

news letter

The Newsletter for Paterson Institute for Cancer Research



Director's Introduction

I would like to thank all the members of the Institute who contributed to the Open Day held on 2nd June and the Race for Life and Run for Moore events held on the 3rd June. It was a busy weekend, but all events were a great success and helped greatly to highlight research being supported by Cancer Research UK and to raise funds.

At the end of June Terry Allen will be retiring. Terry has been associated with the Institute for 37 years and has contributed enormously to the Institute's success and reputation. For many years Terry has been recognised as a world-leading electron microscopist, pioneering new techniques and approaches and using these skills to great effect in delineating the intricacies of the Nuclear Pore Complex, which was his own passion, but also facilitating the research of many colleagues both in the Institute and world-wide. Over the years he has contributed in many other ways and has always been willing to spend his time managing different aspects of the Institute's affairs, such as postgraduate education and representing the Institute on external bodies. In this newsletter Terry reflects on his time here. He will be missed and I am sure we all wish him well in his retirement.

The dynamics of an Institute is all important and as some people leave us, others arrive to develop their career. The next three months will be a busy time with three new groups being set up. In July, Akira Orimo will join us from Boston where he is currently at the Whitehead Institute at MIT. Akira will develop a new laboratory programme characterising the role of stromal fibroblasts present within invasive human carcinomas. In September, Tim Somervaille will join us from Stanford University and will set up a new laboratory programme focussed on cancer stem cells associated with certain leukaemias. Around the same time we will also be joined by Nullin Divecha who is at the NKI in Amsterdam. Nullin is an international expert on phosphoinositol signalling and how it influences many different biological programmes, including cancer progression. I really look forward to working with all three new group leaders and ensuring that their research programmes can have maximum success and impact.

Nic Jones Director

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Paterson PhD student wins national "best thesis" prize

The Pontecorvo prize is awarded every year to the CR-UK-funded student judged to have submitted the best PhD thesis.

This year, our own Aga Gambus will be one of the recipients of the award. The judging panel were unanimous in their praise for Aga's thesis, and felt that the work of Peter O'Donovan (from the London Research Institute) should also be recognised.

Aga started her PhD in 2002 and spent four years working on DNA replication in Karim Labib's group. She found that a number of known DNA replication molecules form a complex, which most likely produces a driving element during the process of DNA replication, opening the DNA and pulling the replication machinery behind. Aga studied the stability of this Replisome Progression Complex as well as the timing of its assembly. She completed her thesis last year and has since moved to Dundee for her first post-doctoral position.

Working with Professor Julian Blow, she is now using Xenopus Laevis rather than budding yeast as a model organism, but remains in the DNA replication field.

Coming from Poland, Aga was one of the first international students at the Paterson and thoroughly enjoyed her time here; "The Paterson is a great place to do a PhD - it's a friendly place with an active group of students organising social activities so there are a lot of opportunities to get to know new people. It is also brilliant from the scientific point of view - there is a wide spectrum of high quality science and very good facilities that make lab work much easier. I have made a lot of friends and will always remember my years in Manchester in the best way. The work that I have done



during my PhD, and the experiences I gathered, greatly helped me to get my present job and to start off my scientific career."

Aga and her fellow prize winner will attend an awards ceremony at Cancer Research UK's Clare Hall Laboratories in Hertfordshire in September.

Items for the Newsletter

If anyone would like to submit an article for the newsletter, or has information for the staff news, we'd love to hear from you. Any feedback on the new layout is also appreciated. Please contact Elaine Mercer - emercer@picr.man.ac.uk.

Credits: Photographs in this issue were supplied by: Steve Royle, David Wiggins and Paul Cliff.

Paterson at Race for Life

by James Dunphy

On Saturday 2nd June and Sunday 3rd June over 10,000 women (including Elaine Mercer) and 700 men (including Nic Jones) descended upon Heaton Park to take part in Race for Life and Run for Moore with the aim of raising £1million for Cancer Research UK.

Special thanks to the team from the Paterson Institute (Alicia Gonzalez

Serrano, Claire Mitchell, Cristina Ferreras, David Wiggins, Flor Perez-Campo, Karen Brookes, Pippa McNichol, Stephen St George-Smith, Yunis Al-Hassan and Nic Jones) who came along and volunteered at these very successful events. The team were stationed at the 3.5km point and played an important role in encouraging the Race for Life women around the course. The feedback received from the participants was very positive with many

appreciating the invaluable support and encouragement in the stifling hot conditions.

Nic Jones also managed to find the time to help give out medals at the end of the race. It was here that he met the oldest participant at the race. He is pictured on the front cover with the inspirational Doreen Rowlands who is 76 years old.



CR-UK Forthcoming Events

Cancer Research UK's North West Supporters Conference

On Saturday 2nd June the Paterson Institute opened its doors to 65 of Cancer Research UK's volunteers and supporters from across the region. The day began with tea and coffee on arrival before supporters gathered for the first of their morning talks. Becky Murrell, Head of Community Fundraising in the Northern Division, opened with an update of the Charity, announcing a total scientific spend of £292 million for 2006-07. Helen Kitchen gave a

regional update of the local fundraising activities which have raised over £4.8million. Professor Peter Stern completed the morning with an enthralling overview of his research, looking at the development of cancer vaccinations in the prevention of cervical cancer.

After lunch, supporters were treated to a tour of the laboratories, including excellent demonstrations from many of the groups. This was thoroughly enjoyed by all the guests with many commenting that it was interesting and inspiring to see

where their money goes. Sheila Burgess of CR-UK's Crewe & Nantwich Local Committee stated "This was the best supporter's conference yet, the content was excellent and the lab tours fascinating". Cancer Research UK would like to thank Graham Cowling and everyone involved at the Paterson Institute for all of their support, endeavours and passion in making the day such a resounding success.

Why not get together with your friends, family and work colleagues and 'All Walk Together' to help raise vital funds for Cancer Research UK. All Walk Together is open to absolutely everyone so why not get involved with your local walk at:

- Heaton Park Sunday 14th October
- Tatton Park Sunday 21st October

To register visit www.cancerresearchuk.org/breastcancer or call o161 772 5555.



A Fond Farewell to Laura - The Newsletter's Student Rep

by Elaine Mercer

Laura Edwards is busy writing up her PhD thesis and ready to move on to pastures new.

The Newsletter Committee would like to take this opportunity to thank her very much for all her hard work. She has worked tirelessly each issue to ensure that we get student articles in on

time and has always been happy to help in all aspects of the Newsletter. She will be greatly missed and her replacement on the Committee will have a hard act to follow. We would all like to wish her every future happiness and a long and successful scientific career.



CR-UK Quinquennial Review



A large amount of work goes on before a site visit and behind the scenes on the day.

CR-UK staff are involved in organising the composition of the Review Party, setting deadlines and distributing all the documentation. The paperwork has to be produced in a set format at least two months before the review and information on the space and resources requested needs to be collated. As the day itself nears, rooms must be booked both for the review and for practices, and rooms set aside for private meetings of the Review Party, lunches and the presentations and posters (hence the lack of rooms available for general booking on a Site Visit day). We aim to keep the Review Party as happy as possible with information about the Institute, handouts of posters and presentations, and the all-important refreshments and mints. It is certainly a relief to all at the end of the day, when the outcome of the

review is known, and everything has gone well.

The interest of the Cell Division and Cell Regulation teams (led by Iain Hagan and Nic Jones) in stress response pathways took on a whole new meaning as the stress of the quinquennial review process complemented their more normal obsessions with oxidative, osmotic and heat stress. Like all stresses it was a transient affair and ended up with a very positive endorsement of the work of both teams over the last five years and the proposals for the next five.

The focus of lain's work has been on the regulation of cell division, a key step in the proliferation of cells. This is a very highly conserved process and lain's laboratory uses, to great effect, the fission yeast as a model to understand the complexities of division. New regulators have been identified and new insights gained on the impact of environmental cues "the successful reviews represent an endorsement of the aims and structure of the Paterson Institute as a whole"

Cell Regulation Group, pictured above, L-R (Back Row) Julien Ackermann, Clare Lawrence, Orestis Mavroudis-Chocholis, Caroline Wilkinson, Dominic James, (Front)Wolfgang Reiter, Steve Lyons, Nic Jones, Yujun Di, Malgorzata Gozdecka, Keren Dawson, Wolfgang Breitwieser.

Cell Division & Cell Regulation Site Visit

on this process. These studies influence and guide our understanding of division in human cells and how it is affected during tumour development. In Nic's laboratory, yeast as well as mouse models are used to understand how cells react to adverse stress conditions, a process which again is highly conserved. Cells need to respond in an appropriate and timely manner and in mammals such responses influence many critical biological functions such as cell proliferation, differentiation, apoptosis and inflammation. The failure to respond can result in cellular damage which could contribute to a number of pathologies, including cancer. New insights into the regulation and function of stress response pathways have been identified through this work.

In addition however, the successful reviews represent an endorsement of the aims and structure of the Paterson Institute as a whole because the work of both laboratories relies heavily on the

Institute's research services and in particular the proteomics, advanced imaging, histology and biological resource facilities.

For example the programme proposed by Iain and the team exploits proteomic and microscopy approaches to study cell structure and function. It was clear from the referees' comments on the proposed programme that the phosphorylation site mapping technologies, which are now working routinely within the Institute are thought to be tricky by some and impossible by others. It is fair to say that the visiting party were suitably stunned by the quality of the phospho-site mapping and phospho-peptide identification data that they were shown. Similar comments can be made about the other services that have helped the progress of both research programmes. There is no doubt that having such first class research services available is hugely beneficial and contributes significantly to the ability of all our research programmes to remain competitive.

"There is no doubt that having such first class research services available is hugely beneficial and contributes significantly to the ability of all our research programmes to remain competitive"

Cell Division Group, L-R (Back Row) Iain Hagan, Alasdair Robertson, Najma Rachidi, Tamara Krsmanovic, (Front) Victor Alvarez-Tallada, Nimesh Joseph, Deepti Wilkes, Daphne Garcin, Dorota Feret, Agnes Grallert



Keswick to Barrow Race



On Saturday 12th May, in a little bit of rain and wind, a group of 17 brave scientists, who are connected to the Paterson Institute for Cancer Research, participated in the 41st Keswick to Barrow (K2B) race.

This year's "Christie's Crusaders Against Cancer" team was organised by Arek Welman and Michal Okoniewski. It was the third year running that the Paterson Institute presented a team at this event and the team was larger than ever before (see photo).

K₂B challenge is a 40-mile race within the landscape of the Lake District in Cumbria. It starts on the southern side of the Lake District, in the town of Keswick, and winds its way through some of the most beautiful scenery to the Victorian town of Barrow-in-Furness, on the coast of the Irish Sea. The race not only puts the mental and physical strengths of all participants to the extreme test, but also provides an avenue to support diverse local and national charities. So far, over £1 million has been collected through the event. This year's race attracted over 2,000 participants from around the country as well as guests from abroad. The main goal of our team was to raise funds for Christie's, a charity that supports

Christie Hospital in Manchester. Some of the raised funds were also donated to Cancer Research UK. Our mission would have been impossible without the hard work of Denise Owen and Martin Greaves who convinced several of the Institute's suppliers to support our case. Martin Brandenburg and Cristina Martin-Fernandez were essential in collecting money from our colleagues in the Institute. Significant funds were also obtained due to the individual efforts of Yuichi Morohashi and Natalie Reeves. In total the team was able to raise £1,723.50, which is over £2.50 per mile per person! We would like to take this opportunity to thank all our sponsors. We are particularly grateful to the companies which generously donated more than £900. Our corporate sponsors (in order of the donations given) were as follows: Scientific Lesser Ltd, Bioline, Starlab, Dako, Jencons, Corning, The Danwood Group, Miltenyi Biotech, Promega and Northern Vending. We would also like to express our gratitude to Hiroko Morohashi, Sandra Strassburg, Lourdes Ponce-Perez and little Ivana for providing the team with support during the race.

K2B walk was again great fun for all of us. Out of 17 team members, 13 managed to complete the race and we were placed 84th out of 281 teams classified. It is worth mentioning that Gavin Wilson completed the race for the fifth time setting a new "team record" of 7 hours 54 minutes and 55 seconds. Arek Welman and Eduardo Castaneda-Saucedo completed the race for the third time whilst Katalin Boros, Martin Brandenburg, Nimesh Joseph and Michal Okoniewski did it for the second time. Katalin was even classified among the top 50 women of the race!

We hope that the tradition of fundraising for Christie's via the K2B race will be continued next year.

Individual times were as follows:

1: Gavin Wilson 7hrs 54min 55sec 2: Arek Welman 8hrs 18min oosec 3: Nimesh Joseph 8hrs 39min 54sec 4: Yuichi Morohashi 9hrs 33min 50sec 5: Katalin Boros 9hrs 33min 54sec

6: Cristina Martin-Fernandez

9hrs 49min 45sec 7: Simon Dovedi 10hrs 45min 35sec 8: James Harvey 10hrs 45min 46sec

9: Martin Brandenburg

10: Jian Mei Hou 11hrs 33min 14sec 11: Michal Okoniewski 11hrs 35min 47sec 12: Eduardo Castaneda-Saucedo

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12hrs 19min 43sec 13: Natalie Reeves 12hrs 19min 52sec

Practice Safe IT

by Steve Royle

The IT department aim to provide all Paterson staff (research and support) with high quality, highly available IT services to support research and operational activities.

In so doing we need to balance computer security, while enabling productivity to develop and maintain systems that are resilient to attack and protect data confidentiality, integrity and availability. Our work is multi-faceted and is designed to keep IT systems running 24x7x365 for everyone's benefit. This ranges from desktop systems, the network and everything connected to it (e.g. file servers, mail servers, application servers and printer servers) to providing continuous high speed access to the network and internet.

As researchers, you minimise any risks in the lab environment that may impact your work or health and

safety. Similarly, the IT department minimise risks with the following tools: firewalls, anti-virus software, anti-spam software and industry best practices; all of which are designed to mitigate IT security risks.

We have tried to answer what we feel are your most pressing issues in the frequently asked questions below. If you have any queries that are not covered below, please email Malik Pervez, Head of IT: mpervez@picr.man.ac.uk

Why Can't I?...

...plug an external laptop into the network?

- This completely bypasses our firewall and the protection it affords.
- It allows a potentially unprotected machine, of unknown risk, full access to our computer network where it could mount attacks against our servers and data.

...order IT equipment, without approval from the IT Dept?

- We ensure that it is compatible, reliable, value for money and fit for purpose.
- All organisations have to standardise their IT systems to provide a supportable infrastructure.

...have admin rights to my pc?

- Admin rights are not required for normal use.
- They provide rogue software with the opportunity to run with elevated privileges, giving access to critical system files and services they would not normally have.
- It allows malicious software to download and install silently.
- This poses such a high threat that Microsoft have specifically designed protection for it in the latest desktop version of Windows i.e. Vista. Windows Vista will run most applications with standard user permissions even if the user is an administrator.

...personalise my computer - screensavers, upload my own photos etc?

- You can set your own backgrounds.
- You can set a screensaver of your choice from the standard windows set.
- You cannot install your own screensavers as they are notorious for harbouring malicious software e.g.

- viruses, trojans etc.
- Uploading personal photos impacts the performance of your desktop PC, the network and file servers using valuable resources for a non-work related purpose.

...download movies from the net?

- They devour network bandwith which slows overall performance of the whole network.
- Their sheer size causes a processing overhead that impacts on the performance of desktop PC's and servers alike.
- Wastes expensive, high performance disk storage.

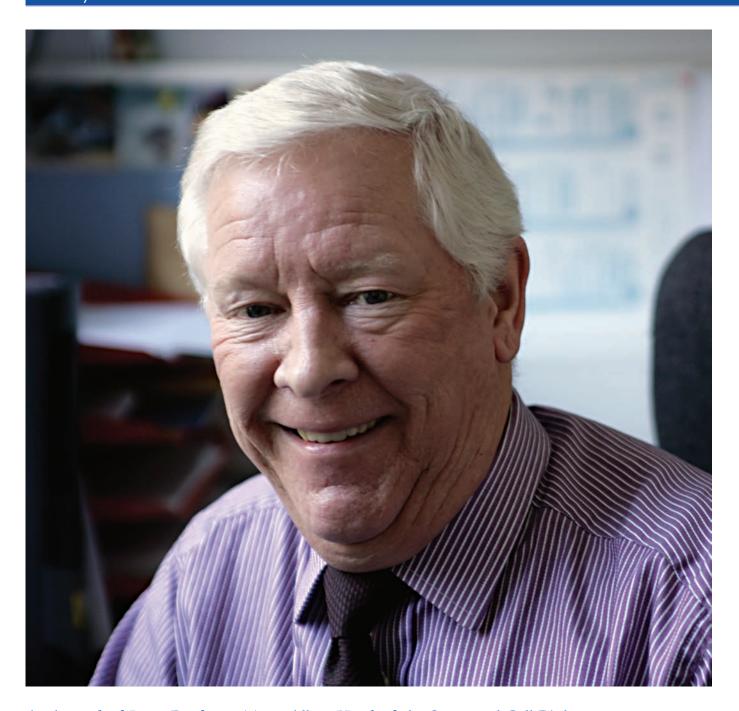
...buy specialised software for work?

- This is acceptable with the following provisos:
- There is no recommended or supported alternative
- You can make a valid business case
- It is properly licensed
- It is fit for purpose

...have unlimited file & email space?

- Disk space is finite and has to be shared amongst all staff equitably in order to provide cost effective use of limited resources.
- We need to ensure availability of these facilities for everyone – if we allowed our mail servers disks to fill then the mail service would simply stop and reject all incoming mail.
- The new storage facility is currently being installed and should allow us to be more generous in our allocation of disk space in the future.

Terry Allen



At the end of June, Professor Terry Allen, Head of the Structural Cell Biology Group is retiring after 37 years service. Here he takes a reminiscent look back over his time at the Institute and the many changes that have taken place.

by Terry Allen

Starting in October 1970, I made it by name alone into the Annual Report, but by 1971 "Electron Microscopy" (myself and one technician) reported on Chromosome structure, BNU induced leukemia, testicular feminisation in mice and radiation induced changes in Osmunda

prothalli. The Osmunda studies were with Alma Howard (Deputy Director) who had previously discovered discontinuous DNA replication, indicating the existence of the cell cycle.

She was then using ferns as a model

system for radiation effects, irradiating the spores with a million volt linear accelerator in the basement of the Institute, growing the prothalli in the lab, and adult mutant plants in her garden at Chinley!

37 Years at the Paterson

With hindsight, I guess I had a fairly unique situation in that I came direct from my Ph.D. studies to essentially a Group Leader position, as compared to the current system. Throughout the rest of the 1970s, I was occasionally accused by the Director (Laszlo Lajtha) of "wandering round the labs working on whatever took my fancy" but he seemed happy with it as long as there was a good level of scientific output. At around the same time, several ex-research students from the Institute were returning from foreign post doc visits (e.g. Mike Dexter, Chris Potten, Geoff Margison, Jolyon Hendry and Jill Birch) to build their own successful careers. Mike Dexter was the first person to grow bone marrow in vitro, and Chris Potten was inventing the science of epithelial cell kinetics, and together we had extended, productive and thoroughly enjoyable collaborations.

Cell culture of specific lines was also novel at the time and we characterised some of the first ever adult rat liver cell lines produced by Tom lype. By the mid-70s my first Scanning Electron Microscope (SEM) had been installed, providing the opportunity to pioneer SEM in cell biology. I was helped by research students Christine (now Prof) Harrison and Martin Britch, who met in the lab and subsequently married who says science lacks romance? After a couple of years in Lewis Wolpert's lab, Christine returned to become a cytologist with Rodney Harris at St. Mary's. However, during the 1980s we, with the help of Elspeth Jack. investigated human chromosomes (usually my own) and produced SEM images which are still standard in textbooks to this day. At around this time we were regular contributors to other groups site visits, in addition to our own, and had

moved on to study the role of the cytoskeleton in cell adhesion, shape and movement, and to human and feline bone marrow cultures, characterising the first in vitro osteoclasts with Nydia Testa. Videotape was just beginning to be used for time lapse of living cells and we filmed a single BM culture for 6 weeks. Around this time we were joined by Sandra Rutherford who is still here and has made a huge contribution to everything we have achieved.

In 1989, Martin Goldberg arrived as a new post-doc to help use the new high resolution, in lens, Field Emission SEM (the first of its kind out of Japan) to sort out chromatin structure. Investing in this extremely expensive hardware which was untried in cell biology showed great faith by the Director, David Harnden. However, after attending a talk on the Nuclear Pore Complex by Hans Ris, we took a slight diversion from chromatin to the nuclear membrane. I was helping Herbert MacGregor to set up 'Chromosome Research' as a new journal at the time and, as the expert on lampbrush chromosomes, was the ideal tutor for isolation of individual

nuclear membranes by hand from Xenopus oocytes. The nuclear transport field was just beginning and we found ourselves in an ideal situation to exploit the amazing resolution of the new instrument to visualise entirely novel structure in the nuclear pore complex. We also hosted two Paterson Symposia (1994 and 1998) on nuclear transport, helping to launch a series of international collaborations with groups from Europe, Japan and the US. Elena Kiseleva started her 15 years of visits from Russia and Janet Cronshaw and Helen Pickersgill were amongst the Ph.D students. Steve Bagley was recruited from The University and subsequently we were joined by Sheona Drummond and Steve Murray.

This brief account cannot really begin to address the ups and downs of 37 years of cell biology and electron microscopy but, to sum it all up, I'd do it all again without a moment's hesitation. We scientists are a lucky minority, probably like musicians, who get paid for doing something they would undertake as a hobby if they didn't need to earn a living and I count myself fortunate to be one.



1977. Discussing the surface morphology of bone marrow cultures with Elaine Spooncer and Mike Dexter.

In the Spotlight

In each issue of the newsletter we feature a member of staff who will take the 'Spotlight' and answer a list of questions that we have put together. The next lucky individual to be featured is Professor John Gallagher of the Medical Oncology Proteoglycan Group

1. What is your favourite part of the UK?

Lake District and Snowdonia - both wonderful, I can't decide which I like best.

2. What is the most important lesson that you have learnt from life?

Look on the bright side - a manuscript rejected (it will find a publisher eventually), getting old (at least you're still alive), England losing at cricket, football, rugby etc. (think - we always beat Andorra, Faroe Islands, Luxembourg)

3. What is your favourite book?

Lincoln by Gore Vidal.

4. If you were an animal, what would you be and why?

I think a skylark - I love its song and the sense of freedom it conveys as it sings and rises high into the sky (no I'm not on drugs!)

5. If you had to change careers tomorrow, what would you do?

(Is this a hint?) Something in sport - a commentator or journalist.

6. What is your greatest fear?

Being stuck in a lift.

7. What do you think is the world's greatest landmark?

Of the one's I've seen it has to be The Grand Canyon.

8. What would be your perfect meal?

Really good fish and chips with a pint of Stella - you will gather I love good pub food.

9. What trait do you most deplore in others?

Selfishness.

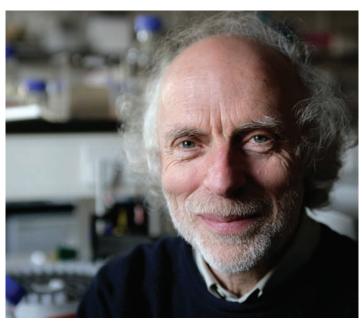
10. Which words or phrases do you most overuse?

How about the following:

"How's it going?" - I say this when I mean "have you got any results yet?"

"It might be fun if you did some experiments."

"So the meeting's in a luxury resort..."



11. What is your idea of perfect happiness?

Strolling in the hills on a warm summer day.

12. What three things would you save from your burning house?

- 1. One of my wife's paintings (otherwise she'd send me back in).
- 2. Photo album.
- 3. My Collection of Old Cigarette Packets. There is a good reason for this when I went to University my mother, who is a great one for clear-outs, threw away my collections of pressed flowers, traced maps (I was mad-keen on geography), old school essays, old school uniforms, sporting odds and ends etc...but for some reason the cigarette packets survived so I would save them they are great designs, too good to go up in smoke.

13. With which well known figure (past or present) do you most identify?

This is impossible. I don't really identify emotionally with anyone but if you ask who I'd like to be I'd go for Roger Federer. I'd like to play tennis like him.

14. What keeps you awake at night?

Not having a good book to read.

15. What is your greatest regret?

Actually no major ones although I was sad when my cousin crashed and wrote-off my Morris Minor van when I was a student. It was my father's van and I took it over when he died. I'd been everywhere with it including an epic camping trip through Europe. It never let me down. My dear cousin, who I still speak to (just) drove it between a wall and a bus - the gap was too narrow unfortunately.

Performance Review Panel - what does it actually do?

by Mandy Watson, Staff Representative.

When, to my surprise, I found that I had been voted onto the Performance Review panel as the staff representative I thought, what a great opportunity.

However, seeing the huge pile of forms dampened my enthusiasm a little. Carefully reading all of them was pretty hard going, particularly as they were so very variable in style, content, detail etc. That said, it was apparent during the subsequent meetings that every member of the panel had diligently scrutinised each one.

During the course of our meetings all performance reviews were

thoroughly considered and where information/evidence or clear performance metrics were lacking, reviewers were interviewed and given a further opportunity to support their appraisal. In some cases reviewees were also interviewed. Since the aim of this was to allow the reviewee the best opportunity to evidence their contribution, and it was recognised that the whole panel might seem quite intimidating, a sub panel consisting of Stuart, Jenny and myself conducted these interviews.

It was extremely encouraging to find that it actually is the philosophy of the panel to ensure that recognition and reward of contribution is equitable across the Institute. At no point during the discussions were we hindered by consideration of the

monetary implications of our decisions since these were, quite intentionally, kept totally separate from this process. In fact, following consideration of other staff on the same grade and further discussion with their reviewers, some staff had their rating changed from "good " to "exceptionally good".

So I have come away from this with a much more positive view of the process and now appreciate the sterling efforts of the panel, in sometimes difficult circumstances, to ensure that contribution is recognised and that the rewards are equitable across the Institute.

So next year why not nominate yourself and find out first hand.

Anti-Bullying Training

by Pippa McNichol

We have asked ACAS (the Advisory, Conciliation and Arbitration Service) to devise a training course for all line managers about bullying. ACAS aims to improve organisations and working life through better employment relations.

This compulsory half day course will cover such issues as:

Definitions of bullying and harassment - people's perceptions

The difference between strong management and bullying

What causes it? Management styles, competitive environment, culture, insecurity

The statistics - where most bullying and harassment comes from

The Legislation

What stops people reporting bullying

What stops the managers dealing with it

Using formal and informal procedures

There will be four dates to choose from and all line managers will be asked to sign up for one of the dates.

Staff News



Congratulations to:

James Hainsworth (Targeted Therapy Group) and his wife Jennifer on the birth of their bonny baby boy, George Henry James (left) on 29th March. George came into the world at 38½ weeks weighing a very healthy 8lbs 10.50z (see photo of George at 5 weeks old)

Colin Gleeson (Health & Safety) who has recently been awarded the NEBOSH Diploma with credit in Occupational Health & Safety, which is no mean feat. Well done, Colin.

Tom Southgate (Gene Therapy) and his wife Claire on the arrival of their first child on 25th April - a beautiful daughter (below) named Charlotte Niamh (7lbs 6oz) (see photo of the little lady at 2 hours old).

Steve Alcock (Estates) who along with his college colleagues achieved an overall mark of 70% - 1st class standard for a project they undertook as part of their Building Services Engineering (Hons) degree.

Anna Pearson (HR) and Justin Haylock on their recent wedding (below) at Chiddingstone Castle, Kent on 27th April. Anna and Justin had a fantastic day which was followed by a two week honeymoon in the Maldives – what a brilliant start to married life!





Welcome to:

Anthony Griffin - Central Services Assistant, Central Services
Cristina Ferreras - Post doc, Stem Cell Biology
Fernanda Castro - Post doc, Immunology
Lee Lancashire - Post doc, CEP
Lisa Bickley - Scientific Officer
Angela Cooke - Scientific Officer
Geoffrey Dippnall - Lab Aide
Daniel Bennett - Scientific Officer

Rose Storey - Scientific Officer

Paterson Green Initiative

by Nic Jones

We need to be much more active at energy conservation and recycling and, to this end, we would like your help in reducing the amount of energy waste produced by the Paterson Institute.

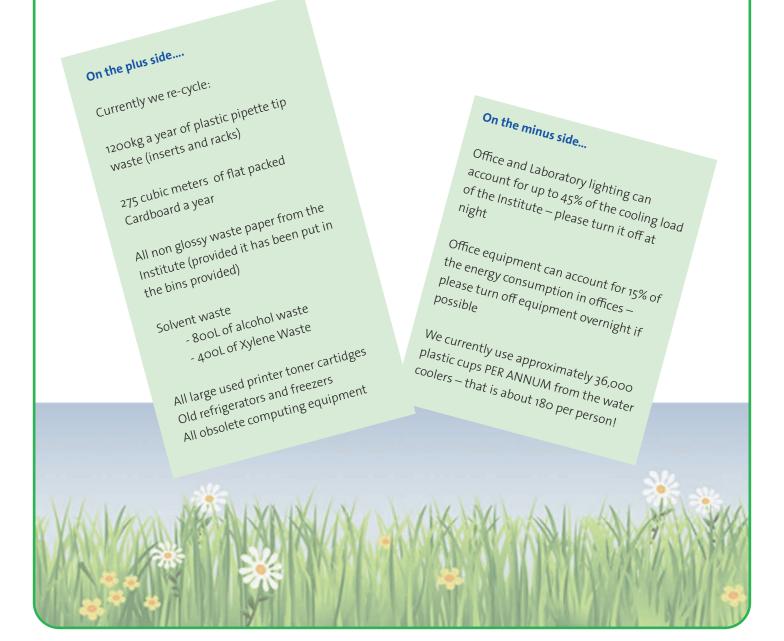
The intention is that we will continue to evaluate any possible ways to reduce energy consumption. In the first instance there are some areas where we know we can make an enormous impact and these are identified on the posters around the Institute:

Closing windows whenever possible prevents unnecessary heat loss. This is particularly important at nights and during the cooler months.

Switching off office equipment at night will also make a dramatic reduction, not just computers but monitors, printers and photocopiers

Switching off lights will probably have the most striking effect. It is estimated that a staggering 45% of the cooling load in a building such as ours is accounted for by the lighting. Therefore turning off lights whenever possible will have a tremendous impact.

I am sure that you will support these measures. Although we have had a lot of publicity during 'GREEN WEEK', this will be ongoing and we will welcome any additional ideas from staff.



Paterson Sixth Form Day 2007

by Stuart Pepper

The Sixth Form Day is now in its third year, having been initiated in 2005 by Lez Fairbairn. For those who are new to the Paterson, the idea is that each year we invite top Sixth Form science students to come in and spend a day learning about some of the research that goes on here. Students were exposed to a variety of demonstrations: Iain and Agnes ran a demo looking at cell cycle, Steve Bagley allowed the students to operate some cutting edge microscopy equipment, Martin Greaves organised a session looking at Apoptosis and the Core Facility looked at aspects of the Human Genome sequencing project.

The course was fully booked and feedback was very positive, with students finding the day both enjoyable and informative. This year the course was expanded by taking more students in each group, however, anyone who would like to be involved next year there is space to add more demonstrations.

We are very grateful to the numerous people who supported the event on the day but have not been named above. The enthusiastic support of people on the day helps convey to the students the excitement of a career in cancer research, which is after all the main idea.



Emma Saunders (back) with a student in the core facility preparing a Bioanalyser chip

Reflections on my PhD

by Laura Edwards

It doesn't seem like almost four years since I arrived for my first day, and first colloquium, at the Paterson Institute. I remember feeling completely daunted by all the presentations (would I ever manage to do that?!) and the stamina of everyone in the pub later (would my liver stand the next few years?!).

My rotation year flew by and I learned so much from my projects in Carcinogenesis, Gene Therapy and Bioinformatics. The only difficulty was choosing what to concentrate on for the next three years. In the end I decided to work on the transcriptional profiling of HOXB4, under the supervision of Lez Fairbairn and Crispin Miller. This

project seemed really exciting; I would be discovering the targets of an important transcription factor and would be able to learn and use a wide range of different techniques. However, HOXB4 decided not to yield its secrets that easily and the project has been more of a challenge than I initially imagined. My first microarray experiment, rather than giving me too many targets to focus on, seemed to suggest that there was no difference in transcription when HOXB4 was activated. A very surprising result given that I was looking at over 45,000 transcripts!

2005 was a difficult year due to Lez's sudden death. He was great and is much missed. At first I was unsure about carrying on with the project, but my advisor, Georges Lacaud, offered to step in and co-supervise

with Crispin and, along with Valerie Kouskoff, they all gave me the support to continue. Two more years and another microarray project later, I'm about to write up and, hopefully, get my PhD. I think that's the best tribute I can give to Lez.

Finally, I would like to thank everyone for the last four years. I was going to list all the people who have helped and supported me during this time but that could have filled the newsletter! Apart from the excellent science, the best thing about working at the Institute has been the people; so thank you all!

Last, but definitely not least, I would like to thank the fundraisers of the CR-UK Nelson Local Committee for sponsoring my PhD.