

# ACPSEM NZ Branch Newsletter

August 2009



*Summer haze over Kaikoura*

*Photo : Andrea Zytkovicz*

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The Newsletter of the Australasian College of Physical Scientists and Engineers in Medicine, New Zealand Branch is published 3 times a year and distributed electronically to NZ members of the College and other interested parties. Contributions for consideration of publication are welcomed from all members; for information please contact the Newsletter Editor.

**The 2009 ACPSEM New Zealand Branch Committee members are:**

- Chairperson** . . . . . **Richard Dove** Dept Medical Physics & Bioengineering, Christchurch Hospital, Private Bag 4710, Christchurch. Tel +64 3 364 0653 email: [richard.dove@cdhb.govt.nz](mailto:richard.dove@cdhb.govt.nz)
- Vice Chairperson** . . . . . **Juergen Meyer** Dept Physics & Astronomy, University of Canterbury, Private bag 4800, Christchurch. Tel: +643 364 2987 email: [juergen.meyer@canterbury.ac.nz](mailto:juergen.meyer@canterbury.ac.nz)
- Secretary** . . . . . **John Turner** Medical Physics and Bio-Engineering, Christchurch Hospital, Christchurch. Tel: (03) 3640853 email: [John.R.Turner@cdhb.govt.nz](mailto:John.R.Turner@cdhb.govt.nz)
- Treasurer** . . . . . **Mark Dirksen** NRL, Private Bag 92522, Auckland 1141. Tel: 09 441 3687 email: [mark\\_dirksen@moh.govt.nz](mailto:mark_dirksen@moh.govt.nz)
- Committee** . . . . . **Keith Croft** Palmerston North Oncology, Ruahine St, Palmerston North Hospital. Tel : (06) 356 9169 x8147 email: [keithc@midcentral.co.nz](mailto:keithc@midcentral.co.nz)
- Lynne Greig** Wellington Blood & Cancer Centre, Wellington Hospital, Private Bag 7902, Wellington. Tel: (04) 385 5837 email: [lynne.greig@ccdhb.org.nz](mailto:lynne.greig@ccdhb.org.nz)
- Brian Lunt** Cardiac Physiology, Auckland Hospital, Private Bag 92024, Auckland 1. Tel: (09) 307 4949 x24322 email: [brianl@adhb.govt.nz](mailto:brianl@adhb.govt.nz)
- Matthew Paris** Oncology & Haematology CPG, Dunedin Hospital, 201 Gt King Street, Dunedin. Tel: (03) 474 7947 x8375 email: [Mparis@healthotago.co.nz](mailto:Mparis@healthotago.co.nz)
- Giles Wynn-Williams** Medical Physics Dept, Dunedin Hospital, 201 Gt King Street, Dunedin. Tel: (03) 474 0999 email: [giles.wynn-williams@otagodhb.govt.nz](mailto:giles.wynn-williams@otagodhb.govt.nz)
- Newsletter Editor** . . . . . **Mark Holmes** Oncology & Haematology CPG, Dunedin Hospital, 201 Gt King Street, Dunedin. Tel: (03) 474 7007 x5135 email: [mark.holmes@healthotago.co.nz](mailto:mark.holmes@healthotago.co.nz)



Spinner dolphins  
(photo : Andrea Zytovicz)

## *From the Chair*

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Many of you made the trek to Auckland last month to enjoy the Branch Conference. Brian, Isla and their team assembled an interesting couple of days and were rewarded with a good turnout of members. The

branch conference is always a great opportunity to catch up with what other centres are doing, both in our own specialty areas and in other specialties. At larger conferences this cross-specialty interest is often lost.

At the AGM in Auckland changes were made to the Branch Spokesperson portfolios. These have now been reduced to match the ACPSEM specialty areas. Most of the new roles transferred directly from the old

portfolios, but I welcome Kathryn Greenfield to the all-new role of Biomedical Engineering spokesperson. I would like to thank those who have given up spokesperson roles for your contribution to the Branch over the years.

Many will be aware that John Turner has once again been appointed as the TEAP Clinical Training Coordinator for New Zealand. John is now back in the country after celebrating a notable birthday in the UK, so those involved in the TEAP training should be hearing and seeing plenty of him. The TEAP scheme in Australasia is going from strength to strength with work currently going on to expand the ACPSEM involvement in training in oncology, radiology and nuclear medicine.

I hope to catch up with some of you in Canberra in November.

*Richard Dove*

*Chair NZ Branch, Christchurch Hospital*

## *News from Auckland*

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Fiona Bignell has writer's block this month so she handed the job over to the Irish gutter press representative.

We have just had our second Siemens CT scanner installed along with Varian gating equipment. There have been communication problems between the two systems. The Siemens software said "Sprechen Sie Deutsch?" and the Varian gating equipment replied, "You gotta be kidding, man!" The problem has been resolved by a black box, which may or may not contain a cat which could be American and German at the same time.

A new Varian iX linac is being installed to replace our old 2100CD, we are upgrading ARIA to V8.6 and also getting a Pinnacle upgrade in the next couple of weeks so there is a lot going on.

Isla Nixon has just returned from ESTRO in Maastricht, the Netherlands where she was too busy attending presentations on VMAT and brachytherapy to see even a single tulip or eat a chocolate coated waffle. Our newest registrar, James returned from the World Congress in Munich where he presented his paper on Augmented Reality and enjoyed a

Maß or twenty served by friendly fräuleins at Oktoberfest .

I leave next week to go on maternity until August 2010. This is the third and final one to get past the goalie. The striker has now retired due to a chronic knee injury. We have recently advertised for new physicists so there will be lots of changes by the time I get back.

Thank you to everyone who attended the New Zealand Branch Conference

in August and special thanks to all those who presented whether voluntarily or via arm-twisting. Apologies to George for not providing the promised pole dancers at morning tea, but it was the only thing I could think of that might encourage a man to leave the Waikato. I hope the coffee and scones were sufficient!

*Deirdre Hutton*

Hot off the press photos by Fiona Bignell of the new iX machine 'going in':





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Dr Mori Wada (Austin Health) and David Ly (Townsville Hospital) use a smartphone and CMS Direct Access to scale new heights in collaboration between departments at the CMS Users Meeting in Queenstown!



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## *News from Christchurch*

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The Christchurch department has come through winter in good shape although we have several vacancies that are taking far too long to fill. From a purely personal point of view the most important of these was the head of department (now known as clinical manager), but after a year and a bit of acting in the role management decided to sign me up so the department is stuck with me now.

Elsewhere in the department there are the normal vacancies in Oncology causing much frustration. Susan Reynolds has recently announced that she is leaving us to join the world of private enterprise – so if anyone is interested in a half time radiology physicist job do let me know. Of course there is also a vacancy in the bioengineering section to fill my previous role. Add in a couple of registrars for next year and it feels like a recruitment agency some days.

The Oncology department has been watching a large hole appear outside and then get filled with concrete as their new bunker takes shape. With an early December deadline progress is definitely quicker than usual. December sees us take delivery of our first Elekta linac which will be a huge change for everyone involved. To keep people busy till then there is an HDR unit arriving soon.

Many of the department grabbed a couple of warm days in Auckland to attend the branch meeting and training workshop prior. For those with greater aspirations Jerome headed to World Congress in Munich and Richard Jones to IEEE EMBS in Minneapolis. We also sent Annalie off to a conference in Portugal on medical radiation shielding to make sure we got the new bunker design right.

*Richard Dove*

## *News from Dunedin*

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Life in Dunedin has had its notable moments since the last Newsletter with the Undie 500 student riots over for another year (and possibly for ever since the Canterbury engineering students' decision to drive somewhere else next year) and, in June, a mobile crane operation removing a heat exchanger from the hospital roof went disastrously wrong with the crane falling over. The jib crashed to the ground across a busy road intersection, luckily missing the traffic and miraculously no-one was injured

Here in Oncology Physics our numbers have been boosted by the recent arrival of Friedlieb Lorenz. Friedlieb and his family have moved to

Dunedin from Mannheim in Germany where he worked as a radiotherapy physicist, splitting his time between clinical work and teaching/research into filmless IMRT and VMAT quality assurance. In 2008 Friedlieb was awarded the DGMP (German Society of Medical Physicists) Elekta Prize for a paper published as part of his PhD dissertation (“Verification of a treatment planning system’s dose calculation – development and implementation of VERIFY”) and he carried out some of the experimental work for this at Boston’s Womens’ Cancer Centre whilst employed as a Research Fellow there. We welcome Friedlieb to our department and look



*The fallen crane's jib lies across the intersection. The hospital building is on the left.*

forward to him making a valuable and important contribution.

Thanks to the Auckland team for hosting a well organised and successful NZPEM 09, of which Jonathan Griffin and Mark Holmes attended. After the meeting Mark then flew onto St Louis for CMS training on beam modelling and IMRT implementation with the Xio treatment planning system. Andrea Zytковicz attended AAPM Summer School on

Dosimetry held at Colorado Springs in June.

And finally, Andrea will be returning to the US for a couple of weeks in October to get married. We all hope Andrea and Dave have a great day and wish them all the best for their married life. And we might even get to see some photos - look out for those in the next Newsletter.

*Mark Holmes*

### *News from Carey Wood in Germany*

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Greetings from Germany!

For those of you who don't know, I recently decided it was time for the big OE, so instead of planning it out properly I just jumped right in. Naturally an English speaking country was too boring, so I chose to come to Germany, a country and language I

have always loved. Well anyway, after a couple of great months travelling we finally settled in Dortmund, in the former industrial centre of Germany, one of the most densely populated areas in Europe. The area has been going through an identity change since the closing of the larger steel mills and

other heavy industries over the last couple of decades, but it still has a bad reputation amongst Germans from other areas. After all this travelling, I'm pretty sure I have now seen at least as much of Germany as many Germans have, and there are some great things to see.

The first question everyone asks when they find out I come from NZ is why anyone would want to leave such a beautiful place. My short and sweet answer is that it's a cultural thing, we just do it and don't really think too much about it. Everyone seems to think I am somehow courageous, but I'm just an ordinary Kiwi.

Being a western country and having been here before, I thought Germany would be quite like NZ, and to a certain degree it is, but there are so many small differences here that add to it being such a different experience. For instance, most flats for rent don't even come with carpet, wallpaper, light fittings or a kitchen sink. The whole work permit experience was also interesting: no one wanted to employ me without a work permit, I couldn't get a work permit without an address, no one in their right mind would sign a lease without a job, and no one will sign a lease with you anyway if you don't have a job to be able to pay the rent. Aaaagh. I am now a lot better at speaking German, and my husband is coming along nicely in his German course. Only 3 1/2 more months until he will be able to sit the B1 level exam, and then he should be able to get a work permit too. Also, you still have to pay a broadcasting fee over here, but internet is much faster and cheaper than in NZ. On the plus side, the public transport system is amazing, and the monthly ticket is definitely worthwhile, even without the hospital discount. Beware of the many foods that look similar to things found in NZ but taste surprisingly and unexpectedly different.

So anyway, I have now been working for almost 3 months at a private

radiotherapy practice. We have 2 linacs, 2 doctors, 5 RTs, 2 physicists and 4 'doctors helpers' who do reception, typing, admin, simulation and basic nursing (yes, you do have to do a course for it). A new law is going through sometime next year which states that the number of physicists has to be at least equal to the number of linacs + 1, so we have a trainee physicist starting next week (everyone always starts on the 1st, even if it's a Friday). Even though I am accredited in Australasia, it's not recognised over here until I get my 'Fachkunde', so in early October I will be attending the second of two radiation protection courses. The two courses plus evidence of 2 years experience will enable me to finally be recognised as a qualified medical physicist in the EU... yay!

So anyway, what do we do here? Well, the main job of a medical physicist in Germany is planning. Since there are so many RT centres over here, most patients start treatment within a couple of days of having their planning CT, so things move faster and waiting times are short. Breast boosts are also contoured by the doctors and usually treated with a 3 field technique instead of electrons, as recommended by the DGMP (German Society of Medical Physics). We also treat things like tennis elbow, with 6 x 0.85 Gy. For anyone who loves doing phantom measurements, there are even companies over here that offer 24 hour beam data collection for when a linac is replaced and you want the shortest possible downtime. Everything over here is done according to the DIN standards, so the QA test frequencies are a little different to those in NZ (as are writing paper, windows and anything else they can prescribe). I also learnt that there is a DIN for absolute dosimetry, instead of IAEA TRS-398.

*Carey Wood*  
(ex Waikato & Dunedin)

**Ode to MV4**

Good bye to you  
You great big hunk  
You're nothing but a piece of junk  
Sitting in that bunker there  
Don't you know that I don't care?

It seemed like only yesterday  
That you were brought in  
On a silver tray  
Now only to be tossed away  
Like limp old salad on a sunny day

The new machine will be better than you  
It'll be all shiny & new  
Not all dusty like you are  
I wonder if it'll be green or blue?

I can't wait now for the day  
When the scrap metal guys come & take you  
away  
They'll cut you into little pieces  
& throw you out with the rats & mieces

The electrons sitting in the gun  
Won't be having so much fun  
When those guys cut thru the wire  
& throw it on the funeral pyre.

Others may cry &  
Others may weep  
But I won't be losing any sleep  
No! I won't be the one who cries  
Over this..... your sad demise

You've been nothing but trouble well.... since  
from day one  
We've spent hours upon hours sitting there on  
our bum  
Trying in vain to get voltages stable  
Staying into the night for as long as we're able

But now the game's up  
You're nothing but dust  
The time to turn off  
Is an absolute must

So goodbye to you  
My dear old friend  
The time has come  
You're at an end.

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**Medical Aid**

The Medical Association has finally released its consideration of the new health care plan proposed by the Government:

The Allergists voted to scratch it, but the Dermatologists advised not to make any rash moves.

The Gastroenterologists had sort of a gut feeling about it, but the Neurologists conceded the administration had a lot of nerve.

The Ophthalmologists saw the idea as extremely short-sighted.

The Pathologists looked closely at the document before grumbling "Over my dead body..." whilst the Paediatricians just stamped their feet and refused to cooperate.

The Psychiatrists thought the whole idea was madness, while the Radiologists claimed they could see right through it.

The Surgeons cut to the heart of the matter before washing their hands of the whole thing.

The Internists thought it was a bitter pill to swallow whilst the Plastic Surgeons' claimed it put a whole new face on the matter.

The Podiatrists thought it was a step forward, but the Urologists disagreed, wanting to pass water over the whole thing.

The Anaesthesiologists thought the idea was a gas, but the Cardiologists just didn't have the heart to say no.

In the end, the Obstetricians won out by convincing the politicians they had all been working under a misconception and threatened to withdraw their labour.

## *An update on new Tertiary Courses in Medical Physics and Biomedical Engineering*

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Progress on the Proposed BE(Hons) Bionics Degree at AUT

At a recent meeting of the Committee for University Academic Programmes the BE degree was approved subject to a few minor modifications. These are being attended to and I expect that the degree will be offered next year for the first time.

It was quite a fight to get this degree accepted as such developments are subject to a lot of political fighting and opposition from the other universities. In the end it was the support from and the lobbying by the College that got this through.

*Howell Round*