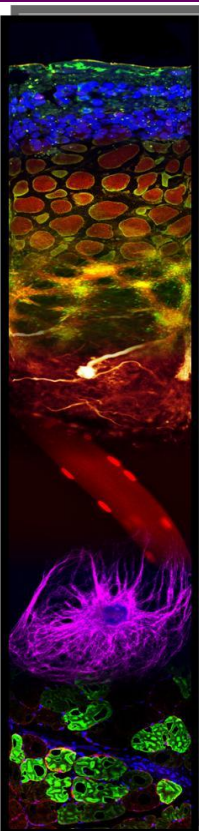


RESEARCH NEWSLETTER

AUSTRALIAN INSTITUTE OF HEALTH INNOVATION

UNSW Medicine has established the Australian Institute of Health Innovation (AIHI), by bringing together three well-established and successful UNSW research Centres along with associated research capacity. UNSW has for some time been in the fortunate position of possessing three cutting edge Centres devoted to research designed to improve health systems. They work in the separate but related areas of clinical health services research, health informatics, and clinical governance. These are the Simpson Centre for Health Services Research directed by Professor Ken Hillman, the Centre for Health Informatics directed by Professor Enrico Coiera and the Centre for Clinical Governance Research directed by Professor Jeffrey Braithwaite. **At its heart this initiative is addressing critical issues arising in current health systems that cannot effectively be addressed by single focus research centres.** Research topics in the early stages of the Institute include: designing safer health systems and practices; improving decision-making through better access to data and knowledge; executing policy into practice research; investigating innovative health delivery arrangements; conducting rigorous analysis and evaluation to learn from present and past initiatives; and encouraging health inducing behaviours and risk minimisation.



The Institute provides national and international leadership in developing innovative research-led solutions to health care systems by capitalising on the success of the existing Centres. It is fashioning new linkages with external research agencies, policy bodies and health care provider organisations, creating strong national capability in scholarly activities and forging sustainable relationships with international researchers. Institute staff secure NHMRC, ARC and Industry funding. New grants have been awarded to Institute staff in the last six months with other proposals under consideration. One key grant is **NHMRC Program Grant entitled *Patient safety: enabling and supporting change for a safer and more effective health system*** [Chief Investigators, Professor Jeffrey Braithwaite, Professor Johanna Westbrook, Professor Enrico Coiera, Professor William Runciman and Professor Ric Day]. This provides \$8,400,000 over five years (2009-2013), and is examining, across Australia, ways to measure and improve care so that it is safer. Internationally, patient safety and quality of care are growing concerns. It is estimated that patient harm occurs in 10% of hospital admissions. A million adverse events occur in general practice each year in Australia. Overseas studies report that patients receive recommended care only 50% of the time. We will significantly advance this work by investigating how and why this occurs, with a focus on the roles of teamwork, safe medication use and the application of information technology to support improved decision-making. (Pictured from the top Prof Jeffrey Braithwaite, Prof Enrico Coiera and Prof Ken Hillman).

From the Dean's desk:

The recent Faculty Strategic Planning Day involving senior members of the Faculty was successful not only in emphasising that Faculty were achieving their objectives, but also in highlighting strategies for improving our performance in research, teaching and administration. We are ahead of target in terms of our strategic objectives for this year, and hopefully with improvements in the economy, will remain on track for the next triennium. Constructive discussions were held with regard to the concept of creating a MD/PhD program. This will require further work and extensive consultation and will provide the Faculty with an opportunity to increase involvement of medical graduates in research projects and help to address the crucial shortage of clinician scientists in Australia. The results of the recent Strategic Planning Day will be highlighted in a forthcoming publication in which we will revise and update the Strategic Plan of the Faculty.



AT YOUR SERVICE: BIOLOGICAL RESOURCES AND IMAGING:

by Debra Thompson



Accommodation and care for experimental research animals – rats, mice, rabbits guinea pigs at Kensington and rats, mice, sheep, pigs, rabbits and chickens at St George. **When I asked staff to tell me what they do I was told that we do all things with animals that make research feasible.**

Our dedicated team includes 3 senior animal technicians, 6 animal technicians, a laboratory assistant and an admin assistant. All animal staff have TAFE qualifications in Animal Care and Technology and or Veterinary Nursing as well as years of experience. They will happily provide advice to researchers on all animal matters. Technical services such as time-mating, tail-tipping, injections and assistance in anaesthetising animals are available with large animal surgery conducted at St George. Procedure rooms and behavioural study rooms are available for booking to researchers boarding their animals. Office staff source animals and can advise availability of species and strains and the source of supplies. Our aim is to provide quality customer service to ensure the best possible research outcomes. Please let us know how we can help you. email debra.thompson@unsw.edu.au or phone our office on 9385 8456.



Photos from the top: Debra with Raj, Annie and Mila (researchers), David and Keita (Animal Technicians) and Marta (Lab Assistant)

RESEARCHER PROFILE:



Clovis obtained a first class BSc double major in Botany and Biochemistry at the University of the West Indies, Kingston, Jamaica. For his final year BSc research project, he used his summer holidays in the warm and picturesque country side to develop a unique method to cross pollinate a mutant and wild type mung beans to obtain a more desirable phenotype.

After completing his BSc, he embarked on a PhD project at the University of Sydney, where he used Molecular Genetic and proteomic approaches to study the host-fungal interaction in cotton plants. Although passionate about plant biology, he always had an interest in the pathogenesis of viral diseases. After submitting his thesis in 2006 he began voluntary work for a short period in Centre for Infection and Inflammation Research under the supervision of Prof Andrew Lloyd and Dr Amany Zekry in projects related to the role of fat cells in the pathogenesis of viral hepatitis.

The focus of his research is to study the effect of obesity on the anti-HCV cellular immune response in patients with HCV infection and also to study the effect of obesity on liver injury in these patients. He also works on other projects to investigate the regulation of Interferon stimulating genes (ISGs) in the treatment response in obese and HCV infected patients and to study the role of microRNAs in liver injury in this cohort. His work in this field has so far generated 2 recent publications in Journals with IF>10, with Clovis as first author. He served on the SOMS research committee as the post doc representative and additionally supervises honours and PhD students.

HOW CAN I HELP?

Each month we will profile members of Faculty of Medicine staff who can help you with various aspects of your research. This month's profile is of Karen Walker:

Karen Walker is the Manager Strategy & Research located at AGSM Level 2. Karen works with the Associate Dean (Research), managing the Post Doctoral Grant Program, and the Professional Development & Talent Management Scheme for medicine academic staff. She writes and reports on the Faculty Strategic and Business Continuity Plans, produces marketing brochures for the Dean's office, oversees the medical Deans Australia and New Zealand Medical Schools Tracking Project, and represents the Faculty on a number of committees.

Her contact details are k.walker@unsw.edu.au, telephone 9385 1664.

Quote of the month: "Learn from your mistakes. But don't get overqualified". Karl Mizens. ANZ Bank.

Is it possible to patent IP and also publish your research?

"You cannot patent and publish at the same time"...While this is true to a degree, it can be managed to allow both protection and dissemination of scientific discoveries. The most common patent strategy is to file a provisional application first. After a provisional application is filed, it remains "secret" for at least 18 months. The international or PCT stage occurs 12 months after the original filing date but the application does not publish (is out in the public domain) until 18 months after the original filing date. You may publish the information contained in the provisional application after it has been filed as long as no additional information is presented. If you publish additional information to that disclosed in the provisional application (which you may have included into the PCT application) before the PCT publishes, it will be seen as prior art, and therefore, challenges the "novelty" aspect of the invention. So, yes, you can patent and publish: generally, if you want to publish your original results, do so AFTER the provisional application is filed and with NO additional information; while improvements to the original application may be published AFTER you include them in the PCT application but NOT BEFORE the PCT publishes at 18 months.

Dr Alfredo Martinez-Coll | Senior Business Development Manager
NewSouth Innovations Pty Limited

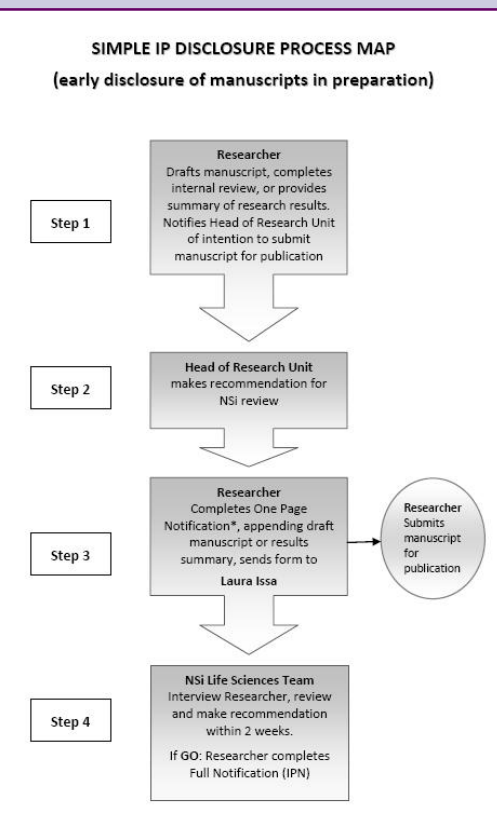
Commercialising Medical Technologies: Getting runs on the board

With its impressive growth in research output in recent years the Faculty of Medicine is poised to get some major runs on the board in relation to demonstrating commercial outputs from medical research. The following list provides a flavour of the types of technologies that have come out the Faculty of Medicine and which are licensed or partnered to industry by NewSouth Innovations:

- A tumour imaging agent
- An angiogenesis inhibitor
- A cancer theranostic
- A genetic test
- Numerous research tools, including antibodies and expression vectors
- Agents that promote tissue regeneration
- A cardiac medical device
- A computer –based psychological training program

NewSouth Innovations is committed to working with the Faculty to identify and develop new opportunities for technology transfer. Researchers are encouraged to contact Laura Issa at NSi at any time to discuss potential IP and commercialisation opportunities at l.issa@nsinnovations.com.au or 9385 559.

Simple process for disclosing research outcomes to NewSouth Innovations



A reminder that the Faculty has implemented a process for disclosing novel research outcomes for commercialisation review. Researchers initiate the process by informing their Research Unit Head of a manuscript in preparation. The Head of Research Unit will make a recommendation to the researcher regarding disclosure to NSi; if positive the researcher completes a simple, one page disclosure form and submits it to NSi together with the draft manuscript.^[1] A member of NSi's Life Science Business Development team will review the submitted one page disclosure form and manuscript within two weeks. If commercial potential is observed, the researcher will be asked to complete a full Intellectual Property Notification (IPN) to initiate the commercialisation process.

Importantly, once the initial one page disclosure form and manuscript is provided to NSi, the researcher is free to submit the manuscript to a journal avoiding any delays to the publication plan.

[1] downloadable at: [One Page Notification of Intellectual Property Development form](http://www.nsinnovations.com.au/unsstaff/index.html)
<http://www.nsinnovations.com.au/unsstaff/index.html>

PROFESSOR ANDREW LLOYD Centre for Infection and Inflammation Research (CIIR)

The hepatitis C (HCV) research program led by Professor Andrew Lloyd and Dr Amany Zekry in the Centre for Infection and Inflammation Research (CIIR) is funded by an NHMRC Program Grant. The studies include: the HITS-p cohort (Hepatitis C Incidence and Transmission Study), which is seeking to define the epidemiological, immunological and virological features of primary HCV infections in a prospective cohort of high risk, injecting drug user inmates in NSW prisons.



Laboratory studies include examination of aspects of potentially protective immunity against HCV amongst individuals from the HITS cohort who remain highly exposed, but uninfected, with the virus. The laboratory techniques include 10 colour flow cytometry, multiplex in vitro cytokine production and ELISpot assays of hepatitis C-specific T cell immunity. The cohorts and associated laboratory studies are being extended towards HCV vaccine development under the auspices of the UNSW Hepatitis C Vaccine Initiative. The role of chemokines and their receptors in regulation of the trafficking of effector T cells into the inflamed liver in these disease states is being studied. These projects are using real time PCR, immunohistochemistry, laser capture microdissection, multi-colour flow cytometry, and ELISpot assays of T cell function.

Contact: Andrew Lloyd—a.lloyd@unsw.edu.au

MESSAGE FROM TONY GIFFORD—OUTREACH LIBRARIAN TO THE FACULTY OF MEDICINE

I am the Outreach Librarian to the faculty of Medicine. My primary role is to actively support the learning and teaching and research endeavours of UNSW's academics and conjoint staff, by providing a single point of contact for all library services. I can offer individually tailored sessions to keep staff and HDR students informed of relevant content and services, and also address issues and concerns around library services. For more information regarding:

- Services to assist your learning and teaching outcomes
- Locating and keeping up to date with content in your discipline
- Open access publishing
- H index calculation for professional yearly review and grant applications
- HDR mentoring
- Attendance at School meetings and presentations to Faculty groups
- Issues with library services or content



please contact me on 9385 8241 or email t.gifford@unsw.edu.au

Publication of the Month:

Sequential treatment of drug-resistant tumors with targeted minicells containing siRNA or a cytotoxic drug.

Jennifer A MacDiarmid¹, Nancy B Amaro-Mugridge¹, Jocelyn Madrid-Weiss¹, Ilya Sedliarou¹, Stefanie Wetzels¹, Kartini Kochar¹, Vatsala N Brahmabhatt¹, Leo Phillips¹, Scott T Pattison¹, Carlotta Petti¹, Bruce Stillman², Robert M Graham^{3,4} & Himanshu Brahmabhatt¹. Nature Biotechnology Vol 27 (7) 2009.

Accolades and Awards

Congratulations to Dr Nicodemus Tedla for the award of an ALTC Citation for Outstanding Contributions to Student Learning. His citation is: "For the design, development and implementation of integrated teaching of pathology in clinical context that engages students from diverse backgrounds".

Congratulations also to Preet Chadha, Adrienne Withall, Simone Reppermund, Ying Chen, Cristan Herbert, Mark Schira, Tjeerd Boonstra and Michael Valenzuela who were successful in their application for a Post Doctoral Travel Grant.

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DEAN'S AWARD & DEANS LIST

The guidelines for nominating staff and students for these awards have recently been posted on the Faculty website which should be consulted for further information - <http://www.med.unsw.edu.au/medweb.nsf/page/deansawards>.

Correction for last edition : Minoti Apte—email address is m.apte@unsw.edu.au