### Australian Prostate Cancer Research Centre **Oueensland**







### **December Newsletter**

2011

### **Message from APCRC-Q's Directors**

Welcome to the last newsletter for 2011!

The Centre welcomes our newest Postdoctoral Fellow, Shirly Sieh and Research Assistant Nataly Stylianou to the APCRC—Q team.

Next year promises to be another busy year, with many upcoming events, both for the centre and for us as Directors.



**Professor** Colleen Nelson

We look forward to finalising our annual Australian-Canadian Prostate Cancer Research Alliance (Aus-Can PCRA) Symposium and will endeavour to keep you posted.

The fortnightly Seminar Series, held at the Princess Alexandra Hospital will once again inform you of the latest research in the field of prostate cancer.

A very Merry Christmas and a Happy New Year from all of us at APCRC-Q.



**Judith Clements** 

### **Professor Colleen Nelson and Professor Judith Clements**

### **Christmas Office Closure**

The office at APCRC—Q will be closed from close of business Friday 23rd December and will reopen Tuesday 3rd January 2012.

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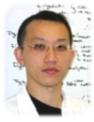
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### **Scientific Promise Rewarded**

Dr. Patrick Ling

APCRC-Q Vice Chancellor Fellow, Dr Patrick Ling has had a great success with the award of two National Health and Medical Research Council (NHMRC) project grants.

These highly competitive grants reward Dr Ling's outstanding achievements and promise for the future.

NHMRC will make a total of \$1.1 million in funds available to Dr Ling for use in two critical research areas in the treatment of prostate cancer: the identification of a new therapeutic target for the treatment of prostate cancer and the study of how prostate tumour metastasizes to bone.

"Research funded by these grants will allow us to understand why prostate cancer preferentially metastasizes to the bone, and will help us to develop novel treatments to be used against the metastatic disease," Dr Ling said.

"In addition, the grants will provide us with the financial support we need to test a new anti-cancer therapeutic target in the treatment of castration resistant prostate cancer."

Both these projects are central to the aims of the APCRC—Q and the Centre's Executive Director, Professor Colleen Nelson, is delighted with Dr Ling's success.

"We are all very pleased and proud of Patrick who deserves our congratulations for his hard work and determination," Professor Nelson said.

"These grants will help our centre move closer to our goals of finding therapeutic targets in the treatment of advanced prostate cancer and understanding metastasis of the disease."

Dr Ling expects that the completion of the studies will lead to the development of effective therapies in the treatment of advanced stage prostate cancer patients.



### **Prestigious Award Received**

Dr Carolina Soekmadji, Postdoctoral Fellow at the Australian Prostate Cancer Research Centre—Queensland (APCRC-Q), has been awarded a highly competitive and prestigious Department of Defence FY11 Prostate Cancer Postdoctoral Training Award.

Dr Carolina Soekmadji

Dr Soekmadji won the US\$115,000 United States Army funded grant for her project *Exosome biomarkers: Defining prognosis for drug and castrate-resistant prostate cancer.* 

Dr Soekmadji's research investigates the use of exosomes, tiny vesicles secreted by tumor cells into the blood or urine that contain a set of proteins and RNA resembling the cells of origin. These can be used as biomarkers to predict whether patients will respond or be resistant to certain treatment, avoiding therapy where it is unlikely to work.

Success in this area of research would allow for a non-invasive characterization of a patient cancer progression or treatment response through a simple blood test.

"This study will allow for the discovery and characterization of potential novel *biomarkers* which will help to predict the response of prostate cancer patients, allowing patients and clinicians to make better informed decisions in regards to treatment options," Dr Soekmadji said.

### **Princess Alexandra Research Foundation Cancer Seminar**

APCRC—Q's Professor Pam Russell gave an informative talk on the centre's current research at the Princess Alexandra Research Foundation's recent Free Cancer Seminar.

Professor Russell shared the basics on Prostate Cancer, then delved deeper into APCRC—Q's objectives and latest research.

Researchers' projects profiled include APCRC—Q's own Dr Patrick Ling, Dr Jennifer Gunter, Dr Martin Sadowski, Dr Carolina Soekmadji and Dr Amy Lubik.

**Professor Pam Russell** 

Professor Russell also spoke about Professor Colleen Nelson's and her own involvement in the Global Scientific Committee for Movember, in particular, the Global Action Plan (GAP) initiative.

"The Movember Global Action Plan is providing global funding which will network prostate cancer researchers from USA, Canada, Australasia, UK and Europe, with the aim of finding new biomarkers that distinguish aggressive from indolent prostate cancers, indicate which prostate cancers are likely to spread, and to predict which prostate cancers will or will not respond to therapy," she said.

Professor Russell's talk was enjoyed by all in attendance, with her vast knowledge and entertaining presentation helping to convey the importance of prostate cancer research.



# New developments in prostate cancer screening and treatment techniques

A team of 131 prostate cancer researchers, including IHBI's very own postdoctoral fellow, Dr Jyotsna Batra and Professor Judith Clements, recently published findings that will significantly impact on our ability to detect a higher risk of prostate cancer in men at a very early stage.

As part of the Prostate Cancer Association Group to Investigate Cancer Associated Alterations in the Genome (PRACTICAL) consortium, Dr Batra worked with scientists from the Queensland Institute of Medical Research (QIMR), as well as researchers from the Institute of Cancer Research (ICR) and the University of Cambridge.

From this international collaboration, emerged the discovery of seven new regions, positioned across the human genome, which increase the chances of developing prostate cancer.

"We studied the genes of almost 60,000 men, looking at pieces of DNA that vary between prostate cancer patients and healthy individuals," Dr Batra explained.

"These additional loci, along with previously identified loci—more than 40—can now explain the approximate 25 per cent of familial risk of prostate cancer."

"Our findings could play an important role in tailoring methods for the screening and treatment of prostate cancer," she said.



### United research discussion

Following on from the collaborative workshop held in Melbourne this past August, APCRC—Q will welcome the Australian Prostate Cancer Research Centre—Victoria to the Princess Alexandra Hospital for another meeting on the 15th December.

### **Movember Update**

## Our Mo Bro's BEFORE











Our Mo Bro's AFTER









Left-Right: Varinder Jeet, Michael Chandler, Raj Vasireddy, Steve McPherson

### **APCRC—Q Joins the Fight**

APCRC—Q once again took part in Movember with an online team, morning tea and multiple donations.

During November each year, men throughout Australia and the world grow moustaches to raise funds and awareness for men's health, specifically prostate cancer, and depression in men.

The funds raised are intended for programs run directly by Movember and their men's health partners, the Prostate Cancer Foundation of Australia and beyondblue: the national depression initiative.

APCRC—Q raised over \$2,000 for Movember in total.

"The Mo is King" - Movember

### Mourning the Mo's

The wrap-up of Movember 2011 saw members of the APCRC—Q and the University of Queensland (UQ), come together to raise funds with a "Mourning the Mo's" morning tea.

Co-ordinated by APCRC—Q, researchers and professional staff baked various goods to share with the attendees, whom paid a \$2 entry fee to attend.

The 2011 Mo-King was crowned, with Postdoctoral Fellow Stephen McPherson taking out the title with his well-groomed handlebar moustache.

The event was a success and enjoyed by all.

These final funds added to the overall amount raised by the APCRC—Q Movember team.

A big thank-you to all who attended and donated funds to the cause.

### **GAP** news

Professor Colleen Nelson (Chair), and Professor Pamela Russell (Member), have been actively engaged with Movember's Global Scientific Committee in order to develop a Global Action Plan (GAP) for prostate cancer research including more than 14 countries.

The first GAP project aims to evaluate biomarkers present in serum, urine, exosomes, circulating tumour cells and tissue for aggressive prostate cancer and for therapeutic response in advanced disease.

They recently attended a meeting in Ireland, early December, to further discuss the second project for 2012.

The key to this initiative is an agreement as ambitious as its goal: not just to fund collaborative global research, but also to share all data freely with the entire prostate cancer community and beyond, via the Movember website.

For more information you can visit the Movember website.







### **Rodeo Raises Funds**

Movember has struck a chord around the world with the Queensland Working Cow Horse Club's (QWCHC) 22nd November Event proving no exception.

Held at the Caboolture Showground indoor arena, the event was well-attended and ran over the entire weekend, with a two-handed snaffle bit cutting competition followed by a wild card team penning event.

The wild card team penning event donated all nominations to the APCRC—Q, raising over \$1,500 towards the cause.

Spectator and competitor donations also added to this amount, as did a raffle held throughout the weekend.

Novelty fines of \$5 were also dealt out over the weekend for infringements such as losing a hat in the arena whilst riding.

These fines also added to the fundraising.

QWCHC President John Brannigan said it was never for the publicity but to raise awareness for men about the importance of keeping up to date with their health.

Congratulations and much appreciation to John and the team at QWCHC for their generous donation to Prostate Cancer Research.



### **Australian-Canadian Prostate Cancer Research Alliance**

### **Publication Success**

Dr Jeff Holst of the Centenary Institute and the Australian Canadian Prostate Cancer Research Alliance (AusCan PCRA) is pleased to announce the publication of his team's research in the prestigious journal Cancer Research.

The publication is entitled, "Androgen receptor and nutrient signaling pathways coordinate the demand for increased amino acid transport in prostate cancer progression," and was the top story in the recent Prostate Cell News e-newsletter.

This successful paper reports that prostate cancer cells coordinate the expression of amino acid transporters—which mediate the uptake of essential amino acids, such as leucine—this means that cancer cells are able to maintain sufficient levels of leucine to continue growth.

By inhibiting the L-type amino acid transporters, tumour cell growth can effectively be diminished.

This study shows that prostate cancer cells respond to the demand for increased amino acids through an integrated pathway, leading to increased amino acid transporter expression and cell growth.

One of the other authors of this publication include the Australian Prostate Cancer Research Centre—Queensland's (APCRC—Q), Executive Director, Professor Colleen Nelson, also the Director of the AusCan PCRA, whom met Dr Holst in 2008 at a Prostate Cancer Foundation of Australia (PCFA) National Conference.

Dr Holst attributes joining the Aus Can PCRA in June 2009 as a great advantage to his current research.

"Having only recently moved into prostate cancer research in January 2008, I have been impressed by the sense of community within the Aus Can groups," he said.

### **Seminar Series Wrap Up**

APCRC—Q's Seminar Series restarted in the second half of 2011, enabling health professionals to share their current research within the area of prostate cancer.

The series drew attendees from within APCRC—Q, the Queensland University of Technology's (QUT) Cancer Group and Institute of Health and Biomedical Innovation (IHBI), along with the University of Queensland's (UQ) various research departments, Mater Medical Research Institute (MMRI) researchers and Princess Alexandra Hospital (PAH) Health Professionals.

The series kicked off with Dr Vasundara Venkateswaran of Canada - Australian Canadian Prostate Cancer Research Alliance member and Associate Professor within the Department of Surgery at the University of Toronto and Division of Urology at Sunnybrook Health Science Centre in Toronto .

Dr Elizabeth Williams - Laboratory Head at the Cancer Metastasis Laboratory, Centre for Cancer Research, Monash Institute of Medical Research, Monash University, Melbourne—spoke on Tumour cell plasticity and disease progression.

The last speaker for 2011, was Dr Declan Murphy—Consultant Urologist & Director of Robotic Surgery, Division of Surgical Oncology at the Peter MacCallum Cancer Centre, Melbourne—whom discussed the clinical challenges and controversies in prostate cancer today.

APCRC—Q's own Dr Patrick Ling, Dr Jennifer Gunter and Dr Stephen McPherson, also spoke at the Seminar Series events.

### events



# Australian-Canadian Prostate Cancer Research Alliance (AC-PCRA) Symposium



This annual conference is a chance for researchers, clinicians, scientists, academics, and other professionals working in prostate cancer to share their work and future plans.

Sessions will favour a collaborative approach, and may include workshops, roundtable discussions, and panel-style presentations.

Planning is underway for the Symposium to be held in April 2012 and further details will be included in our next newsletter.

### Market day raises funds

The Princess Alexandra Hospital Research Foundation (PARF), ran a Market Day on 1st December to raise funds for prostate cancer research.

Businesses such as Wow Sight and Sound, Credit Union Australia, Motorama, Commonwealth Bank, RSPCA, St George Bank and others, gave out sample bags and company information to attendees.

A sausage sizzle and blue cupcakes added to the wonderful aromas floating through the garden and PARF sold their merchandise which ranged from stress balls and pens, to tote bags and wrist bands.

A total of \$1,711 was raised for prostate cancer research, and the day proved a great success enjoyed by all who attended.

The event was run by the hard working team at PARF, whom organise regular events at the PA Hospital.

A big thank-you to the PA Research Foundation for their support of prostate cancer research!

If you have an item that you think should be included in our next newsletter, let us know!

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