Honours in Applied Medical Science at Westmead 2019
Why Study at Westmead

Western Sydney is booming

With 100 000 people moving to the area every year, western Sydney is one of the fastest growing places in Australia. At the geographical heart of Sydney, Westmead is fast becoming a major centre of activity. Over $5 billion of investment and development is expected to take place in Westmead by 2030, with an emphasis on large-scale expansion and transformation of the existing hospitals and medical research institutes located there. The Westmead Precinct is a world-class centre of health research, education and services, employing over 1000 full-time scientists. The scale and diversity of activity at Westmead is unparalleled, including six major research institutes and centres co-located with six hospitals delivering healthcare to millions of patients every year.

Exciting translational research

The Honours in Applied Medical Science program at Westmead has over 150 projects on offer in 2019 across the precinct, so there is bound to be a project that covers your interests. Projects are very broad in scope including basic research, public health, social sciences and allied health. Major specialities include cancer, infectious diseases, immunology, physiology, obesity and diabetes, neuroscience and dentistry. Westmead scientists and researchers are leaders in their fields working in close collaboration with clinicians, giving unparalleled opportunities for ‘bench to bedside’ translational research which provide students with unique opportunities to get involved in research that has a meaningful impact on the health of our community.
Institutes and Research Partners

The Children’s Medical Research Institute (CMRI) has been pioneering microsurgery, immunisations against lethal childhood illnesses, and care for premature babies, improving the lives of countless Australian children for 50 years. Today, the CMRI is the site of world-leading research in areas such as cancer, neurobiology, embryology and gene therapy.

CMRI Honours Coordinator:
Mark Graham; mark.graham@sydney.edu.au

The Institute for Clinical Pathology and Medical Research - NSW Health Pathology (ICPMR) is the largest research-active pathology service in the country and the leading national reference lab for infectious diseases, medical entomology and parasitology. In 2014–15, it contributed to initiatives that were awarded more than $47 million in competitive external grants, and co-authored nearly 400 publications. The ICPMR’s broad range of activities interfaces with all facets of research undertaken at Westmead, including facilitation of clinical trials, biobanking, electron microscopy, pathogen genomics and flow cytometry.

ICMPR Honours Coordinator:
David Brown; D.Brown@amr.org.au
Institutes and Research Partners

**The Institute of Dental Research (IDR)** at the Westmead Centre for Oral Health is the oldest named dental institute in the world. Research at the Faculty of Dentistry and IDR embraces innovative research through broad themes of chronic diseases combined with a deeper understanding of the impact of oral health on the whole body. The IDR’s research strengths include microbial pathogenicity, bioengineering and mucosal pathologies.

**IDR Honours coordinator:**
Naisana Seyedasli; naisana.seyedasli@sydney.edu.au

**Kids Research (KR)** has 300 researchers working with **The Children’s Hospital at Westmead (CHW)**, the biggest children’s hospital in NSW and part of **The Sydney Children’s Hospital Network (SCHN)**. KR’s research improves the lives of children with debilitating illnesses through discovery and translational research in cancer, bone diseases, genetic conditions, diabetes, obesity, infectious diseases, brain and muscle disorders, rare genetic and immunological diseases, sleep disorders, and kidney and liver disease.

**KR/SCHN Honours Coordinators:**
Fran Evesson; frances.evesson@sydney.edu.au
Institutes and Research Partners

The Westmead Institute for Medical Research is one of the largest medical research facilities in Australia. It is home to more than 300 scientists and students who are using the essential tools of molecular and cell biology, plus new techniques in gene discovery, genetic epidemiology, human and cell imaging technology, cell and gene therapy and clinical research. The institute undertakes diverse research spanning the laboratory to the patient, which has led to new medical treatment and prevention programs nationally, and changed health practice internationally.

Honours coordinators:
Monica Miranda-Saksensa monica.miranda@sydney.edu.au
Lian Qiao liang.qiao@sydney.edu.au

Westmead Hospital is a major teaching hospital of the University of Sydney for allied health, dental, medical and nursing students, and is one of Australia’s largest centres for postgraduate training at specialist level in all health fields. Westmead Hospital conducts biomedical, clinical and public health research in hospital-based centres and departments. As such, their research covers a broad spectrum including, but not limited to, laboratory, drug and device trials, and epidemiological studies.

Honours Coordinator:
Heather Medbury heather.medbury@sydney.edu.au
More than just research

Peer Mentoring Scheme
The Westmead Honours program has implemented a peer mentoring scheme which pairs each Honours student with a PhD student or early post doctoral researcher from another lab. This gives each student an opportunity to talk to someone who has recently gone through the experience of Honours about their own experience and any challenges they might be having.

Honours Social Nights
Once a month the Honours Social Committee (HSoC), made up of honours students and mentors, hold an event to allow students to step out of the lab and have some fun. Previous events have included a welcome BBQ, Trivia nights, pizza dinners, board game nights and thesis submission celebrations. This has helped build a sense of community among the honours students working at Westmead, allowing students from across all the institutes to come together and get to know each other away from their studies.
## Projects

### Allied Health

**Vicki Flood**

A systematic review of diet and nutrition interventions among people with Motor Neuron Disease

**Application of Mediterranean Diet among culturally diverse population groups of Western Sydney**

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<tr>
<td><a href="mailto:vicki.flood@sydney.edu.au">vicki.flood@sydney.edu.au</a></td>
<td>0412 118 977</td>
<td>Adult hospital</td>
</tr>
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</table>

### Bioinformatics/Data science

**Ellis Patrick**

Omic-pathology – exploring the cellular composition of diseased tissue through ‘Omics technology

One in a million – characterising a single cell’s impact on disease with state-of-the-art high throughput biomedical technologies

High parameter imaging and novel high throughput analytics to study HIV kinetics

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<td><a href="mailto:ellis.patrick@sydney.edu.au">ellis.patrick@sydney.edu.au</a></td>
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**Erdahl Teber**

Differential molecular characterisation of human organoids and tissues

Understanding immunotherapy responses based on multi-omic cancer signatures

Bioinformatics methods to understand cell fate decisions and developmental trajectories during embryogenesis

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<td><a href="mailto:eteber@cmri.org.au">eteber@cmri.org.au</a></td>
<td>0427 269 217</td>
<td>CMRI</td>
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<td>Name</td>
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<tr>
<td>Sandra Cooper</td>
<td>Refining algorithms for analysis and interpretation of splicing variants in genetic disorders</td>
<td><a href="mailto:sandra.cooper@sydney.edu.au">sandra.cooper@sydney.edu.au</a></td>
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<tr>
<td>John-Sebastian Eden</td>
<td>Exploring the HIV-1 reservoir using bioinformatics and genomics</td>
<td><a href="mailto:js.eden@sydney.edu.au">js.eden@sydney.edu.au</a></td>
</tr>
<tr>
<td>Babak Sarrafpour</td>
<td>Revealing transmission networks using pathogen genomics</td>
<td><a href="mailto:babak.sarrafpour@sydney.edu.au">babak.sarrafpour@sydney.edu.au</a></td>
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<td>Bioinformatic methods in clinical meta-transcriptomics</td>
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<td>Contemporise the Neuromuscular genetic variant database</td>
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<td>Evolution and molecular epidemiology of RSV and other “non-flu” respiratory viruses in Australia</td>
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<td>Biomechanics</td>
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<td>Biomechanical and cellular aspects of tooth development in the maxilla</td>
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<td></td>
<td>Mechanobiological role of endosteum and periosteum in bone modelling</td>
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## Cancer

### Predictors of endocrine treatment response in low-grade serous ovarian cancer

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<td>8627 3740</td>
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**Anna deFazio**

### Development of a Computer Aided Diagnosis (CAD) technique for early detection of melanoma

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**Ashni Kumar**

### Influence of chromatin architecture on transcriptional function of hormone receptors

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**Dinny Graham**

### Space Invaders: How Cancer cells negotiate tissue barriers

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<td>9845 1206</td>
<td>SCHN (KR)</td>
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**Geraldine O'Neill**
Investigating the role of a novel RNA binding protein in telomerase activity

Using telomere length analysis to understand human disease

Understanding protein dephosphorylation in the DNA damage response

Nutrient regulation of the stem cell in cancer

A weighty problem—targeting the lipid droplets in cancer cell lines

Identifying targets to improve therapy of high-risk and relapsed paediatric cancer patients

Interactions between sleep and cancer
### Pablo Fernandez Penas

**Proteomic analysis of Stratum Corneum in cutaneous Squamous Cell Carcinoma (SCC)**

**Proteomic analysis of Cutaneous T cell lymphomas (CTCL) using Scarless biopsy**

**CTCL proteomics in Formalin Fixed Paraffin Embedded (FFPE) tissue**

**Comparison, validation and characterisation of primary human cutaneous squamous call carcinoma cells (cSCC) isolated and cultured using different techniques**

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### Liang Qiao

**Single-cell RNA-Seq for characterization of the subset of HCC cells with Innate or acquired resistance to chemotherapy**

**Searching for potential therapeutic targets for liver cancer**

**Anticancer drug screening for liver cancer using liver organoids**

**Mechanisms of Strigolactones on liver cancer: in vitro studies**

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### Naisana Seyedasli

**Cracking the molecular machinery of therapy resistance in human epithelial carcinoma**

**Epithelial plasticity in human epithelial carcinoma; roles in cancer relapse and drug resistance**

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### Pablo Fernandez Penas

**Proteomic analysis of Stratum Corneum in cutaneous Squamous Cell Carcinoma (SCC)**

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</table>
### Telomerase: the RNA-protein enzyme that drives cancer mortality

**Email:** tracy.bryan@sydney.edu.au  
**Phone:** 9687 2800  
**Institute:** CMRI

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### Telomere deprotection and cancer

**Email:** tracy.bryan@sydney.edu.au  
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**Institute:** CMRI

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### The DNA replication stress response

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**Phone:** 8865 2912  
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### Proteomics of normal and malignant blood cells

**Email:** rreddel@cmri.org.au  
**Phone:** 8865 2901  
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### Identification and development of telomerase inhibitors as potential cancer therapeutics

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### Alternative lengthening of telomeres activity in normal cells

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### Killing cancer cells with cytolytic viruses

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**Institute:** CMRI

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### The telomere deprotection and cancer

**Email:** p.ye@sydney.edu.au  
**Phone:** 0416 170 609  
**Institute:** IDR/WIMR

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### Nanoparticle enhanced drug delivery and release of oral cancer

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**Phone:** 0416 170 609  
**Institute:** IDR/WIMR

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### Proteomics of normal and malignant blood cells

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### Identification and development of telomerase inhibitors as potential cancer therapeutics

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### The DNA replication stress response

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### Killing cancer cells with cytolytic viruses

---

### Alternative lengthening of telomeres activity in normal cells

---

### Telomerase: the RNA-protein enzyme that drives cancer mortality
## Clinical

**Empirical antibiotics for microbial keratitis**

Chameen Samarawickrama

**Corneal collagen glue: inducing corneal regeneration in the treatment of acute corneal perforations**

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<td>0468 383 801</td>
<td>Adult Hospital</td>
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**Impatient vs. outpatient management of microbial keratitis: A comparison of outcomes, complications and cost**

Dana Robaei

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<td>Adult Hospital</td>
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**Use of glyceryl trinitrate in the modulation of inflammatory milieu in preeclampsia (PE) and intrauterine fetal growth restriction (IUGR)**

Indika Alahakoon

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**Gamma-delta cells: A key cell population regulating inflammation**

Joerg Eberhard

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<td>0437 487 452</td>
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</table>
Does adding CO₂ monitoring improve the sensitivity of screening for obstructive sleep apnoea (OSA) in children?

Infant sleep studies. “What, if any of the original sleep study or clinical parameters can help predict the length time that the infant will need to use CPAP at home?”

Email: karen.waters@sydney.edu.au
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Measuring transcutaneous bilirubin: a comparative analysis of the correlation between three devices and serum bilirubin measurements

Prevalence of antenatal anxiety and its association with postnatal length of stay and maternal-neonatal outcomes

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Assessment of and improvement to Clinical Islet Cell Isolation Outcomes for Transplantation

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Phone: 9846 7365
Institute: WIMR

The oral microbiome beyond bacteria – what role do fungi play in establishing good oral health in childhood?

Determining how genetic and environmental factors influence the developing oral microbiota and drive disease in early childhood

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Phone: 8890 4818
Institute: IDR/WIMR
Grant Logan

Development of immunotherapies through virus vector gene delivery

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Gopala Rangan

Therapeutic role ATR-DNA Damage signalling in autosomal dominant polycystic kidney disease

Biomarkers in the progression of autosomal dominant polycystic kidney disease

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Ian Alexander

Gene therapy for genetic and acquired diseases of the liver and haematopoietic system

Discovery of ancient and contemporary adeno-associated viruses in Australian marsupials

Email: iana@chw.edu.au
Phone: 9845 3071
Institute: CMRI

Leigh Waddell

Genomic medicine and the hunt for new disease genes in nerve and muscle disorders

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Phone: 9845 1456
Institute: SCHN (CHW)

Munira Xaymardan

Role of transcription factor Nkx2-5 in orofacial muscle development

Differentiation of orofacial myocytes from human pluripotent stem cells (hPSCs) by modulation of Notch and Wnt signalling pathway

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<tr>
<td>Patrick Tam</td>
<td>Lineage-restricted progenitors for disease modelling, lineage analysis and cellular therapy</td>
<td><a href="mailto:patrick.tam@sydney.edu.au">patrick.tam@sydney.edu.au</a></td>
<td>8865 2911</td>
<td>CMRI</td>
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<tr>
<td>Phillip O’Connell</td>
<td>Investigating the Role of Intrinsic SNP of SHROOM3 in Kidney Inflammation and Injury after Renal Ischemia-reperfusion Injury</td>
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<td>WIMR</td>
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<tr>
<td>Pierre Osteil</td>
<td>Deciphering mechanisms leading to self-organising differentiation of human pluripotent stem cells</td>
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<td>8866 2911</td>
<td>CMRI</td>
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<tr>
<td>Robyn Jamieson</td>
<td>Pathways to therapies in blinding genetic retinal eye diseases</td>
<td><a href="mailto:rjamieson@cmri.org.au">rjamieson@cmri.org.au</a></td>
<td>9845 3273</td>
<td>CMRI</td>
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<tr>
<td>Samantha Ginn</td>
<td>Developing CRISPR/Cas9-based gene therapy reagents for paediatric metabolic liver diseases</td>
<td><a href="mailto:sginn@cmri.org.au">sginn@cmri.org.au</a></td>
<td>8865 2800</td>
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Health Services

A health service website review of adolescent involvement in the planning and provision of age specific health care services

Kate Steinbeck

A systematic review of international child and adolescent health research advisory groups with an emphasis on their creations and the factors that influence sustainability

Email: kate.steinbeck@health.nsw.gov.au
Phone: 9845 2507
Institute: SCHN (CHW)

Infectious Disease/Immunology

Defining the HIV target cells in inflamed human mucosal tissue and their role in sexual transmission

Andrew Harman

Investigating the Dynamics of Sexual Transmission of HIV Using Human Anogenital Tissues

Email: andrew.harman@sydney.edu.au
Phone: 8627 2623
Institute: WIMR

Carola Venturini

Effects of antibiotics on the ecology of enterobacteria and horizontal gene transfer in the Enterobacteriacae

Email: carola.venturini@sydney.edu.au
Phone: 8627 3415
Institute: WIMR

David Booth

Does CpG island methylation affect Vitamin D Receptor regulation of gene expression?

Is EBV miRNA in immune cells dysregulated in MS?

Email: david.booth@sydney.edu.au
Phone: 8627 3602
Institute: WIMR
The Role of Lambda Interferons in Immune Cell Migration to Sites of Inflammation

Golo Ahlenstiel

Generation of human colonoids to examine gut immune responses

Email: golo.ahlenstiel@sydney.edu.au
Phone: 9845 7986
Institute: WIMR

Monocyte reprogramming with increased cardiovascular disease risk

Email: heather.medbury@sydney.edu.au
Phone: 8890 3668
Institute: Adult Hospital

Does familial hypercholesterolemia promote M1 macrophage formation?

Helen Williams

Monocyte inflammatory profile in people with Peripheral arterial disease and diabetic foot ulcers

Email: helen.williams@sydney.edu.au
Phone: 8890 5775
Institute: Adult Hospital

Comparative and binding analysis of the bacterial HusA Haemophore homologs to explore the function evolution of periodontal pathogen Porphyromonas gingivalis

Jinlong Gao

Exploring the antibacterial potential of oxolate nanocrystal in dentistry

Email: jinlong.gao@sydney.edu.au
Phone: 9847 8766
Institute: IDR

Understanding the role of Arg1 in invasive fungal disease and Arg1 potential as a new antifungal

Julianne Djordjevic
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<tr>
<td>Kerrie Sandgren</td>
<td>How does the promising vaccine adjuvant AS01 work in humans</td>
<td><a href="mailto:kerrie.sandgren@sydney.edu.au">kerrie.sandgren@sydney.edu.au</a></td>
<td>8627 3633</td>
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<td>Ky-Anh Nguyen</td>
<td>Mutagenesis study of LptO – an essential component of type IX secretion system in Porphyromonas gingivalis</td>
<td><a href="mailto:ky-anh.nguyen@sydney.edu.au">ky-anh.nguyen@sydney.edu.au</a></td>
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<td>Min Hu</td>
<td>Role of IL-7 and IL-7/anti-IL-7 Antibody Complexes in Treg Expansion in Vitro and in Vivo a Murine Skin Transplant Model</td>
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<td>Monica Miranda-Saksena</td>
<td>Role of the cytoskeleton in the exit of herpes simplex virus from sensory nerves</td>
<td><a href="mailto:monica.saksena@sydney.edu.au">monica.saksena@sydney.edu.au</a></td>
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<td>Muhammad Kamruzzaman</td>
<td>Plasmid interference and curing antibiotic resistance from Enterobacteriaceae</td>
<td><a href="mailto:muhammad.kamruzzaman@sydney.edu.au">muhammad.kamruzzaman@sydney.edu.au</a></td>
<td>8627 3417</td>
<td>WIMR</td>
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Characterising ‘Bona-fide’ plasmacytoid dendritic cell responses in initial HIV infection

Email: najla.nasr@sydney.edu.au
Phone: 8628 3622
Institute: WIMR

Cloning of receptors specific for joints

Designing and testing skin patches for drug delivery

Marijuana oils for the treatment of arthritis

Testing different sympathetic/parasympathetic drugs and their effect on immune function

Niacin dietary effects on arthritis

Niacin dietary effects on the onset of diabetes in diabetic mice

Email: nicholas.manolios@sydney.edu.au
Phone: 9847 6305
Institute: Adult Hospital

Understanding the immune response to eye infections: The hope for limiting sight threatening tissue damage

Email: nicole.carnt@sydney.edu.au
Phone: 0403 976 245
Institute: WIMR

Investigating regulatory T and B cells in children with atopic disorders

Exploring the immune regulatory mechanisms in oral peanut immunotherapy for the treatment of peanut allergy

Exploring the mechanism of immune dysregulation in primary immune deficiencies

Email: peter.hsu@sydney.edu.au
Phone: 9845 3420
Institute: SCHN (KR)
<table>
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<tr>
<th><strong>Philip O’Connell</strong></th>
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<tr>
<td><strong>The role of memory Foxp3-GFP report gene in vivo in a transplant mouse model</strong></td>
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<td>Email: <a href="mailto:philip.oconnell@sydney.edu.au">philip.oconnell@sydney.edu.au</a></td>
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<th><strong>Ping Ye</strong></th>
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<td><strong>Expression of human serum amyloid A protein in inflamed gingival epithelium</strong></td>
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<td><strong>Activation of inflammasome by oral Campylobacter concisus in a cultured epithelial cell model</strong></td>
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<th><strong>Robert Booy</strong></th>
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<td><strong>Influenza Vaccination: Fever, antipyretics and immunogenicity</strong></td>
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<td><strong>Human Papilloma Virus (HPV) vaccine: long term protection</strong></td>
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<td><strong>Meningococcal disease: evolving epidemiology and provoking microbe elimination</strong></td>
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<td><strong>Surviving meningococcal disease: long term physical, psychological and economic implications</strong></td>
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<td>Email: <a href="mailto:robert.booy@health.nsw.gov.au">robert.booy@health.nsw.gov.au</a></td>
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<th><strong>Ruby Lin</strong></th>
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<td><strong>Investigating the roles of microRNA dysregulation in sepsis</strong></td>
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<tr>
<td>Email: <a href="mailto:ruby.lin@sydney.edu.au">ruby.lin@sydney.edu.au</a></td>
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### Vitali Sintchenko

**Corynebacterium diphtheriae: deciphering molecular mechanisms of virulence and antibiotic resistance**

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<td><a href="mailto:vitali.sintchenko@sydney.edu.au">vitali.sintchenko@sydney.edu.au</a></td>
<td>9845 6255</td>
<td>ICPMR</td>
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**Deciphering transmission networks of genital Chlamydia using genomics**

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### Wieland Meyer

**Finding the link between the environment and the patient - environmental sampling and phylogenetic studies with the artificial genus Candida**

**Correlation between Genotype and Virulence of a New Super Killer; Cryptococcus neoformans and Cryptococcus gattii**

**MLST applied to Pneumocystis jirovecii strain typing**

**Next generation sequencing applied to DNA barcoding of human pathogenic fungi**

**Molecular epidemiology of chlamydiosis in koalas in Gunnedah, New South Wales**

**Fungal Microbiome of beach sands - a clinical connection?**

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</table>
Neurosciences

Detecting MOG-specific B cells in children with brain myelin diseases

Maternal cell surface autoantibodies and association with neurodevelopmental and neurophsyciatric disease in offspring

Understanding the role of T cells in autoantibody-associated movement and psychiatric disorders

Email: fabienne.brilot@sydney.edu.au
Phone: 9845 1456
Institute: SCHN (KR)

PYROXD1; a novel cause of an inherited muscle disorder, and essential for life. But what does it do?

Email: frances.evesson@sydney.edu.au
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Institute: SCHN (KR)

Big omics data analysis of neurological diseases to determine new drug targets

How to stop and epileptic seizure – looking for the right molecules to target

How do molecules make memories? Understanding learning and memory at the level of protein interaction and signalling

Big omics data analysis of neurotransmission to determine emergent properties

Email: mark.graham@sydney.edu.au
Phone: 8865 2989
Institute: CMRI
Cortical processes underlying generation of intracortical inhibition and facilitation in healthy humans and ALS patients

Brain plasticity using tDCS in healthy controls and neurodegenerative diseases

Nerve dysfunction in amyloid related neuropathy. Towards a biomarker of disease progression

Cortical dysfunction in ALS. Utilising novel MRI imaging and analytical techniques

Motor neuron disease phenotypes in ALS. Pathophysiological insights using transcranial magnetic stimulation and MRI techniques

Email: steve.vucic@sydney.edu.au
Phone: 9845 6097
Institute: Adult Hospital

Steve Vuvic

Development of radiopharacuticals for the management of Parkinsons disease

Development of radiopharacuticals for the insulinoma

Email: vijay.kumar@health.nsw.gov.au
Phone: 8890 6533
Institute: Adult Hospital

Vijay Kumar

Maternal immune activation in neurodevelopmental and neuropsychiatric disorders

Maternal immune activation in neurodevelopmental and neuropsychiatric disorders using brain slices as a model system

Modelling neurological disorders using CRISPR

Email: wendy.gold@sydney.edu.au
Phone: 9845 1446
Institute: SCHN (KR)

Wendy Gold
Obesity/Diabetes/Nutrition

Role of vitamin D in acute liver damage

Muscle stem cells and vitamin D

Is it Scurvy? Vitamin C and dental/peridontal disease

Beige fat and obesity treatment

Email: jenny.gunton@sydney.edu.au
Phone: 9845 8089
Institute: WIMR

Physiology

Bone

Gene discovery in a cohort of paediatric bone fragility disorders

Email: andrew.biggin@sydney.edu.au
Phone: 9845 0221
Institute: SCHN

Building bone strength in brittle bone disease

Studying the effects of genetic mutations on musculoskeletal tissue function

Gene therapy for bone diseases

Email: aaron.schindeler@sydney.edu.au
Phone: 9845 1451
Institute: SCHN
## Cardiology

**Gene therapy of cardiac arrhythmias**

Eddy Kizana

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<tr>
<th>Development of novel viral vectors for cardiac gene therapy applications</th>
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<tr>
<td><strong>Cardioprotection against anti-cancer drugs</strong></td>
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<td>Email: <a href="mailto:eddy.kizana@sydney.edu.au">eddy.kizana@sydney.edu.au</a></td>
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**Repair and regeneration of the injured heart**

James Chong

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## Cellular

**Stem cell differentiation – A novel mechanism involving MitoCeption and cytoplasmic exchange**

Belal Chami

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**Development of live-cell biomarkers to probe cell molecular states in live-cell imaging experiments**

James Cornwell

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<td>Investigating single-cell growth dynamics by live-cell imaging and single-cell tracking</td>
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<td>Quantifying cell-cell and cell-microenvironment interactions and their effect on cell fate inheritance</td>
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<tr>
<td>Email: <a href="mailto:james.cornwell@sydney.edu.au">james.cornwell@sydney.edu.au</a></td>
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**Renal**

**Guoping Zheng**

**Therapeutic potential of mesenchymal stem for kidney injury repair (in vitro study)**

**Prevention of kidney failure by targeting β-catenin Foxo**

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**Natasha Rogers**

**Investigating the role of thrombospondin-1 and CD47 in diabetes mellitus and islet cell transplantation**

**Biomarkers in kidney disease**

**Different ways of dying – changing how cells respond to injury**

**Treating inflammation to improve kidney transplant outcomes**

**Preventing fibrosis leading to chronic kidney disease**

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**Philip O’Connell**

**The role of key driver genes in the pathogenesis of acute renal allograft rejection**

**Identifying the causes of fibrosis after kidney transplantation**

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**Glomerular Podocyte Injury and Repair Mechanisms**

**Stephen Alexander**

**Gene Identification and Treatment in Genetic Kidney Disease**

**Targeting Regulatory T Cells for the Treatment of Autoimmune Disease**

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<td><a href="mailto:stephen.alexander@health.nsw.gov.au">stephen.alexander@health.nsw.gov.au</a></td>
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**Wayne Hawthorne**

**Alternative approaches to preventing rejection in transplant models. Focusing on islet cell transplantation**

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**Yuan Wang**

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**Kristina Kairaitis**

**Sleep**

**The body clock in breast cancer survivors: Relations to sleep quality**

**Intermittent hypoxia during sleep: A preventable contributor to melanoma?**

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Public Health

Investigating parents’ experiences communicating with their child’s doctor about the online health information they find on their child’s medical condition

Karen Scott

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Adolescence, risk-taking and sexual health

HPV school based vaccination of adolescence

Rachel Skinner

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‘Caring for the Carer’: implementing a comprehensive support service model for family caregivers looking after persons with age-related macular degeneration

Bamini Gopinath

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What to do next...

Want more information on a project/supervisor?

Talk to the supervisor or the institutes Honours coordinator at the Honours information night. If they are not available on the night head to the Honours information page at http://sydney.edu.au/medicine/study/honours/westmead/ to search for a brief overview of the project and previous work the supervisor has undertaken. While you’re there use the search tool to look for other projects of interest offered at Westmead.

Found a project/supervisor you’re interested in?

Contact your potential supervisor directly (usually via email) and request a time for a meeting. It’s extremely important you meet with your potential supervisor in person before applying for their project, both for you and the supervisor. It is also useful to include a scanned copy of your academic transcript and CV and a bit about yourself and why you’re interested in the offered project.

Following the meeting if you are interested in undertaking the project and the supervisor is willing to accept you for the project then you can proceed to make an application. Fill out and submit an expression of interest form available from your potential supervisor or the Honours coordinator (Andrew Harman) and keep working hard to ensure you obtain the required SCIWAM of 68.

Eligible for a scholarship?

A number of scholarships are available for Honours students each year. These include:

- Westmead Honours scholarship (external applicants only)
  - Interstate/ international $10,000
  - NSW/ ACT $5,000
- USYD honours scholarships $6,000

For more information on scholarships visit: http://sydney.edu.au/science/fstudent/undergrad/honours_scholarships.shtml

CMRI Honours Stipend

All CMRI honours students receive a $2,000 stipend