zimmet AO

(*) Extract from the Eulogy presented at the funeral by Professor Zimmet.

EPIDEMIOLOGY

PUBLICATIONS 2001/2002

REFEREED JOURNALS

Walder K, McMillan JS, Lee S, Civitarese A, Zimmet P, Collier GR. Effects of Beacon administration on energy expenditure and substrate utilisation. *Int J Obesity* 2001;25:1281-1285.

Kriska AM, Hanson RL, Zimmet PZ, Alberti KGMM, Pereira MA, de Courten MP, Chitson P, Bennet PH, Knowler WC. Association of physical activity and plasma insulin concentrations in two populations at high risk for Type 2 diabetes but differ by obesity status. *Diabetes Care*;2001;24:1175-80.

Walder K, Oakes N, Fahey G, Cooney G, Collier G, Zimmet P. Profile of dyslipidemia in *Psammomys Obesus*, an animal model of the metabolic syndrome. *Endocrine Regulations* 2002;36:1-8.

Walder K, McMillan J, Lapsys N, Kriketos A, Trevaskis J, Civitarese A, Southan A, Zimmet P, Collier G. Calpain 3 gene expression in skeletal muscle is associated with body fat content and measures of insulin resistance. *Int J Obes Relat Disord* 2002;26:442-449.

Dunstan D, Zimmet P, Welborn T, Shaw J, de Courten M, Cameron A, Sicree R, Dwyer T, Colagiuri S, Jolly D, Kuiman M, Atkins R on behalf of the AusDiab Steering Committee. The rising prevalence of diabetes mellitus and impaired glucose tolerance. The Australian Diabetes and Lifestyle Study. *Diabetes Care* 2002;25:829-834.

Walder K, Zimmet, P, Collier G et al. Elevated hypothalamic Beacon gene expression in *Psammomys Obesus* prone to develop obesity and type 2 diabetes. *Int J Obesity* 2002;26:605-609.

Myers MA, Mackay IR, Zimmet PZ. A dietary cause of type 1 diabetes: unearthing a new twist to the tale. *Diabetes Technology and Therapeutics* 2002;4:193-198.

Dunstan D, Zimmet P, Welborn T, Cameron A, Shaw J, de Courten M, Jolley D, McCarty D. The Australian Diabetes, Obesity and Lifestyle Study (AusDiab) Methods and Response Rates. *Diabetes Res Clin Pract* 2002;57:119-129.

Unwin N, Shaw J, Zimmet P, Alberti G. International Diabetes Federation IGT/IFG Consensus Statement. Report of an Expert Consensus Workshop 1-4 August 2001, Stoke Poges, UK. *Diabetic Med* 2002;19:708-723.

Walder K, Kantham L, McMillan JS, Trevaskis J, Kerr L, de Silva A, Sutherland T, Godde N, GAM Y, Bishara N, Windmill K, Tenne-Brown J, Augert G, Zimmet PZ, Collier GR. Tanis: a link between type 2 diabetes and inflammation? *Diabetes*: 2002;51:1859-66.

IN PRESS

Zimmet P. Addressing the insulin resistance syndrome; a role for the thiazolidinediones. *Trends in Cardiovascular Medicine*. 2002: in press.

Dunstan DW, Daly RM, Owen N, Jolley D, de Courten M, Shaw J, Zimmet P. High-intensity resistance training improves glycemic control in older persons with type 2 diabetes. *Diabetes Care* 2002: in press.

BOOKS, CHAPTERS, PROCEEDINGS, REVIEW ARTICLES

Myers MA, Mackay IR, Rowley MJ, Zimmet PZ. Dietary microbial toxins and Type 1 diabetes – a new meaning for seed and soil. *Letter to the Editor Diabetologia* 2001;44:1199-1200.

Zimmet P, de Courten M, Hodge AM, Tuomilehto J. Epidemiology, evidence for prevention: Type 2 diabetes. In: Ekoe J-M, Zimmet P, Williams R (eds). *Epidemiology of Diabetes Mellitus - An International Perspective*. John Wiley & Sons, Chichester 2001 pp 41-49.

Zimmet P, Cohen M, Ekoe J-M. The United Kingdom Prospective Diabetes Study. An epidemiological perspective. In: Ekoe J-M, Zimmet P, Williams R (eds). *Epidemiology of Diabetes Mellitus - An International Perspective*. John Wiley & Sons, Chichester 2001 pp 425-429.

Hodge AM, Collins VR, Zimmet PZ, Dowse GK. Type 2 diabetes and obesity. In: Ekoe J-M, Zimmet P, Williams R (eds). *Epidemiology of Diabetes Mellitus - An International Perspective*. John Wiley & Sons, Chichester 2001 pp 273-283.

Ekoe J-M, Zimmet P. The clinical syndrome and the biochemical definition. In: Ekoe J-M, Zimmet P, Williams R (eds). *Epidemiology of Diabetes Mellitus - An International Perspective*. John Wiley & Sons, Chichester 2001 pp 7-10.

McCarty DJ, Zimmet P. Pacific Island Populations. In: Ekoe J-M, Zimmet P, Williams R (eds). *Epidemiology of Diabetes Mellitus - An International Perspective*. John Wiley & Sons, Chichester 2001 pp 239-245.

Ekoe J-M, Zimmet P. Diabetes mellitus: diagnosis and classification. In: Ekoe J-M, Zimmet P, Williams R (eds). *Epidemiology of Diabetes Mellitus - An International Perspective*. John Wiley & Sons, Chichester 2001 pp 11-29.

Zimmet P, Alberti KGMM, Shaw J. Global and societal implications of the diabetes epidemic. *Nature* 2001;414:782-787.

Myers M, Mackay I, Zimmet P. Dietary toxins: Digging up the dirt on vegetables. *Diabetes Voice* 2002;47:35-37.

Tong JC, Myers MA, Mackay IR, Zimmet PZ, Rowley MJ. The PEVKEK region of the pyridoxal phosphate binding domain of GAD65 expresses a dominant B cell epitope for type 1 diabetes sera. In: Immunology of Diabetes: Autoimmune Mechanisms and the Prevention and Cure of Type 1 Diabetes. Annals of the New York Academy of Sciences 2002;958: 182-89.

IN PRESS

Zimmet P, Hodge A. Paradise lost: the epidemiology of obesity in Pacific and Indian Ocean populations. In: Ailhaud G, Guy-Grand B (eds). Progress in Obesity Research. J Libbey & Co Ltd. in press.

de Courten M, McCarty D, Zimmet P. Chapter 2 Diagnosis: the scale of the problem and future risks. In: Hitman G. (ed) Type 2 Diabetes: Prediction and Prevention. John Wiley & Sons p 17-36 in press.

Zimmet P, Walder K, Collier G. The Genetics of Diabetes. Encyclopedia of the Human Genome: in press.

PRESENTATIONS AT SYMPOSIA 2001-2002

PROFESSOR PAUL ZIMMET

Symposium Chairman and Speaker, EASD Glasgow 2001

Co-Chairman, IDF Expert Committee on Impaired Glucose tolerance 2001

Honoris Doctoris Causa (Complutense University, Madrid) 2002

Harold Rifkin Award, American Diabetes Association for international service and research in diabetes 2002

KEYNOTE LECTURES

RACGP Annual Congress, Sydney, 2002

Remote Doctors Conference, Perth, 2002

Chairman and Symposium Speaker, IDF Congress in Beijing, 2002

PRESENTATIONS BY SENIOR STAFF

EPIDEMIOLOGY

Gender differences in the relationship between fasting and 2-hour glucose levels in Mauritius. Williams JW, Shaw JE, Zimmet P, de Courten MP, Chitson P, Tuomilehto J, Alberti KGMM.

Epidemic Glucose Intolerance in Australia. Shaw JE, Dunstan DW, Zimmet PZ, Cameron AJ, de Courten MP, Welborn TA.

A Staged Approach to Screening for Undiagnosed Type 2 Diabetes. Colagiuri S, Shaw J, Hussain Z, Zimmet P.

A Comparison of Body Mass Index and Waist Circumference in a National Diabetes Prevalence Study. Dalton MF, Cameron AJ, Tapp R, Shaw JE, Zimmet P, Welborn T.

A Profile of Diabetes Related Foot Complications in Australia. Tapp R, Shaw J, Dalton M, Welborn T, Zimmet P.

Association between diabetes related risk factors and states of impaired glucose metabolism in Australia. Cameron A, Dunstan D, Shaw J, Welborn T, Zimmet P.

Gender Association with Basis for Abnormal Glucose Tolerance Diagnosis According to Diagnostic Criteria. Sicree RA, Shaw JE, Dunstan DW, Cameron AJ, Zimmet PZ.

Diagnostic Criteria For Diabetes: The Relationship Between Glycaemia and Retinopathy. Tapp R, Shaw J, Harper A, Dunstan D, Taylor H, Welborn T, Zimmet P.

Prevalence and Risk Factors for Retinopathy in the Australian Diabetic Population. Tapp R, Shaw J, Harper A, Dalton M, de Courten M, Murray S, Dunstan D, Taylor H, Welborn T, Zimmet P, on behalf of the AusDiab Study Group.

GENETICS RESEARCH

Phase Simulation and Estimation of LD in a Random Sample from a General Population. Wormald H, Proietto C, Jowett JBM

Detection of Human Obesity-Associated Polymorphism by AFLP Genome Scan. Huxtable SJ, Youd JM, Hunt N, Dennis SL, de Silva AM, Wang J, Walder K, Wormald H, Zimmet P, Jowett JBM.

Genome Scan for Body Fat Distribution-Associated Markers. Wang J, de Silva AM, Walder K, Zimmet P, Jowett JBM.

Identification of Sequence Variants in the Coding Region of the Human Tanis Gene. Gluschenko K, Collier GR, Kantham L, Walder K, Zimmet P, Jowett JBM.

Comparison of SNP Genotyping Methodologies. Proietto CE, Zimmet P, Jowett JBM.

Detection of Human Obesity-Associated Polymorphisms by AFLP Genome Scan. Dennis SL, Hunt N, Huxtable SJ, Proietto CE, Youd JM, de Silva AM, Wang J, Walder K, Zimmet P, Jowett JBM.

LIFT FOR LIFE

Lift, loosen and lose for diabetes – strength training for older people with Type 2 diabetes. Dunstan D.

AusDiab – From Concept to Completion. Dunstan D, Colagiuri D, O’Dea K.

Diabetes – The Accelerating Epidemic. Dunstan D.

Strength in the fitness industry. Dunstan D.

