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**Faculty of Medicine and Health**

**School of Medical Sciences & School of Health Sciences**

Research Information Session

8th July 2021, 3 – 5pm

Potential Research Projects for 2022

(Honours, Masters, PhD)

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# Applied Anatomy and Imaging Projects

### Applied Anatomy and Imaging – see topics on Poster (Honours/Masters/PhD)

#### **Professor Nalini Pather**

#### n.pather@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EZJDQT_1wGBJtTsSorSpMYYBob6102fX4q6AACz4TVYuFw?e=HXHLMI)

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# Biomechanics and Exercise Physiology Projects

### Active and Healthy Ageing (Honours/Masters/PhD)

#### **Dr Kim van Schooten / Associate Professor Delbaere**

#### mailto:k.vanschooten@neura.edu.au

#### Neuroscience Research Australia

#### [Poster Link](https://unsw-my.sharepoint.com/%3Ab%3A/g/personal/z3001235_ad_unsw_edu_au/EWvaG0CWgRtFkIFUmxJiELsBlQzUhvO8riVeaslpZA99VA?e=KpqtAO)

### Does biomechanical symmetry in gait improve outcomes for unilateral prosthetic device users? (Honours;Masters;PhD)

#### **Dr Kirsty McDonald**

#### kirsty.mcdonald@unsw.edu.au

#### Neuroscience Research Australia

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYXIJJrpojRLjFccmIQzTmgBJdl1j3pH7OHCewZnAtmhPw?e=LNbzci)

### Investigating the plasticity of metabolic cost optimization in human walking (Honours;Masters;PhD)

#### **Dr Kirsty McDonald**

#### kirsty.mcdonald@unsw.edu.au

#### Neuroscience Research Australia

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYXIJJrpojRLjFccmIQzTmgBJdl1j3pH7OHCewZnAtmhPw?e=LNbzci)

### My knees are creaky - should I avoid exercise? (Honours;Masters;PhD)

#### **A/Prof. Jeanette Thom**

#### j.thom@unsw.edu.au

#### School of Health Sciences

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EU-DghFh6VhPj-ZzV2Y_yisBKT6KxzlZ42XcIQgbkA1PaQ?e=BniwMZ)

### Reactive balance training to improve balance responses to trips and slips in older adults (Honours;Masters;PhD)

#### **Dr Yoshiro Okubo & Prof Stephen Lord**

#### y.okubo@neura.edu.au

#### Neuroscience Research Australia

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EfG9lzwSsONMjnjPeMJLxQYBf35sCmooqzfcW3meDEcrLQ?e=rLo384)

[*Video Link*](https://youtu.be/55q5pK0kjqY)

### The effect of cognitive demand on human gait selection behaviours (Honours;Masters;PhD)

#### **Dr Kirsty McDonald**

#### kirsty.mcdonald@unsw.edu.au

#### Neuroscience Research Australia

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYXIJJrpojRLjFccmIQzTmgBJdl1j3pH7OHCewZnAtmhPw?e=LNbzci)

# Cancer Projects

### 3D cell culture and drug screening using lung pleural fluid for personalized medicine in lung cancer patients (Honours; Masters)

#### **Dr Yafeng Ma & A.Prof. Therese Becker**

#### yafeng.ma@unsw.edu.au

#### Ingham institute for Applied Medical Research

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWKikwJCaB1JlaP6VyVPBaoBQ9lj1fznZoxE2qVVt6c6Fg?e=R6gf1b)

### A cellular sense of touch: how do cancer cells use force sensing molecules to invade and migrate? (Honours;Masters;PhD)

#### **A/Prof. Kate Poole**

#### k.poole@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EcsVZYchuAlOil5zyeAWOQwBTGhovaOEH5ez4ua3KA_26g?e=7qY4OF)

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### Cellular decision making during cancer (Honours;Masters;PhD)

#### **Dr Vaishnavi Ananthanarayanan**

#### vaish@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYGiEHFnm0FKpMB9e02D_FIBVqwWp8T87Ej2C1yUX5T-Qg?e=1DwzzV)

### Characterisation of cancer stem cells in neuroblastoma: A role of telomeres (Masters;Honours;PhD)

#### **Dr Vinod Vijay Subhash**

#### VSubhash@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ER-4PoS-H_JElP2kQS2czRcBCpuvgLsG3xMWXtOzxzQkXQ?e=bnFzaW)

### Characterising the molecular diversity of pancreatic cancer: Personalised medicine in action (Honours)

#### **Dr Sean Porazinski**

#### s.porazinski@garvan.org.au

#### Garvan Institute of Medical Research

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EbUgH4LKL-hNtinBBVQdZMQBJxDJ1AEard3Xi2kskd4GaQ?e=qEGkAH)

### Comparison of basal cell carcinoma clearance rates between oral sonidegib, surgery and radiotherapy (Honours)

#### **Dr Liang Joo Leow & Natalie Teh**

#### L.Leow@unsw.edu.au

#### 69 Burton St Darlinghurst

### Conjunctival melanoma disease presentations and outcomes (Honours/Masters/PhD)

#### **Dr Svetlana Cherepanoff**

#### svetlana.cherepanoff@svha.org.au

#### St Vincent’s Hospital Sydney

### Developing mouse models of high-risk neuroblastoma metastasis (PhD;Honours)

#### **Dr Caroline Atkinson**

#### CAtkinson@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ET2hu7CJEshGp0sjvKsDUYIBwqLWImxWqtUcFkhviRSzlw?e=eupJVa)

### Developing mouse models for high-risk neuroblastoma metastasis using bioluminescent patient-derived cells (Honours)

#### **Dr MoonSun Jung**

#### mjung@ccia.org.au

#### Children's Cancer Institute

#### [Poster link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EbmOD59NS1FOnFuDgALTdwsBbxEh-AHC2AO8naco3RQ3vg?e=eZyBex)

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### Developing new tests for surgical pathology (Honours;Masters;PhD)

#### **A/Prof. Murray Killingsworth**

#### m.killingsworth@unsw.edu.au

#### Ingham Institute

### Developing novel combination therapies for diffuse intrinsic pontine gliomas (Honours;Masters;PhD)

#### **Dr Dannielle Upton**

#### dupton@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EfxLkEx8EUZDln-REmH9J7EBqB4Sdyb6Oy0ZcQ-sVcdgTQ?e=nfsDip)

### Development of novel cancer pharmacotherapeutics (Honours)

#### **Prof. Levon Khachigian**

#### l.khachigian@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXrRJ6UBPo9EmFFS0k8X828Bwiwv68wBQO0ri2QUN9WS3Q?e=HLjNMw)

### Development of novel treatment strategies for childhood brain tumours (Honours;PhD;Masters)

#### **Dr Ben Rayner**

#### brayner@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ET_OhDsCEVZEojdLXGDRXhsBL16ltOQ0TcuOjXAEDUGn9Q?e=g28RQg)

### Digital archiving and online medical education of ageing and age-related macular degeneration (Honours/Masters/PhD)

#### **Dr Svetlana Cherepanoff**

#### svetlana.cherepanoff@svha.org.au

#### St Vincent’s Hospital Sydney

### Dissecting the role of endoplasmic reticulum stress in cancer cell progression and metastasis (Honours;Masters;PhD)

#### **Dr Angelica Merlot**

#### a.merlot@unsw.edu.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWK-2Tr1NsdPueM-CB8U1k0BzxUDF_Wc1t2YqKWZ8wprcA?e=s5bQzJ)

### Enhancing the anticancer efficacy of transcriptional super-enhancer inhibitors (Honours; Masters; PhD)

#### **A/Prof. Tao Liu**

#### tliu@ccia.unsw.edu.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EV8SsxwSmftHkT7v4ukCZ_kBfNZ_fxXPkSa6yKclHxy-nA?e=eXZ2Cu)

### Epigenetic therapy in diffuse intrinsic pontine glioma. (Honours;PhD)

#### **Dr Fatima Valdes Mora**

#### fvaldesmora@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EaFZNogv0-dBoBDmfH1Bjf8BRK7tVuyM1Qhv8uGOI5XdZw?e=HLkYHz)

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/EXTuUkZwUkxJrGdGnAlEjxABlPQn_7A60i-MqyTYIMIHIA?e=UyiEGh)

### Genome-wide analysis of novel long noncoding RNAs critical for tumorigenesis (Honours;PhD;)

#### **A/Prof. Tao Liu**

#### tliu@ccia.unsw.edu.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EV8SsxwSmftHkT7v4ukCZ_kBfNZ_fxXPkSa6yKclHxy-nA?e=eXZ2Cu)

### Host and Microbiome Interaction along Colorectal Cancer development (Honours;Masters;PhD)

#### **Dr. Howard Yim & Prof. Emad El-Omar**

#### c.yim@unsw.edu.au and e.el-omar@unsw.edu.au

#### St George & Sutherland Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EY1kYiLSrStBtpr54MsiNmUBiBRNnntcO3M5UyOhKo1P-w?e=16Oith)

### Investigating immunotherapeutic strategies in DIPG – understanding tumour microenvironment in DIPG (Honours/ PhD)

#### **Dr Orazio Vittorio**

#### Ovittorio@ccia.org.au

#### Children's Cancer Institute

### Investigating RNA splicing alterations as an unexplored causal factor of leukaemia (Honours;PhD)

#### **Dr Ashwin Unnikrishnan**

#### ashwin.unnikrishnan@unsw.edu.au

#### Adult Cancer Program

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ERQVHSU0FEFBkeTWYLnX2r8BrQRyVNc4YIj6OCfQuLVVuQ?e=aKkDBg)

### Mapping cancer cell signalling through single-cell quantitative imaging and machine learning (Honours;Masters;PhD)

#### **Dr John Lock**

#### john.lock@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EeWhTFyDklVDuQiE6xLuY1YB36MjPaAtm1hysA0XBLVD_Q?e=VDP3e3)

[*Video Link*](https://unsw.sharepoint.com/%3Ap%3A/s/SoMS_Honours_Committee/EWjk7X_F1E5Hiio3wvBFnY4BTwwf6lYmi4Bt-jyZ-P37GQ?e=bbedPb)

### Novel strategies to starve cancer cells (Honours;PhD)

#### **Prof. Jeff Holst**

#### j.holst@unsw.edu.au

#### Adult Cancer Program

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQ_hRddwyoJJkHJ6-wR3qTwBtq2I_zmsh9nAk8vU_cZsIQ?e=mxLjJt)

### Pancreatic Cancer Related Diabetes, Pancreatic Cancer, Pancreatitis (Honours;Masters;PhD)

#### **Dr Chamini Perera**

#### h.c.perera@unsw.edu.au

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWIGoGBiU2NDtvF7g9Rf9GgB9hF2FyDU21e_ZUkWOXtNjw?e=T74xZr)

### Pre-clinical evaluation of a dual kinase inhibitor to overcome chemotherapy resistance in leukemic cells (Honours;PhD)

#### **Prof. John Pimanda**

#### jpimanda@unsw.edu.au

#### Adult Cancer Program

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EdjfcajeG1BNvt_CTdsMsHoB5AQsYpU33sIwExsU1IKKpg?e=FJ91Ip)

### Risk factors and their prevention to embryonal cancer (Honours;PhD;Masters)

#### **Dr Mukesh Raipuria**

#### Mraipuria@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQY_27Pot5lBtkalz-1aTJYBfQksvyrgiMiuZ3m6VsHq_w?e=NGOZIO)

### Role of PSCs in progression of pancreatitis; Novel treatments targeting the stroma in pancreatic cancer; Pancreatic cancer-related diabetes (Honours;PhD)

#### **Dr Zhihong Xu**

#### zhihong.xu@unsw.edu.au

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWIGoGBiU2NDtvF7g9Rf9GgB9hF2FyDU21e_ZUkWOXtNjw?e=T74xZr)

### Single-cell multi-omics of circulating tumour cell in pancreatic cancer (Honours/Masters/PhD)

#### **Dr Omid Faridani**

#### o.faridani@unsw.edu.au

#### Adult Cancer Program

#### [Poster link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ETHezWQ22dZFgnABBB2V-sABnr8UzeWYW0ZdbmOTMBLKWA?e=Bb9sBk)

####

### Targeting BCL2 family proteins in high-risk neuroblastoma (Honours;PhD)

#### **Dr Alvin Kamili**

#### akamili@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ET2hu7CJEshGp0sjvKsDUYIBwqLWImxWqtUcFkhviRSzlw?e=eupJVa)

### Targeting cellular energy metabolism to treat pancreatic cancer (Honours;PhD)

#### **Prof. Nigel Turner**

#### n.turner@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXZN4ZbWBG9LvqdyENXEsCEBB6HhRyrDb0AXfHoUaYWmIQ?e=hjbBVl)

### The role and targeting of Anaplastic Lymphoma Kinase (ALK) in neuroblastoma. (Honours;PhD;Masters)

#### **Dr Vinod Vijay Subhash**

#### VSubhash@ccia.org.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ER-4PoS-H_JElP2kQS2czRcBCpuvgLsG3xMWXtOzxzQkXQ?e=UmnqEq)

### Therapeutic and preventative strategies for children with high-risk neuroblastoma: targeting high fat diet-related metabolism (Honours;Masters;PhD)

#### **Dr Belamy Cheung**

#### bcheung@ccia.unsw.edu.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQY_27Pot5lBtkalz-1aTJYBfQksvyrgiMiuZ3m6VsHq_w?e=NGOZIO)

### Towards a diagnostic tool for the early detection of cancer in Butterfly disease (PhD;Masters;Honours)

#### **A/Prof. Albert S Mellick**

#### a.mellick@unsw.edu.au

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ES89ZSs6kEtHplhWLu1b5VsBJHT0CiMVROBPEj5pQeo_Rw?e=qeRXw6)

### Understanding role of the microbiome in determining response to immunotherapy in Hepatocellular (Honours;Masters;PhD)

#### **A/Prof Amany Zekry**

#### a.zekry@unsw.edu.au

#### St George & Sutherland Clinical School

### Using Big Data to reduce variation in radiotherapy (Honours)

#### **Dr Vikneswary Batumalai**

#### vikneswary.batumalai@health.nsw.gov.au

#### South Western Sydney Clinical School

### Validation of novel drug targets identified by CRISPR/Cas9 in myeloid leukaemia cells (Honours;PhD)

#### **Prof. John Pimanda**

#### jpimanda@unsw.edu.au

#### Adult Cancer Program

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EdjfcajeG1BNvt_CTdsMsHoB5AQsYpU33sIwExsU1IKKpg?e=FJ91Ip)

# Cardiovascular Disease Projects

### Identification of PHACTR1 binding partners in human arterial cells (Honours;Masters;PhD)

#### **Dr Kathryn Wolhuter**

#### k.wolhuter@victorchang.edu.au

#### Victor Chang Cardiac Research Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ESGgBjLj4HlCq9M9cieOkDQBq_pQP1gWYjxnzb4L4WHUZQ?e=TNHIdj)

### Identification of risk factors and biomarkers for cardiovascular disease using data from large cohorts (Honours)

#### **Dr Kwok Leung Ong**

#### kwokleung.ong@unsw.edu.au

#### School of Medical Science

### Targeting of new pathways to inhibit neutrophil activation in cardiovascular disease (Honours)

#### **Dr Blake Cochran**

#### b.cochran@unsw.edu.au

#### School of Medical Sciences

### Understanding the role of mitochondria in controlling endothelial cell function and phenotype during cardiovascular disease (Honours;Masters;PhD)

#### **Ass/Prof Shane Thomas**

#### shane.thomas@unsw.edu.au

#### School of Medical Sciences

### Utilising multi-omics to decipher the role of PHACTR1 in atherosclerosis (Honours;Masters;PhD)

#### **Dr Kathryn Wolhuter**

#### k.wolhuter@victorchang.edu.au

#### Victor Chang Cardiac Research Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ESGgBjLj4HlCq9M9cieOkDQBq_pQP1gWYjxnzb4L4WHUZQ?e=TNHIdj)

# Cell Biology and Stem Cells Projects

### Exploring how mitochondria signal bioenergetic stress (Honours/PhD)

#### **Professor Nigel Turner**

#### n.turner@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXZN4ZbWBG9LvqdyENXEsCEBB6HhRyrDb0AXfHoUaYWmIQ?e=hjbBVl)

#### Genetic, Cellular and Molecular Analysis of Cardiac Ventricular Septation (Honours/PhD)

#### **Prof. Richard Harvey**

#### r.harvey@victorchang.edu.au

*Victor Chang Cardiac Research Institute*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXoS85JJgSFGuFC38JR71vwB8-l7UOu4FRm-sOGoRGFB8Q?e=z01OJv)

### Imaging-based analysis of cancer cell self-organisation and heterogeneity (Honours/PhD/Masters)

#### **Dr John Lock**

#### john.lock@unsw.edu.au

*School of Medical Science*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYe7pltK6qtCmMdcpnem0NgB4vgrRlWQ8LA0XEmEPknKYw?e=uwF8pQ)

[*Video Link*](https://unsw.sharepoint.com/%3Ap%3A/s/SoMS_Honours_Committee/EY5dm96AH8hEv8eEa-0hYAUBu3O8VsPaln9dr8wPuWfSQw?e=R3bXpe)

### Stem cells that maintain sight under steady-state and restore vision after transplantation in blinding corneal disease (Honours/PhD/Masters)

#### **Professor Nick Di Girolamo**

#### n.digirolamo@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYubHRZbHjRKuWkwTDpy-5IBqAegPc_ocK4zfAW-YfPoWA?e=debdAz)

### The impact of nuclear-cytoplasmic shuttling of PHACTR1 on cytoskeleton organization and gene expression in human arterial cells. (Honours/PhD/Masters)

#### **Dr Nicole Bryce**

#### n.bryce@victorchang.edu.au

*Victor Chang Cardiac Research Institute*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ESGgBjLj4HlCq9M9cieOkDQBq_pQP1gWYjxnzb4L4WHUZQ?e=TNHIdj)

# Cellular & Systems Physiology Projects

### Insulin secretory granule trafficking in cholesterol loaded beta-cells: Insights into diabetes. (Honours/PhD)

#### **Dr Nicholas Ariotti**

#### n.ariotti@unsw.edu.au

*School of Medical Science*

### Physiological monitoring in older patients presenting with delirium

#### **Danielle Ni Chroinin and Paul Middleton**

#### danielle.nichroinin@health.nsw.gov.au; Paul.Middleton@health.nsw.gov.au

*Liverpool Hospital / Ingham Institute*

#### [Poster Link](https://unsw.sharepoint.com/%3Ap%3A/s/SoMS_Honours_Committee/EadJbV0xKTJMgxEY-LbNaekBZ2CQOrVhc6c8IiO5wdIybQ)

### Visualizing neuronal transport function: using live cell imaging to quantify KCC2 activity and modulation (Honours/PhD/Masters)

#### **Associate Professor Andrew Moorhouse**

#### a.moorhouse@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw-my.sharepoint.com/%3Ab%3A/g/personal/z3001235_ad_unsw_edu_au/Efrj4I9MFthNtEby8t5eEOwBA2Vw_Tgwq9q1sXDb59Ly2Q?e=dedXIz)

####

# Clinical & Education Projects

### A public health approach to gambling and alcohol harm prevention (Honours/Masters/PhD)

#### **Dr Amy Bestman**

#### abestman@georgeinstitute.org.au

*The George Institute*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EfZx_moXtEVMrnZSjS1eUb0BXyLhxXBo4YNTQZKv_0r0Zg?e=p3bHww)

### Addressing knowledge gaps amongst women regarding long-term cardiovascular health after hypertensive disorders of pregnancy: a pilot study (Honours)

#### **A/Prof. Amanda Henry**

#### amanda.henry@unsw.edu.au

*St George & Sutherland Clinical School*

### Cannabis and issues with supply, guidelines, health care providers and industry (up to 4 projects). (Honours/Masters/PhD)

#### **Dr Tina Naumovski**

#### v.naumovski@unsw.edu.au

*South Western Sydney Clinical School*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWZSt-8MxlhDlPu2KYGCIQoBOTyBrJfL8Q9W3Z5TSM2xSA?e=Ofv0ju)

### Chronic Kidney Disease A Hidden Epidemic – Improving Multidisciplinary Care to Reduce Burden (Honours/PhD/Masters)

#### **Dr Ria Arnold**

#### ria.arnold@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ES__TA3ps4VFkF-A-9vVbHcBckf9HfLJeGRmbPfo-BRhKA?e=hf8IkE)

####

### Context-specific fall prevention training for older adults using virtual reality. (Honours/PhD/Masters)

#### **Dr Yoshiro Okubo**

#### y.okubo@neura.edu.au

*Neuroscience Research Australia*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EfG9lzwSsONMjnjPeMJLxQYBf35sCmooqzfcW3meDEcrLQ?e=rLo384)

[*Video Link*](https://youtu.be/55q5pK0kjqY)

### Enhancing student engagement and developing activities in Biomedical Science Education (Honours/PhD/Masters)

#### **Associate Professor Andrew Moorhouse**

#### a.moorhouse@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw-my.sharepoint.com/%3Ab%3A/g/personal/z3001235_ad_unsw_edu_au/Efrj4I9MFthNtEby8t5eEOwBA2Vw_Tgwq9q1sXDb59Ly2Q?e=dedXIz)

####

### Evaluation of cannabis' efficacy for symptom management via an App. (Honours/Masters)

#### **Dr Tina Naumovski**

#### v.naumovski@unsw.edu.au

*South Western Sydney Clinical School*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWZSt-8MxlhDlPu2KYGCIQoBOTyBrJfL8Q9W3Z5TSM2xSA?e=Ofv0ju)

### Exploring clinical characteristics, rehabilitation goals and outcomes of different patient groups accessing rehabilitation services. (Honours)

#### **Dr Christine Shiner**

#### christine.shiner@svha.org.au

*St Vincent's Clinical School*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ETQ7pEbh6ZZIgzqFKTRpxxQB2Xs6s2E2KAnY8KBHE8IxOg?e=pt2eW8)

### Optimal Use of Medicines: How do we get there? (Honours/PhD/Masters)

#### **Professor Ric Day, A/Prof. Darren Roberts, Dr Jonathan Brett, Dr Bridin Murnion, Dr Jana Stojanova, Dr Jane Carland, Dr Sophie Stocker, Dr Eindra Aung, Dr Matthew Coleshill**

#### **(Thuy Huynh – Administrative Officer)**

#### t.huynh@unsw.edu.au

#### St Vincent's Clinical School

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EcPHObWYIANEmEWJ8JXK-4sBVZs90r6oveq34WHTMl5U0g?e=bQu475)

####

### Reverse Engineering Insulin Secretion in Health and Disease. (Honours/PhD)

#### **Dr Dorit Samocha-Bonet**

#### d.samochabonet@garvan.org.au

*Garvan Institute of Medical Research*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ERTD5gE4-kpJqNB9258cXr8B8Dy8sa8FB4X6vDgRKwZm2w?e=FRHZf1)

### Variability and inaccuracies in written instructions and graphical representations of subcutaneous injection technique. (Honours)

#### **Dr Liang Joo Leow**

#### L.Leow@unsw.edu.au

*69 Burton St Darlinghurst*

# Healthy Ageing Projects

### Healthy ageing through active lifestyle programs. (Honours/PhD/Masters)

#### **Prof. Kim Delbaere**

#### k.delbaere@neura.edu.au

*Neuroscience Research Australia*

[*Poster Link*](https://unsw-my.sharepoint.com/%3Ab%3A/g/personal/z3001235_ad_unsw_edu_au/EWvaG0CWgRtFkIFUmxJiELsBlQzUhvO8riVeaslpZA99VA?e=KpqtAO)

# Inflammation, Immunology & Infection Projects

### (1) The role of pathobionts in the development of metaplasia

### (2) Immunoglobulin degradation by the gut microbiota

### (3) Efficacy of microbiota manipulation therapies

(Honours/PhD/Masters)

#### **A/Prof Nadeem Kaakoush**

#### n.kaakoush@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/Eceeensj-QBMiKk6pwIzpvwB-oXNXQyMPb3iGjfv34IuFg?e=8bJ7Sh)

### 1. Post TB respiratory sequela

### 2. TDM for NTM

(Honours/Masters)

#### **Dr Anthony Byrne**

#### Anthony.Byrne@svha.org.au

#### St Vincent's Clinical School

### A new classification of psoriasis in the age of biologic therapy and its place in our current understanding of systemic inflammatory diseases (Honours)

#### **Dr Liang Joo Leow**

#### L.Leow@unsw.edu.au

#### 69 Burton St Darlinghurst

### Antibody responses in COVID-19 (Honours/Masters/PhD)

#### **Associate Professor Rowena Bull**

#### r.bull@unsw.edu.au

####  School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ETrgi0v4BxdBgQbBCo0Jz9UBdsoJCy6vo9mwQbtVJ5OPnQ?e=9VdRH6)

### Bioinformatic approaches to study gene interactions on the X-chromosome (Honours /PhD)

#### **Dr Sara Ballouz**

#### s.ballouz@garvan.org.au

#### Garvan Institute of Medical Research

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ERHCUvXI2IVEm1UWLvqRxIoBrx7pQXLte0A0SII6CNp_dA?e=0paSIL)

### Characterisation of human T regulatory cells

### Antigen specific T regulatory cells in Transplantation

### Antigen specific T regulatory cells in Autoimmunity (Honours/Masters/PhD)

#### **Dr Nirupama Verma**

#### nirupama.verma@unsw.edu.au

#### **Dr Bruce Hall**

*b.hall@unsw.edu.au*

#### **Assoc Prof Suzanne Hodgkinson**

*s.hodgkinson@unsw.edu.au*

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWJnj3YwdRdAuz0WCWLwqH8BADpYcqcHbH9xp0rcvgKVmg?e=rF3KgD)

### Characterising the human virome to identify all viruses promoting the development of type 1 diabetes using cutting-edge Next Generation Sequencing Methods (Honours/Masters/PhD)

#### **Dr Ki Wook Kim**

#### k.w.kim@unsw.edu.au

#### Prince of Wales Hospital, Virology Research Laboratory

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQO_n2B0JsJNm50U-2lcQBsB4e87TMMLNPxHr1baeztMRQ?e=OKIMGc)

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/EWHKvdjW_mpAjMxx7F8ata0BKt-c7NjW7lsGpCYf7Re50w?e=ivhu8o)

### Defining the Australian Inflammatory Bowel Disease Microbiome – The AIM Study (Honours/Masters/PhD)

#### **Prof. Georgina Hold**

#### georgina.hold@unsw.edu.au

#### St George & Sutherland Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ap%3A/s/SoMS_Honours_Committee/Eb4_u8nSQ4pIsvixe7aau50BCDOOYpq1-bSc-zfG3Cuy0w?e=Jy7kZJ)

[*Live Zoom Link*](https://unsw.zoom.us/j/86831639767)

### Development of novel anti-inflammatory therapeutics for acute respiratory stress syndrome (ARDS).

#### **Prof. Levon Khachigian**

#### l.khachigian@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXrRJ6UBPo9EmFFS0k8X828Bwiwv68wBQO0ri2QUN9WS3Q?e=HLjNMw)

### Development of novel anti-inflammatory therapeutics for cardiovascular disease (CVD).

#### **Prof. Levon Khachigian**

#### l.khachigian@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXrRJ6UBPo9EmFFS0k8X828Bwiwv68wBQO0ri2QUN9WS3Q?e=HLjNMw)

### Development of novel therapeutics for diabetic retinopathy (DR).

(Honours)

#### **Prof. Levon Khachigian**

#### l.khachigian@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXrRJ6UBPo9EmFFS0k8X828Bwiwv68wBQO0ri2QUN9WS3Q?e=HLjNMw)

### Evaluating LILRA3 as a novel anti-inflammatory agent for treatment of acute lung injury in a mouse model

#### **Prof Nicodemus Tedla**

#### N.Tedla@unsw.edu.au

#### School of Medical Sciences

### Human immune tuning: Understanding the genetic basis for health, cancer and Inflammatory disease (Honours/Masters/PhD)

#### **Associate Professor Shane Grey**

#### s.grey@garvan.org.au

#### Garvan Institute of Medical Research

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ES2YsE4T00tAuHkc_phsDYcBVf6q9_Z34cCllrWYZKL-ew?e=VyLMxF)

####

### Investigating clinically relevant immune phenotypes in immunodeficiency (Honours/Masters/PhD)

#### **Dr Alisa Kane**

#### alisa.kane@svha.org.au

#### Garvan Institute of Medical Research

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ERPRQgpEBnlKjqEtN-wO1EcB2_PIOj6NGV6wKmkJp139Zw?e=lCZlwd)

### Investigating the role of the longitudinal pregnancy virome on the development of gestational diabetes in the Microbiome Understanding in Maternity Study (MUMS) (Honours)

#### **Prof. Maria Craig**

#### m.craig@unsw.edu.au

#### Virology Research Laboratory, Prince of Wales Hospital

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQO_n2B0JsJNm50U-2lcQBsB4e87TMMLNPxHr1baeztMRQ?e=OKIMGc)

#### [Video Link](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/EWHKvdjW_mpAjMxx7F8ata0BKt-c7NjW7lsGpCYf7Re50w?e=ivhu8o)

####

### Kefir consumption and gut health (Honours)

#### **Dr Fatima El-Assaad**

#### f.el-assaad@unsw.edu.au

#### St George & Sutherland Clinical School

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EaFZNogv0-dBoBDmfH1Bjf8BRK7tVuyM1Qhv8uGOI5XdZw?e=rt4UNw)

#### [Video Link](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/Edo3DA8gozFJqe_poUjEcCgBzA9E8gzA_lZDqLNp8sxGxw?e=bFjB9d)

#### Live Zoom Link – not available. Please email

### Molecular machines in infection and immunity (Honours/Masters/PhD)

#### **Associate Professor Till Boecking**

#### till.boecking@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EW3KeWxARZNCtnknZeEUV5oBK17EuT_igltFGIw2h4qVgA?e=rgaHsu)

####

### Phyloddynamics of HIV-1 in NSW (Honours/Masters/PhD)

#### **Dr Francesca Di Giallonardo**

#### fdigiallonardo@kirby.unsw.edu.au

#### Kirby Institute

### Profiling rogue lymphocytes in human autoimmune disease (Honours/PhD)

#### **Dr Manu Singh**

#### m.singh@garvan.org.au

#### Garvan Institute of Medical Research

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/Edwhl_CAZMNFiAU6mUx6bg8BHLHGYEy3lop3uvXJMhBSAg?e=iJpUtG)

### Redefining histologic criteria in the diagnosis of pyoderma gangrenosum (Honours)

#### **Dr Liang Joo Leow**

#### L.Leow@unsw.edu.au

#### 69 Burton St Darlinghurst

### RNA-directed gene silencing of Human Papillomavirus (Honours/Masters/PhD)

#### **Dr Chantelle Ahlenstiel**

#### cahlenstiel@kirby.unsw.edu.au

#### Kirby Institute

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYhjUOMCq6RJmW0TNLM6BSQBEhQeUdFy-nLIaNLBdc1P8Q?e=hQgwID)

### State-wide surveillance for emerging enteroviruses (Honours)

#### **Dr Sacha Stelzer-Braid**

#### s.stelzer-braid@unsw.edu.au

#### Prince of Wales Hospital

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXcIxEyxM_xNj-AJYQSy6k0ByAEYPYk6gUOFq-aI0jeX-g?e=LPdLST)

#### [Video Link](https://www.youtube.com/watch?v=B8ACLVC7tnA)

####

### Studies of viral pathogenesis (Honours Masters PhD)

#### **Prof Bill Rawlinson**

#### w.rawlinson@unsw.edu.au

#### Virology Research Lab is based at Level 4, Campus Centre, Prince of Wales Hospital

### The fastest one: discovering the genes regulating migration speed in immune and cancer cells (Honours/PhD)

#### **Dr Fabio Zanini**

#### fabio.zanini@unsw.edu.au

#### Adult Cancer Program, Lowy Level 2, UNSW

####

### The MothersBabies Study: Evolution of the microbiome from preconception, pregnancy and related outcomes (Honours/PhD)

#### **Prof. Emad El-Omar**

#### e.el-omar@unsw.edu.au

#### St George & Sutherland Clinical School

[*Poster Link*](https://unsw-my.sharepoint.com/%3Ap%3A/g/personal/z9900261_ad_unsw_edu_au/Ed8-xz6F1epHs-QV1goZXWUBx71yDrGaYRN2YakSG4bxCQ?e=uGEfJb)

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/Edo3DA8gozFJqe_poUjEcCgBzA9E8gzA_lZDqLNp8sxGxw?e=bFjB9d)

### The Pathogenesis and Prevention of Congenital Cytomegalovirus Disease (Honours/Masters/PhD)

#### **Dr Stuart Hamilton**

#### Stuart.Hamilton@health.nsw.gov.au

#### Virology Research Laboratory, Prince of Wales Hospital

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXcIxEyxM_xNj-AJYQSy6k0ByAEYPYk6gUOFq-aI0jeX-g?e=1hWrmN)

[*Video Link*](https://www.youtube.com/watch?v=B8ACLVC7tnA)

### The role of PHACTR1 in the development and progression of atherosclerosis (Masters/PhD)

#### **Dr Nicole Bryce**

#### n.bryce@victorchang.edu.au

#### Victor Chang Cardiac Research Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ESGgBjLj4HlCq9M9cieOkDQBq_pQP1gWYjxnzb4L4WHUZQ?e=TNHIdj)

### The role of the microbiome and endometriosis (Honours/PhD)

#### **Dr Fatima El-Assaad**

#### f.el-assaad@unsw.edu.au

#### St George & Sutherland Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EaFZNogv0-dBoBDmfH1Bjf8BRK7tVuyM1Qhv8uGOI5XdZw?e=rt4UNw)

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/Edo3DA8gozFJqe_poUjEcCgBzA9E8gzA_lZDqLNp8sxGxw?e=bFjB9d)

*Live Zoom Link* – not available please email

### The role of the microbiome and proton pump inhibitors on the development of dementia (Honours/PhD)

#### **Dr Fatima El-Assaad**

#### f.el-assaad@unsw.edu.au

#### St George & Sutherland Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EaFZNogv0-dBoBDmfH1Bjf8BRK7tVuyM1Qhv8uGOI5XdZw?e=rt4UNw)

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/Edo3DA8gozFJqe_poUjEcCgBzA9E8gzA_lZDqLNp8sxGxw?e=bFjB9d)

### Transcriptomic analysis of severe Community Acquired Pneumonia local immune response and relationship to clinical outcome (Honours/Masters)

#### **Dr Sarah Sasson**

#### ssasson@kirby.unsw.edu.au

#### Kirby Institute

#### [Poster Link](https://unsw.sharepoint.com/%3Ap%3A/s/SoMS_Honours_Committee/ERUXFUrdBnlCpdLqZcItpp4B0On8Gg9P2zQvDRAYc8-ndw?e=jw35TK)

####

### Understanding disease in patients with PI3K GOF mutation (Honours)

#### **A/Prof. Elissa Deenick**

#### e.deenick@garvan.org.au

#### Garvan Institute of Medical Research

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EfkgQM72ZcNJrkHdXr639XUByGAg5ylbBeK_U1nG2NOfEA?e=04CIUD)

### Understanding microbial community resilience in response to environmental trigger events

#### **Prof. Georgina Hold**

#### georgina.hold@unsw.edu.au

#### St George & Sutherland Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ap%3A/s/SoMS_Honours_Committee/EcljffrSumhLp_1TsTX_KdUBVcd2bxfAL1xT71Ijqcr20A?e=2L6usR)

### What cause coeliac disease? (Honours/Masters/PhD)

#### **Associate Professor Fabio Luciani**

#### luciani@unsw.edu.au

#### Kirby Institute

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EZV3OPMk-1FDp9o_FLjQqasBIxDHwqtbNqtM6RM9BBo9dw?e=dfkPms)

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# Metabolism & Energy Projects

### Glutathione, glutathione supplementation and its impact on brain metabolism (Honours/Masters)

#### **Prof. Caroline Rae**

#### c.rae@unsw.edu.au

*Neuroscience Research Australia*

### Impact of diet on the body and brain (Honours)

#### **Professor Margaret Morris**

#### m.morris@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXBh32fDdutAvzXH6cxJNbIBRlRMhyJZ646nJYtKJTkCqw?e=dlbfWy)

####

### Mitochondrial uncoupling drugs to maintain protein folding in old age (Honours/Masters/PhD)

#### **Dr Lindsay Wu**

#### lindsay.wu@unsw.edu.au

#### School of Medical Sciences

### Old age and metabolism in innate immunity and coronavirus infection (Honours/Masters/PhD)

#### **Dr Lindsay Wu**

#### lindsay.wu@unsw.edu.au

#### School of Medical Sciences

### Promoting NAD+ biosynthesis to prevent metabolic diseases (Honours/PhD)

#### **Professor Nigel Turner**

#### n.turner@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXZN4ZbWBG9LvqdyENXEsCEBB6HhRyrDb0AXfHoUaYWmIQ?e=hjbBVl)

### Reverse Engineering Insulin Secretion in Health and Disease (Honours/PhD)

#### **Dr Dorit Samocha-Bonet**

#### d.samochabonet@garvan.org.au

*Garvan Institute of Medical Research*

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ERTD5gE4-kpJqNB9258cXr8B8Dy8sa8FB4X6vDgRKwZm2w?e=FRHZf1)

### Targeting lipid synthesis pathways to improve glucose metabolism in obesity and diabetes (Honours/PhD)

#### **Professor Nigel Turner**

#### n.turner@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXZN4ZbWBG9LvqdyENXEsCEBB6HhRyrDb0AXfHoUaYWmIQ?e=hjbBVl)

# Molecular & Drug Discovery Projects

### A NOVEL COMBINATION THERAPY FOR MYCN-DRIVEN CANCER (Honours/Masters/PhD)

#### **Dr Belamy Cheung**

#### bcheung@ccia.unsw.edu.au

#### Children's Cancer Institute

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQY_27Pot5lBtkalz-1aTJYBfQksvyrgiMiuZ3m6VsHq_w?e=NGOZIO)

### Exploring the molecular pharmacology of G protein-coupled receptors in health and disease (Honours/Masters/PhD)

#### **Dr Nicola Smith**

*nicola.smith@unsw.edu.au*

#### **Dr Angela Finch**

#### a.finch@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ETBOvSu-iZhFpJ8YRGA9cGkB2vi8A12VL9BQ1Q1qz3DGlg?e=P9iVmK)

#### [Video Link](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/EQ4zvijg4bhPvrySBOTd1IUBAmfWLWMoBEV1E4NUOhjtlQ?e=OtJqeT)

####

### Therapeutic targets for inflammatory bowel disease and bladder disorders (Honours/Masters/PhD)

#### **A/Prof Lu Liu**

#### lu.liu@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ERQWals7iNhBud-atFLqjTABxaN0DSO2G8Dgo_xfJ_Lz-g?e=kgQ8kS)

####

### Whole-genome sequencing of cytomegalovirus to untangle antiviral resistance in transplant recipients and other patients (Honours)

#### **Dr Charles Foster**

#### charles.foster@unsw.edu.au

#### Prince of Wales Hospital

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EVogvj9kEENFrosu_vi3LVwBRxaK7unSy016bnwAE45iew?e=dIBIbp)

# Neuroscience Projects

### 1. Developing new innovative technological devices for the assessment and treatment of Cervical Myelopathy and Normal Pressure Hydrocephalus

### 2. Using new innovative technological devices to help clinicians assess, treat and monitor patients with back and neck pain conditions.

(PhD)

#### **A/Prof James Van Gelder**

#### j.vangelder@unsw.edu.au

#### Sydney Spine Institute and Public Hospital Sites

[*Poster Link*](https://unsw.sharepoint.com/%3Aw%3A/s/SoMS_Honours_Committee/EZH_LD108TBCvkQ4-jwZIy8Bfqv3tIPqVZtLDaMrsVh1pw?e=fO0TIb)

### AI: Development of evaluation/predictive performance - imaging segmentation benchmark model (DWI image segmentation) (Honours)

#### **Prof. Mark Parsons**

#### Mark.Parsons@unsw.edu.au

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQI4NCppZexLlQ4Im7drjgcByV96fVRHrYKKfJ0PCokNqQ?e=MfnjEO)

### Acquired Brain Injury and hearing loss drug and DNA therapeutics (Honours/Masters/PhD)

#### **Professor Gary Housley**

#### g.housley@unsw.edu.au

#### School of Medical Sciences

### Auditory Circuits involved in Selective Listening (Honours)

#### **Prof. David Ryugo**

#### d.ryugo@garvan.org.au

#### Garvan Institute of Medical Research

### Characterising learning-related signals in new genetically-encoded activity reporters in vivo (Honours/Masters/PhD)

#### **Dr Jay Bertran-Gonzalez**

#### j.bertran@unsw.edu.au

#### School of Psychology (Matthews)

[*Website Link*](http://www.neuromodulab.org)

### Determining the molecular underpinnings of neurodegeneration (Honours/Masters/PhD)

#### **Dr Vaishnavi Ananthanarayanan**

#### vaish@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EcquZbz-y8tIhmRQvKvL_ScBeFI_D6ctyM5ykYmW0C9LyQ?e=Auv12c)

### Effects of age, posture and task condition on cortical activity during reaction time tasks (Honours)

#### **Dr Jasmine Menant**

#### j.menant@neura.edu.au

#### Neuroscience Research Australia

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/Ec3N4HWanhhMrar5XxegEIMBSyB5qofUwpfdxvd2063PmA?e=EWNm0h)

### Electroencephalographic (EEG) connectivity measures in states of reduced consciousness (Honours/Masters)

#### **Dr Frederic von Wegner**

#### f.vonwegner@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://tnf-computational-physiology.github.io/slides/thesis-info.html)

### How do transcutaneous spinal stimulation (TSS) parameters impact function and neural excitability? Optimising TSS as a therapeutic tool in individuals with spinal cord injury

#### **Dr Martin Héroux**

#### m.heroux@neura.edu.au

#### Neuroscience Research Australia

### How proprioceptive perceptions of grasp aparture scale across the functional range and differ with task complexity (Honours)

#### **Dr Annie Butler**

#### a.butler@neura.edu.au

#### Neuroscience Research Australia

### Impact of maternal obesity on offspring behaviour and metabolism (Honours)

#### **Professor Margaret Morris**

#### m.morris@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYbB-U0bdulJttOWulu61UEBwNsWQCoyamve7AJwAPsp8w?e=QRgldL)

####

### Implantable neuromodulation: Using ionic direct current to treat chronic pain (Honours/Masters/PhD)

#### **Dr Felix Aplin**

#### f.aplin@unsw.edu.au

#### School of Medical Science

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYp2Bmel5hdIoRhPWZa1DM4BrN_1SvrlfV4ViRzeLMnDrQ?e=8lhgCb)

### Individualised lower limb strength and gait training to improve walking in people with MS (Masters/PhD)

#### **Dr Jasmine Menant**

#### j.menant@neura.edu.au

#### Neuroscience Research Australia

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/ERqFq_y0EO1AqIykcwEbxjABV01ESWwkBLmQqPbKEEuB_g?e=cc5QL0)

### Influence of lower limb pain on cortical activity during stepping (Honours)

#### **Dr Jasmine Menant**

#### j.menant@neura.edu.au

#### Neuroscience Research Australia

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/EQ9QHNC1aFtFho_kW42J61ABLD1an1wouzFJgnF1K6qsMA?e=fM1d6a)

### Investigating central respiratory chemoreception with trans-synaptic viral tracing (Honours/Masters/PhD)

#### **Dr Natasha Kumar**

#### natasha.kumar@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/ESznHkkBpilNtYVxXP3wuDcB8uoiiO4irXcUyHQpKoxbgw?e=4Ytwkx)

####

### Investigating kynurenine pathway in multiple sclerosis (Honours/Masters/PhD)

#### **Prof. Bruce Brew**

#### b.brew@unsw.edu.au

#### St Vincent's Centre for Applied Medical Research

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/Edji8063GKJDtSlQdUW5dIABPIjaHXwVb-Q_xCfMVrN9Sw?e=xhiTVH)

### Life with a blind mind

Extreme visual imagery from aphantasia to hyperphantasia

(Honours/PhD)

#### **Prof. Joel Pearson**

#### jpearson@unsw.edu.au

#### School of Psychology

### Lighting the brain pathways: Neural circuitry of drug addiction and movement disorders (Honours/Masters/PhD)

#### **Dr Asheeta Prasad**

#### asheeta.prasad@unsw.edu.au

#### School of Psychology

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EWw1nvWLbzFIizoGO2gO-v0BNpg7F7mRaUgfETs2bqIpWA?e=wi3lX8)

### Mapping addiction associated neural circuits (Honours)

#### **Dr John Power**

#### john.power@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EfpHkn2hLdpFkQlW-roHe8wBMIgKf26_rru5DPN9uTbGug?e=UKv8gL)

#### [Video Link](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/EWtqKDdL_3REg-l1WksvbKYBqfHUkWCutUMayPKZDEgFwQ?e=DeXBfB)

####

### Mapping brain tissue conductivity across the lifespan (Honours/Masters/PhD)

#### **Prof. Caroline Rae**

#### c.rae@unsw.edu.au

#### Neuroscience Research Australia

Microglial-related contributions to dopamine dysregulation in schizophrenia

(Honours/Masters/PhD)

#### **Dr Tertia Purves-Tyson**

#### t.purves-tyson@neura.edu.au

#### Neuroscience Research Australia

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXCtMYzvchhHrjIpEMBYU54B8ZCNqD2UCtQ7sOYdJiGHQw)

### Mild hypoxia (and drugs which mimic hypoxia) as a neuroprotective strategy (Honours/Masters/PhD)

#### **Dr Nicole Jones**

#### n.jones@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EecNloqd1DdBr5kZ0qBDk9sBgMyZYLf964pE6AiqLMoqFg?e=KaKOHY)

####

### Neural Code, Perception and Sensory Bionics: Sense of Touch and Auditory System (Honours/Masters/PhD)

#### **Associate Professor Ingvars Birzniek**

*i.birznieks@unsw.edu.au*

#### **Associate Professor Richard Vickery**

#### richard.vickery@unsw.edu.au

#### School of Medical Sciences and Neuroscience Research Australia (NeuRA)

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EdH0f6_p5sRAtizxTp3AwEMBC-d-mf4MB-uKvTfT2CB7iQ?e=agcWDB)

#### [Video Link](https://youtu.be/b7DSoMMTSgw)

####

### Neural mechanisms of visual perception (Honours/Masters/PhD)

#### **Dr Erin Goddard**

#### erin.goddard@unsw.edu.au

#### School of Psychology

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/Ef6I4eiBKUhJjNh70Gx3sOwBo9Q4WJgOcHpPRZ-H2xgUPg?e=iSmTS5)

### Neuroimmune cross-talk following nervous system injury: Implications for chronic pain (Honours/Masters/PhD)

#### **Associate Professor Gila Moalem-Taylor**

#### gila@unsw.edu.au

#### School of Medical Sciences

#### [Poster Link](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EcgsEWF-rJRNkDr6A9jK8-oBuzNjm5k6wKNXn0FsxjVDfg?e=hJLtdr)

####

### Novel perfusion patterns in stroke & mimics (Honours)

#### **Prof. Mark Parsons**

#### Mark.Parsons@unsw.edu.au

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQI4NCppZexLlQ4Im7drjgcByV96fVRHrYKKfJ0PCokNqQ?e=MfnjEO)

### Understanding fall risk in cancer survivors with chemotherapy-induced peripheral neuropathy” (Honours / Masters / PhD)

#### **Dr Jasmine Menant**

#### j.menant@neura.edu.au

#### Neuroscience Research Australia

[*Video Link*](https://unsw.sharepoint.com/%3Av%3A/s/SoMS_Honours_Committee/ETpG7RuRHyVFh7j78iaezEIBsKKSWGD_AMmlGulw4IgJ3Q?e=3BJe9z)

Role of neuroinflammation and neurotransmitter systems in the improved cognition induced by estrogen receptor modulation (Honours/Masters/PhD)

#### **Dr Tertia Purves-Tyson**

#### t.purves-tyson@neura.edu.au

#### Neuroscience Research Australia

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EXCtMYzvchhHrjIpEMBYU54B8ZCNqD2UCtQ7sOYdJiGHQw)

### The neurophysiological effects of a one-week trial of transcutaneous spinal stimulation in individuals with a spinal cord injury (Honours/Masters)

#### **Dr Martin Héroux**

#### m.heroux@neura.edu.au

#### Neuroscience Research Australia

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/Eceeensj-QBMiKk6pwIzpvwB-oXNXQyMPb3iGjfv34IuFg?e=qBnmPF)

### Translational Neuroscience Facility, Wallace Wurth Building 3SW (Honours/Masters/PhD)

#### **Prof Gary Housley, Dr. Jennie Cederholm, Dr. Jeremy Pinyon, Dr. Dominik Froehlich, Dr. Georg von Jonquieres**

#### g.housley@unsw.edu.au

#### Translational Neuroscience Facility, Wallace Wurth Building 3SW

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EYkWp5sAVIFOsp0RHgpNC9EBgSvP2cLQyCDawXb5qbbFKQ)

### Unravelling the neural circuits of food intake control (Honours/Masters/PhD)

#### **Dr Zhi Yi Ong**

#### zhiyi.ong@unsw.edu.au

#### School of Psychology

### Using CRISPR technology to understand neurodevelopmental disorders (Honours/Masters/PhD)

#### **Dr Robert Weatheritt**

#### r.weatheritt@garvan.org.au

#### Garvan Institute of Medical Research

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EZkLf9iiHzVDidyfDwrUjw8BnLShcjb_5JTvyaNota8aUQ?e=QQV4YZ)

### Using CT perfusion imaging to characterize brain ischaemia: permeability maps/advanced perfusion imaging analysis using the INSPIRE database (Honours)

#### **Prof.** **Mark Parsons**

#### Mark.Parsons@unsw.edu.au

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQI4NCppZexLlQ4Im7drjgcByV96fVRHrYKKfJ0PCokNqQ?e=MfnjEO)

### Using CT perfusion imaging to characterize brain ischaemia: Small perfusion lesions (Honours)

#### **Prof. Mark Parsons**

#### Mark.Parsons@unsw.edu.au

#### South Western Sydney Clinical School

[*Poster Link*](https://unsw.sharepoint.com/%3Ab%3A/s/SoMS_Honours_Committee/EQI4NCppZexLlQ4Im7drjgcByV96fVRHrYKKfJ0PCokNqQ?e=MfnjEO)

# Other – Fertility

### Role of Microbiome in Infertility: Integrated Metagenomic Sequencing Analysis (Honours)

#### **Howard Yim and Dr. Xiaotao Jiang**

#### c.yim@unsw.edu.au and xiaotao.jiang@unsw.edu.au

*St George & Sutherland Clinical School*

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# Other – Health Systems

### Assessing Equity of Universal Health Coverage Reforms in Kerala, India: A Mixed Methods Study (PhD/Masters/Honours)

#### **Dr Devaki Nambiar**

#### dnambiar@georgeinstitute.org.in

#### The George Institute for Global Health, India

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# Other – Microbiome and Health

### Defining the Australian Optimal Healthy Microbiome (HOAM) through Machine Learning (Honours)

#### **Xiaotao Jiang and Prof. Emad EI-Omar**

#### xiaotao.jiang@unsw.edu.au

#### St George & Sutherland Clinical School

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# Other – Public Health/Epidemiology

### Neglected Tropical Diseases Research Projects: options include data analysis of already collected data, systematic or scoping reviews; in diseases such as soil-transmitted helminths, scabies, trachoma (Honours;Masters;PhD)

#### **Ass Prof Susana Vaz Nery**

#### snery@kirby.unsw.edu.au

#### The Kirby Institute

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### Understanding parental information needs in the first year of life of a child; Expanding a digital intervention for injury prevention (Honours)

#### **Mr Nipuna Cooray-A/Prof. Julie Brown**

#### ncooray@georgeinstitute.org.au

#### The George Institute for Global Health

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# Other – Unintentional Injury

### Geometry of Child Restraint Systems and Their Ability to Accommodate Child Anthropometry (Honours)

#### **Ms Bianca Albanese-A/Prof. Julie Brown**

#### balbanese@georgeinstitute.org.au

#### The George Institute for Global Health

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