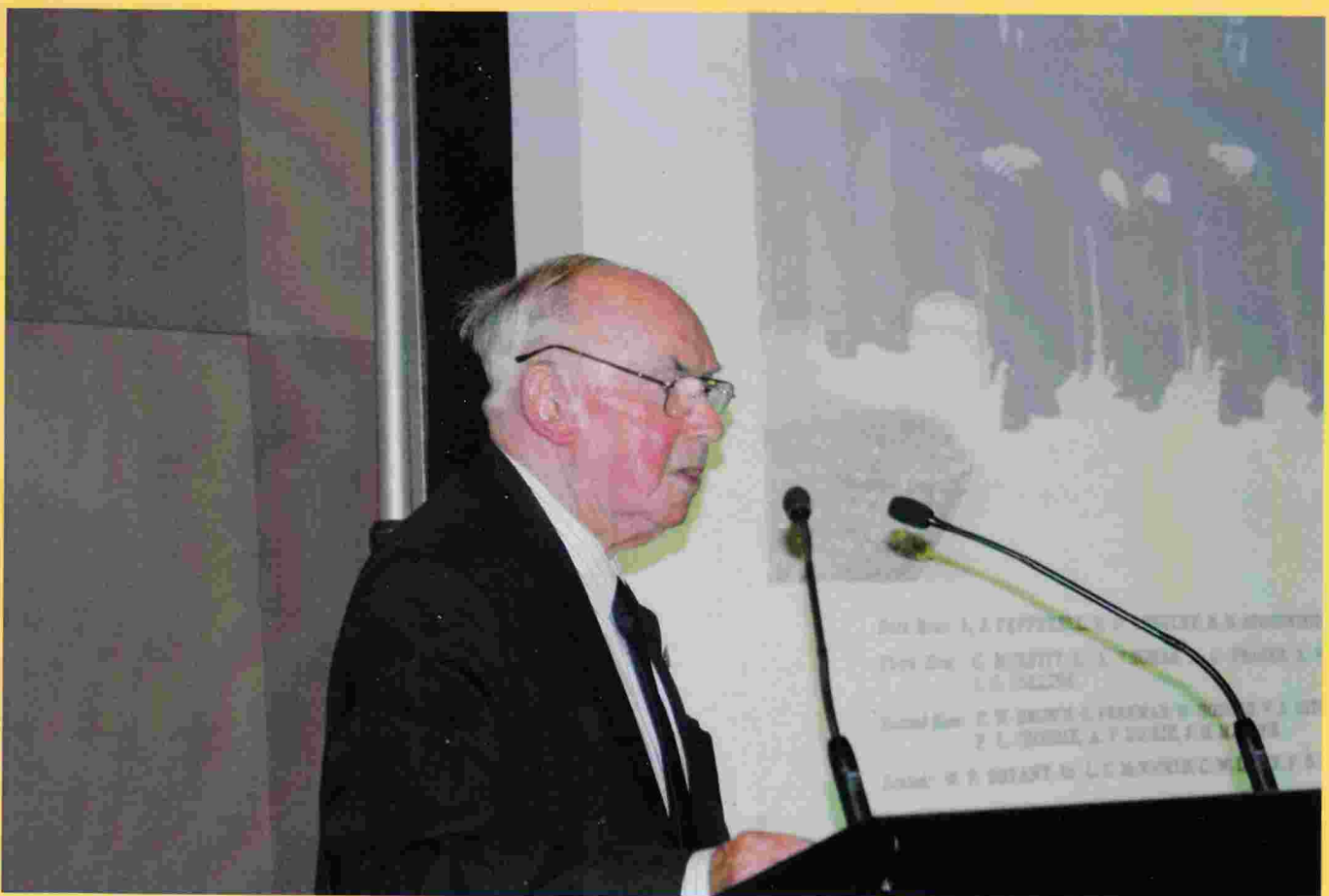


THE HEALTH ENGINEER



New Zealand Institute
of
Healthcare Engineering

NZIHE

New Zealand Institute of Healthcare Engineering

76th Annual Conference Rydges Lakeland Resort Queenstown 7-9 November 2012

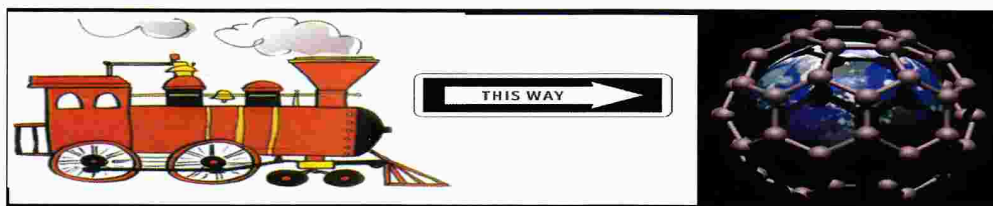


Our Mission:

“To enhance the quality of health care through the pursuit of excellence in health estate and engineering management”

The 2012 conference will mark the first time the NZIHE conference has been hosted in Queenstown. The conference will be held at the Rydges Lakeland Resort Hotel on the beautiful Lake Wakatipu waterfront. Queenstown is a perfect conference location with many venues having dedicated conference facilities set amongst some of New Zealand’s most picturesque scenery.

“FROM STEAM TO NANOTECHNOLOGY”



The theme for the conference is From Steam to Nanotechnology which is intended to reflect the extensive facilities and clinical engineering content of the conference. This theme will also seek to take advantage of some of the relevant activities Queenstown has on offer such as a trip on the steam boat TSS Earnslaw.

All enquiries to:

Tric Moller

Ph: 021 330538

Email: admin@dentmed.co.nz

Request your leave and book your place at
the 2012 NZIHE conference now!

For more information visit www.nzihe.org.nz

THE HEALTH ENGINEER

The Journal of the Institute of Healthcare Engineering

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Cover photo- Lex Smith, Life Member, telling the annual dinner his reminisces about the many past characters in the Institute. The high point of the 75th Anniversary Conference.

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PRESIDENT'S REPORT

2011 was a roller coaster year continuing on from 2010. Natural disasters (Christchurch), man made tragedies (Pike River) and large scale misadventures (Rena). All these have affected us in different ways. These events have also reinforced to us all that change is happening at an accelerating pace. We as engineers know the technological advances that are rapidly improving our lives, but we also have to adapt to changes in our facilities, businesses, workplaces and homes.

The work of our colleagues at Christchurch hospital demonstrated their skill as engineers to adapt, improvise and remedy difficult situations. For once the importance of our engineers was at the fore. Well done to everyone involved in Christchurch. We appreciate your work which will no doubt continue for some years to come.

This years conference in Wellington was remarkable. I don't know whether it was the presentations on Christchurch experiences, the venue or just a number of stressed delegates enjoying a break with friends and colleagues. A very special thanks to Max and Richard for their tremendous work and thanks to our trade partners on marking this special 75th anniversary conference. Lex Smith's presentation and cutting our cake will no doubt remain special to us all.

Looking forward, 2012 will continue to bring change. Health Benefits Ltd will have some ideas to consider, there will be new projects and builds and a finalised AS/NZS 3551 standard. Our Queenstown conference will be a must to attend, so plan now, organise leave early and join us.

Finally, welcome to Leon and Greg on our executive team and a big thanks to Kevin Bardsley for his many years of work on the NZIHE executive.

Wishing you all the best for the year ahead,

Doug Moller
NZIHE President



CONFERENCE REPORTS

After each conference we have contributions from Facility and Clinical engineers as to how they enjoyed the conference and also a write up from the partners on their program.

CLINICAL ENGINEERING

This year's conference was held in Wellington at the Inter-Continental, Wellington's only five star hotel. Celebrating 75 years since the founding of the NZ Institute of Healthcare Engineering (formerly NZIHEEM) this was the 66th annual conference entitled "Closing the Loop".

The conference was scheduled to be held in Christchurch but due to the devastating earthquakes experienced in Canterbury it was moved to Wellington due to the lack of venues and also to allow our fellow Cantabrian engineers to focus on dealing with the damage done to their health system and homes. This, in turn, provided the basis on which to begin the conference with, looking at the earthquake and its effects on Canterbury's Health System.

After Welcoming and Keynote addresses the conference began with topics looking at many aspects of the Canterbury quakes impact on infrastructure, the people and the systems in place to deal with such a natural disaster, along with some very graphic pictures of the toll paid. It was interesting to see how systems dealt with the needs for what most of us just take for granted, getting services such as steam, power and water going so that the emergency room staff could deal with the huge influx of patients arriving at the hospital on the back of ute's, strapped to car roofs, pushed on bikes, being carried in or even just walking in with horrific life threatening injuries.

In some instances it was just a real back to basics approach, constantly re-evaluating the plan, colour coding teams for quick identification of personnel in the emergency response team, drug cupboards were left open, egos were left at the door and everyone did what they could with the limited resources they had.

While the ED room dealt with the patients, the facilities team were organising portable boilers, repairing water mains, diverting power among many other important tasks.

A good quote by David Meates was **"We need the whole system to be working for the whole system to work"**.

What was very apparent from the presenters was how the effects of the quake had taken such a personal toll on them and it was evident in the lengths they went to to just "get the job done" that it was a job well done and a job that is still continuing.

The afternoon continued with a presentation from Health Benefits Ltd on their continued quest to find ways of saving \$700 million dollars in the next 5 years and a presentation on the Medica Centre in Sydney by GE Healthcare.

The Medica Centre is a totally digital hospital that eliminates the use of paper right from when the patient enters and hands over their referral letter which is immediately scanned into the system to innovative approaches to patient environment and building design. This centre challenges the conventional way of thinking and I would recommend you look this hospital up on the internet to form your own opinion on this concept as it is very interesting.

The trade night was held in the TSB Arena and provided a good opportunity for delegates to mix with suppliers, representatives and other delegates in a relaxed environment with great representation from

key sponsors and suppliers who had a wide array of products and services on display.

On day 2 the delegates were split in to Facilities and Biomedical Streams before coming back together at midday.

In the Biomedical stream we had a talk on using a needs assessment tool to assist in fairly distributing funding based on a model developed to help Tygerberg Academic Hospital in South Africa. 3.6 million people receive care from Tygerberg or via it's secondary hospitals.

GS1 or "the barcode geeks" as they are often referred to, explained the Global Trade Item Number (GTIN) system they developed and how they are working on implementing barcode tracking systems into healthcare. It was interesting learning what all the numbers on a barcode mean!

We then had a very entertaining talk from an ICU Nurse tech from CCDHB, explaining from a nursing point of view the important role bio-meds play so the nursing staff can do their job focussing on the patient and rely on biomedical staff to look after the equipment side.

The last talk in the Biomedical stream was from Covidien (formerly TYCO) who gave a presentation on the company's added funding for R&D, demonstrating a new Tri Stapler and the development that went into it, talking about reducing waste with the use of disposable and semi disposable equipment.

The final afternoon consisted of talks from the New Zealand and Australian ANZEX Delegates which was interesting hearing about developments in health-care where traditional facility management aspects are being challenged with new innovations such as robotic systems to move waste and linen. The New Zealand delegate talked about the hospitals he visited on his trip to Australia and both delegates touched on the new Medica Centre and their views on some aspects of its design.

The National Health Board gave a presentation on their role in assisting DHB's and their model for planning and funding of health services.

A talk that left the whole room speechless was from Professor Swee Tan and his work with plastic surgery and strawberry birthmark patients, with impressive before and after photos of patients. Swee Tan gave a very informative, interesting and often entertaining talk of his work and dedication to the continued development of cures to help people with often debilitating strawberry birthmarks.

The conference concluded with the annual dinner which also provided an opportunity to learn some of the history of the Institute over it's 75 years.

Overall the conference was very informative, well run and on time with a friendly atmosphere and many opportunities to mix with fellow Biomedical and Facilities colleagues from around the country.

I found new and useful information on topics both related and unrelated to the field of Anaesthetic Servicing that I work in and I even managed to tie my own tie by the end of the annual dinner!



Gareth Hull
Senior BMET
Clinical Engineering ADHB

FACILITIES

After the introduction and welcoming address from President Tony McKee, David Meates, CEO of Canterbury DHB delivered the Keynote Address where he outlined the impact of the two earthquakes on the Canterbury health system. With facilities spread throughout the Canterbury region a number had sustained damage in the first quake, particularly un-reinforced brick structures but with the February quake, which was slightly less intense but much shallower and centred under Lyttleton, thus causing an enormous amount of damage in the city and suburbs. David Meates delivered his paper clearly and was quite explicit about the problems facing the District Health Board and how they had to keep things going somehow.

Bruce Hall, Emergency Planner Canterbury DHB was next speaker who explained how emergency planning had been put to the test but this was only part of the answer. The whole answer depended on the people, who had responded magnificently.

Jan Bone of the Emergency Department delivered a most moving address about all the happenings of the earthquake and how the emergency department responded –again the people. She listed the numbers of incoming injured and how they were treated, no matter that there were several power breaks, some ceilings caved in and several aftershocks. One injured man had lost both his legs, others with serious crush injuries. Some walked in, others came on the back of utes, on doors as stretchers, in ambulances and even on bicycles. It was a very moving account and Jan was visibly moved at the memory of the events that lasted through the night into the next day.

We then had our own members talking about their response and problems. Nigel Wing showed some videotape film which showed the damage in the process of being created, trolleys and beds on the move, ambulances jumping about. He listed some of the damage incurred by the various facilities, how the emergency generators failed and how long it took to produce power again. Tony Blackler was not at work when the quake struck but he was able to show the impact of the quake and liquefaction in his community. Following second level inspections there was the need to evacuate the building occupied by Clinical Engineering. The Clinical Engineering team had to be really adaptable in the coming months as they continued to deliver an effective service in challenging circumstances. The rest of the afternoon was a bit of an anticlimax with David Page telling his audience about the aims of Health Benefits Limited and how they expect DHBs will be saving large amounts of money over the next five years.

He was followed by Craig Pinkerton of major sponsor GE Healthcare who gave a very interesting account of the Medica Centre in Sydney where health practitioners, and IT have been combined to provide a digital hospital environment within a single purpose built building. The afternoon was rounded off with the holding of the NZIHE AGM where all reports were accepted and Doug Moller was elevated to President.

Trades Night was held in the TSB Arena which is situated just inside the entrance way to Queens' Wharf. There were some highly interesting displays which raised much interest from our members but one feature that caught my interest was the available space combined with the high roof, features that were never apparent in previous Trades Nights. Possibly the best give away was the tool kit from Welch Allyn but the card draw at the end also created a lot of interest. There were many familiar firms and faces amongst the exhibitors for example Garry Busowsky with BEIMS, from Melbourne: Alan Horner with Austco nurse call systems: Alan Cameron, formerly with Mercers now with Gallay Medical & Scientific. Altogether a very enjoyable evening.

On Friday morning the assembly was split off into the Facilities and Bio-med sections to follow their own specific programmes. Facilities started off with Henry Biggelaar from Spirax – Sarco talking about

how accumulators improve steam quality and the future of clean steam in the health sector. Scott Noyes from Schneider Electric, one of our sponsors, then talked about Building Intelligence. He demonstrated how by using a four step model during the lifecycle of a building you can make the most of your energy

The morning session continued with Gavin Carey-Smith from Hawkes Bay DHB giving a presentation on life in the Project World, how some projects fail and how a project can be successful. Finally before the lunch break Ewen Gebbie of the Energy Management Association talked about current trends in the energy management sector.

The final afternoon was a combined session again with both groups welcoming Howard Bulmer, the Australian ANZEX Delegate and his paper about the three significant areas of technological change and innovation that healthcare facility managers will need to address in the future.

He was followed by Chai Chuah, National Director of the National Health Board Business Unit of the Ministry of Health. The NHB Business unit is central to the new model for planning and funding Health Services. Chai who was formerly Chief Executive of the Hutt Valley DHB gave a very informative talk about the work of the National Health Board and the changes that they hope to implement.

It was then the turn of Professor Swee Tan to amaze the conference with his talk about his search for better treatment for strawberry birthmarks. To give him his full title – Professor Swee Tan ONZM, MBBS (Melbourne University), FRACS (Plastic Surgery), PhD (University of Otago). Some of his appointments include Director of Plastic Surgery at Hutt Valley DHB, he is currently Director of the Gillies McIndoe Research Institute, Consultant Plastic & Cranio-Maxillofacial Surgeon, Director of Surgery at Hutt Valley DHB and Professor in Plastic Surgery at the University of Otago. He is also an elected member of 13 national and international professional and scientific societies. During his talk, accompanied by medical photographs, he outlined the successful novel treatment involving the use of β -blockers and inhibitors of the angiotensin converting enzyme. The understanding of this treatment has important implications in regenerative medicine and cancer research.

It was a very hard act to follow for Nigel Cross with his report, as NZIHE ANZEX delegate to the Australian Conference, and he also reported on his visit to many Australian hospitals.

The second last act of the Conference was our new President, Doug Moller, giving his closing comments and inviting all delegates to the 75th Anniversary Cocktail Hour and Dinner. The Cocktail Hour was sponsored by Mercers, as they have over many years while the Hastie Group sponsored the dinner. This was the high point of the Wellington Conference with elder statesman Lex Smith sharing some of his memories and talking about some of the characters who held office during the 75 years we have been in existence. Then to finish off he cut the 75th Anniversary cake ably assisted by wife Pat.

It was an excellent Conference, excellent dinner and thanks for its success must go to Max Christensen and Richard Whitehead after a very late start due to the February earthquake wrecking our proposed venue.

Jim Logan, Editor

PARTNERS PROGRAMME

There's a little bit of guilt attached to the piece of paper presented to us titled Partners' Programme on the Thursday morning of Conference. We rush with our partners to be there in time for their registration then we relax with a coffee and peruse our plan for two days. Now we realise that we have a very important role in supporting our partners but the best way to do that is to get out of the way, get on that bus and into our busy schedule.

First, off to Petone to advise the capable bus driver how to park his bus in a very narrow street while we visit the Stansborough Loom factory. These people produced most of the woollen garments worn in the Lord of the Rings movies. There was a well-stocked factory shop but few of us had a spare thousand for Frodo's brown cape. After a look at Petone's quaint shops we were off to the Short Straw Café in Whitemans Valley where we enjoyed a delicious lunch in a building made of straw bales. We then returned to the Intercontinental to see if we could be of some assistance to anyone there – oh well, not required, so we'll just prepare for Trade night.

Friday's schedule began with us heading off on our bus to Old St. Paul's Church which was constructed in 1866 entirely from native timbers. Our Supreme Court guided tour was one of the highlights of the program for many. We visited the 2 year old Supreme Court building and then the 130 year old restored High Court. Monica was very comfortable sitting on the Judge's bench and ordering us all to "GO DOWN". So go down we did, to the prisoner holding cells below – where the high tech base isolators for earthquake strengthening were comforting for those of us from the south.

It was then time for lunch at the Cheeky Pipi Café at Island Bay. We sat under a large old grape vine and ate a lovely lunch which we had, of course, earned after such a hard morning. After lunch some went back to listen to the afternoon session at Conference while the rest of us worked off our lunch at Carlucci Land Mini Golf. This is not your standard mini golf course, but designed as an amazing feat of defying gravity to get those pesky balls in the hole. There was the odd hole in one but hole in 25 was not uncommon. We sent the bus driver up to Mount Victoria for a major wind blasting to finish the day off for us.

Our thanks go to Monica and Allison for arranging two really enjoyable days. We are all looking forward to November for this year in Queenstown, where we can do what we do best and get out and enjoy the area way while conference goes ahead.

Jo Wing, Christchurch





David Meates, Chief Executive of the CDHB speaking about the earthquake



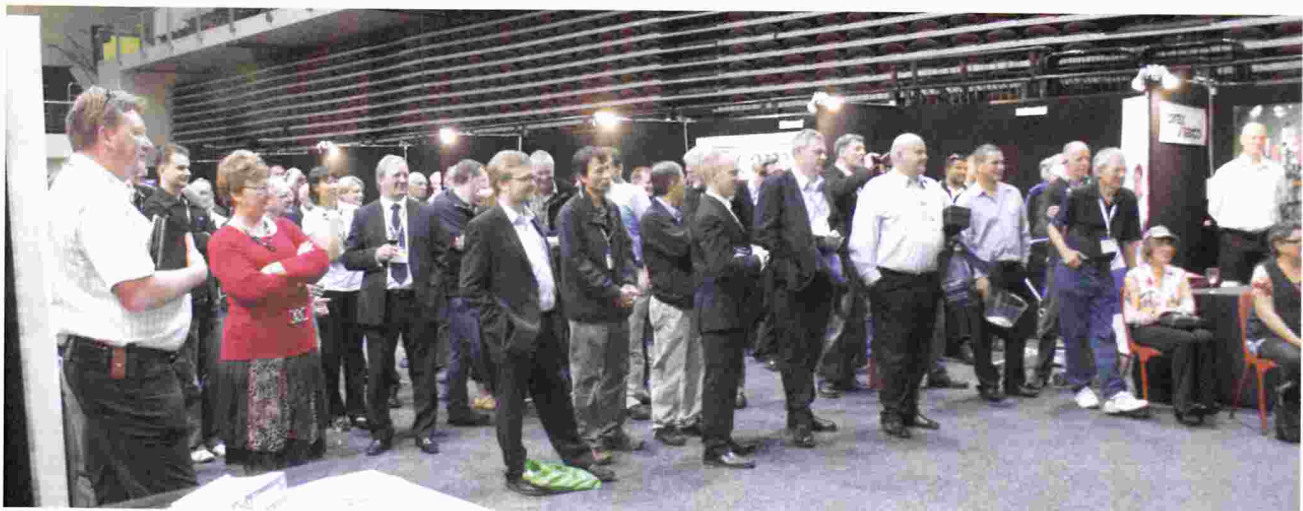
Jan Bone, from the Emergency Department of the CDHB



Spirax-Sarco display with Henry Biggelaar front left



Lordco exhibit



Possibly waiting for their business card to be drawn!



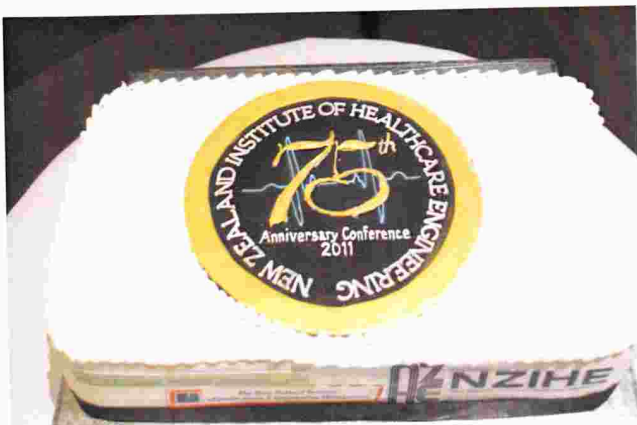
Lex Smith and "young" Robert Raedar



A group enjoying Mercers' Cocktail hour



Lex and Pat Smith cutting the Anniversary Cake with new President Doug Moller watching on



The 75th Anniversary Cake



The "Stag" party enjoying the dinner

IN MEMORIAM

John Sorensen

It is with sadness and regret that we note the passing of John H. Sorensen, Life Member of the NZIHE and former Engineer In Chief of the Auckland Hospital Board, on the 16th November 2011

John played a very big part in the life of the New Zealand Hospital Engineers. His membership was confirmed at the Executive meeting on the 5th November, 1963, and a few years later he was elected to the Hospital Engineers Association Executive and became President for the 1979-1980 years and in 1984 he was made a Life Member of the Association at the Tauranga Conference.

His commitment to Hospital Engineering over the years has been immense, he was a much loved work colleague and a valued member whose expertise and wisdom has helped many people throughout the years. He is remembered fondly by many of our older members.

SOME THOUGHTS FROM ERNIE WILSON ON THE PASSING OF JOHN H. SORENSEN

We have many memories of our meetings together, we enjoyed his company at the social gatherings and, we liked his sense of humour, I say we because both Doris and Alice as well as John and I all enjoyed each others company.

He played his part in the running of the Association and am sure he enjoyed the many discussions at the numerous Committee Meetings.

Alice and I wish to pass on our Condolences to Doris and the family at the Passing of a Great Guy.

Ernie Wilson



John Sorensen (R) and Ernie Wilson at the 1979 Hospital Engineers Conference

Larry Minto

Larry passed away on 14th February, the following is his death notice that Larry himself wrote:

“From Larry

To all my family, friends and acquaintances. After making my peace with God, and after a mainly fulfilling, exciting and enjoyable life, I passed away on Tuesday February 14 2012. I would love to be remembered by Lisa, my darling wife and friend of many years. My daughter Paula, her husband Brett and their children Charlotte, and Gabrielle in Masterton. My son Justin and his wife Jennifer in Italy. Sister Florence and her husband John, niece Susan and family in the UK. Brother Bill and his wife Marjorie, nieces Fiona, Felicity, Kirsty and families in the UK. Sister Mary and family in Melbourne. Lisa's family in Malaysia who have been so kind to me. Also friends Jim, Richard, Barbara, Mui Fah, Mei, Lynnaire and others. My Kontiki fishing buddies on the beach where I have spent many an enjoyable day over the years fishing with my dog Geordie.”

Larry worked for the Health System in Hawkes Bay and was involved with the Institute for many years. He was one of the “characters” of the Institute and a regular attender of the Annual Conference and Regional Meetings.

To Lisa and the family we send our sympathy.