Welcome to the first issue of the School of Women’s & Children’s Health Research Newsletter for 2019.

Well done to those who have submitted applications to the new NHMRC funding schemes, that closed recently. Thank you to all of our co-investigators and support staff, without whom we would be unable to submit such high quality applications. To say the very least, it was a mammoth round and now we wait.

As a School we submitted a total of 21 applications, with an additional 23 administered by the UNSW Centre for Childhood Cancer Research and Children’s Cancer Institute.

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The development of the Randwick Precinct is visibly progressing with the commencement of light rail testing and the lack of building structures between the University and hospitals. Many of you will have received invitations to join various working groups that are being established to govern the development and future of the Randwick site. I encourage you to become involved, where practical.

UNSW Scientia PhD Scholarships are now open for applications from candidates. If you know of anyone within your networks who would like to undertake their PhD with UNSW, I would encourage them to view the available opportunities on the Scientia website. The Scientia PhD Scholarships include a generous stipend for 4 years, tuition fees covered, coaching and mentoring, and up to $10K per year for career building and support of international collaborations.

Together with UNSW Stats Central, Prince of Wales Clinical School, South Eastern Sydney Local Health District, and Sydney Children's Hospitals Network we have commenced a statistical seminar series for all Randwick Precinct staff and students. The seminars are free and held on Wednesday's from 4pm in the Royal Hospital for Women Lecture Theatre. You are welcome to attend one or all seminars. Be quick, there are only five seminars left in this series. Register here.

Congratulations to the following conjoints who received promotions in the last year. Our conjoints contribute ⅔ of the School's total research output and are valued members of our research community.

**Promoted to Conjoint Associate Professor:**
- Dr Fiona Mackie, Nephrology Department, Sydney Children's Hospital.

**Promoted to Conjoint Senior Lecturer:**
- Dr Susan Adams, Surgery Department, Sydney Children's Hospital.
- Dr Shihab Hameed, Endocrinology Department, Sydney Children's Hospital.
- Dr Ashish Jiwane, Surgery Department, Sydney Children’s Hospital.

**Promoted to Conjoint Lecturer:**
- Dr Clara Chung, Centre for Clinical Genetics, Sydney Children’s Hospital.
- Dr Nichola Concannon, Emergency Department, Sydney Children's Hospital.
- Dr Paul Hotton, Department of Community Child Health, Sydney Children’s Hospital.
- Dr Jane Son, Kogarah Developmental Assessment Service, St George Hospital.
- Dr Dylan Wanaguru, Surgery Department, Sydney Children’s Hospital.

I would like to congratulate Prof Kate Moore and Conjoint Prof Maria Kavallaris on receiving Australia Day Honours, this year. Prof Moore was appointed Officer (AO) in the General Division of the Order of Australia 'for distinguished service to medicine, and to medical research, in the field of urogynaecology, and to professional groups.'
Conjoint Prof Kavallaris was appointed Member (AM) ‘for significant service to medicine, and to medical research, in the field of childhood and adult cancers.’ This recognition is much deserved of two of our women in STEMM leaders.

Conjoint Prof Richard Cohn, Behavioural Sciences Unit, Kids Cancer Centre was recently awarded the Ashleigh Moore Award from Clinical Oncology Society of Australia (COSA) recognising his contribution to survivorship care and research. Dr Joanna Fardell was awarded the UNSW Apte Scholarship, which provides funds to support academic women returning to their career following a period of parental leave.

Further congratulations to Dr Angelica Merlot, UNSW Centre for Children’s Cancer Research & Children’s Cancer Institute who was awarded NSW Young Woman of the Year for her work in cancer targets and therapeutics. Thus far, 2019 is showing great recognition for the tireless work our researchers are contributing to improving health outcomes of women and children.

Best wishes,

Professor Adam Jaffe

Head of School &
John Beveridge Professor of Paediatrics
School of Women’s & Children’s Health

MEDIA

END-OF-LIFE CONVERSATIONS CAN CONTRIBUTE TO A BETTER DEATH
24 May 2019 | Mirage News

End-of-life conversations can improve quality of life and provide people dealing with an advanced illness with a much-needed sense of control, according to an expert psychologist speaking at the APS College of Clinical Psychologists Conference in Melbourne 24 – 26 May.

Clinical psychologist Dr Ursula Sansom-Daly, who works with young people with cancer at Sydney Youth Cancer Service, advocates the need for end-of-life conversations between patients and their family members, doctors and healthcare providers.

“When these sometimes difficult conversations are avoided, the quality of remaining life can be jeopardised,” said Ms Sansom-Daly.

She said these conversations are an opportunity for people to discuss treatment plans, life-sustaining options, referrals to hospices and funeral arrangements, but also to reflect on their life.

Read More.

Clinical psychologist Dr Ursula Sansom-Daly speaks with Kia Handley, ABC Newcastle Mornings.

Death is one of the biggest stages in our life journey…and talking about it can actually improve our quality of life. So how can we initiate those conversations and give people more control over the end of their own lives? Listen here.

Rev. Bill Crews, 2GB spoke to psychologist Dr Ursula Sansom-Daly about the importance of having end of life conversations with loved ones. Listen to the podcast here.

THE PLAN TO SAVE CHILDREN WITH ‘THE WORST OF THE WORST’ CANCERS
15 May 2019 | Claire Huang | Sydney Morning Herald

Vivian Rosati vaguely remembers doctors telling her a small portion of her son’s [Jack] brain tumour would be sent to scientists working on a cancer research project.

Jack’s tumour tissue had become part of the Zero Childhood Cancer project's PRISM trial: a precision or ‘personalised’ medicine initiative in which researchers analyse the genetic make-up of cancer cells in search of targeted treatments tailored to each individual child.

“Children who come into this program are really at the end of the line,” executive director of the Children's Cancer Institute Professor Michelle Haber said.
“They are the worst of the worst cases. This program gives hope where there was no hope before.”

On Wednesday, billionaire miner Andrew Forrest and his wife Nicola announced their philanthropic organisation the Minderoo Foundation will donate $5 million to the Zero Childhood Cancer program.

The donation will enable the program to double the number of children enrolled in its trial and come closer to offering personalised medicine to children diagnosed with deadly high-risk or relapsed cancer by 2020.

One in five children diagnosed with cancer in Australia will die, the equivalent of three children every week.

Each year about 200 children and adolescents in Australia are diagnosed with cancers that are extremely difficult to treat and have a less than 30 per cent chance of survival.

Read More.

DAILY STRESS NOT IN THE WAY OF BABY PLANS, STUDY SAYS
7 May 2019 | Claire Huang | Strait Times

The stress individuals face on a daily basis does not hinder a couple’s plans to have babies, an Australian study that looked at common stress factors showed.

Professor William Ledger, an Australian fertility specialist, pointed out that everyday stress such as work pressure, relationship issues, family or financial considerations, should not be confused with extreme stress.

Extreme stress, he says, can cause erectile dysfunction in men and failure to ovulate in women.

The study analysed data from Britain where the stress levels of participants were charted through questionnaires and measurement of stress hormones.

Read More.

ST GEORGE HOSPITAL LEADS TUBE-FEEDING STUDY FOR KIDS
18 April 2019 | Eva Kolimar | The Leader

Specialist doctors from St George Hospital are leading a study into infant tube-feeding through innovative research to help families nourish their children’s nutritional needs.

The hospital launched Supporting Children with Complex Feeding Difficulties (SuCCEED) - a partnership between researchers, clinicians and families.

It brings together all nine multidisciplinary paediatric feeding clinics in NSW to better understand current practices in tube-feeding babies, where standard methods fail.

Tube feeding is a way of providing nutrition, in the form of specialised formula. The two most common methods are NG tubes (inserted through the nose into the stomach) and PEG tubes (surgically inserted through the abdominal wall into the stomach).

SuCCEED chief investigator and paediatrician at St George Hospital, Chris Elliot, said up to three quarters of children born prematurely, with developmental delay or chronic illness have difficulty being fed.

Read More.

BREAKTHROUGH FOR CHILDREN WITH SERIOUS EPILEPTIC SEIZURES
18 April 2019 | Nicola Shepheard | University of Auckland

Emergency medicine doctors around the world now have a better way to treat severe epileptic seizures in children, thanks to a New Zealand-Australian study.

Prolonged epileptic seizures are the most common neurological emergency in children seen by hospitals. The seizures are potentially fatal: up to five percent of affected children die, and a third suffer long-term complications from brain damage. Crucially, the longer the seizure, the greater the chance of long-term complications.

The study – which will change management of this condition internationally – was published in the prestigious medical journal The Lancet this week. It was led by Professor Stuart Dalziel from the Faculty of Medical and Health Sciences at the University of Auckland and Starship Children’s Hospital, and the senior author was Professor Franz Babl at Melbourne’s Murdoch Children’s Research Institute.

Read More.

Dr Arjun Rao is staff specialist in emergency medicine at Sydney Children’s Hospitals Network (Randwick) and conjoint lecturer with the School of Women’s & Children’s Health. He is a member of PREDICT (Paediatric Research in Emergency Departments International Collaborative) and local principal investigator on this study for the Randwick site.

Read the article:

GREEK AUSTRALIAN DOCTOR INSTRUMENTAL TO CHANGING CLINICAL PRACTICE IN MOST IVF CLINICS
10 April 2019 | Neos Kosmos

The Australian based Greek IVF doctor’s breakthrough IVF research helping couples worldwide to conceive.

Dr Christos Venetis' work has gained international recognition and has been instrumental in changing the clinical practice in most IVF clinics worldwide. Currently the Senior Coordinator of Clinical Research at IVF Australia and a Senior Lecturer at the University of New South Wales, Dr Venetis gained his MD from the Aristotle University of Thessaloniki, Greece where he was also awarded his PhD for his work on the prognostic role of progesterone for the outcome of in-vitro fertilization cycles.

Furthermore, Dr Venetis has also recently conducted research on the optimal way to stimulate a woman’s ovaries. In the early days of IVF, it was shown that collecting multiple eggs by stimulating the ovaries increased the chances of IVF success compared to just collecting a single egg that a woman releases during her cycle.

Read More.

UNSW RESEARCHERS LEAD CANCER COUNCIL FUNDING ROUND
14 March 2019 | Lucy Carroll | UNSW Newsroom

The grants will help UNSW researchers who are engaged in promising work to overcome pancreatic, breast, bowel and childhood cancers.

Researchers examining dual treatments for pancreatic cancer and overcoming endocrine resistance in breast cancer are among four projects to receive support in the latest round of funding from the Cancer Council NSW.

The projects are among 13 ground-breaking cancer research studies receiving a share in $9 million in grants that will announced at Cancer Council NSW’s annual Research Awards in Sydney tonight.

Associate Professor Tao Liu, from the Children’s Cancer Institute, has received $450,000 to investigate a new targeted treatment for neuroblastoma, the most common solid tumour in early childhood.

Most people with advanced neuroblastoma die of the disease, and survivors suffer from life-long adverse effects due to high-dose chemotherapy which is the current standard treatment. One subtype with a particularly poor prognosis is neuroblastoma caused by rearrangements in a gene called TERT that result in uncontrolled cancer growth. Only 20% of children with this type of neuroblastoma survive.

Professor Liu said his team are investigating how particular proteins affect the development and growth of tumours in children with TERT-rearranged neuroblastoma. In this study, the team will examine the role of a protein called CDK7. They also aim to explore how best to target and inhibit the action of this protein to stop cancer cell growth.

Dr Jane Hobson, Research Grants Manager at Cancer Council NSW said: “We are extremely proud to announce another round of extraordinary projects in 2019. We are confident these projects will provide incredible value to cancer patients and continue to push our progress towards a cancer free future.”

Funds have been awarded to projects deemed through peer review to be of the highest scientific merit; and through consumer review to be of the most value to the community supporting Cancer Council.

“The broad range of projects that we fund – across many types of cancers and stages of the cancer journey – shows Cancer Council NSW’s commitment to work across every area of every cancer,” Dr Hobson said.

Read More.

NSW GOVERNMENT TO SPEND $42 MILLION TO HELP WOMEN ACCESS IVF TREATMENT
9 March 2019 | Esther Han | Sydney Morning Herald

Manu O’Connor tried for four years to have a baby but it was only when she was 20 weeks pregnant, and her baby the size of a mango, that she began to enjoy the experience.

In that four year period, Ms O’Connor, 40 from Croydon, had been on an “emotional rollercoaster”, suffering several miscarriages and dealing with the mounting costs of IVF treatment.

The government says it wants the IVF process to become easier and has announced a $42 million package to increase access and ease the financial burden.

The government has also announced a partnership with University of NSW for the first statewide fertility preservation service for young cancer patients at The Royal Hospital for Women in Randwick.

Young cancer patients can have their ovaries and sperm frozen so that harsh cancer treatments do not ruin their chances of having children in the future.

Read More.
UNSW CANCER RESEARCHER WINS NSW YOUNG WOMAN OF THE YEAR
7 March 2019 | Lucy Carroll | UNSW Newsroom

Pancreatic and brain cancer researcher Dr Angelica Merlot hopes her award will encourage more women to join the fight against deadly diseases.

UNSW cancer researcher Dr Angelica Merlot has won the 2019 NSW Young Woman of the Year award for her achievements and research into treatments for pancreatic and brain cancer.

The 29-year-old UNSW Scientia Fellow, who is based at the Children’s Cancer Institute, focuses her research on developing new anti-cancer drugs that target drug resistance and suppress cancer spread.

“This award will continue to raise the profile of the world’s deadliest cancers and is something I hope I can continue throughout my career,” said Dr Merlot, who was presented with the honour today at a ceremony in Sydney as part of the first NSW Women’s Week. “There are so many people affected by cancer and it is wonderful to be acknowledged for the work the researchers do behind the scenes.”

Dr Merlot’s cancer biology projects work to better understand the mechanisms by which cancer cells grow and adapt to their environment, why drugs become less effective and the development of nanoparticles to improve drug delivery.

“Some of the advances we are seeing in cancer are our understanding of the tumour itself – how it consists of more than just cancer cells but other important cells that help the cancer adapt and survive. A major area of advancement is immunotherapy and our understanding of the interactions of the immune system with cancer. Immunotherapy helps boost your immune system to attack the cancer to maximise patient outcomes,” says Dr Merlot. “We are understanding more about the genetics of the disease and, with personalised medicine, we are hopeful that we can improve survival rates.”

Pancreatic cancer has some of the lowest survival rates, often diagnosed late and at advanced stage, with 92% of patients dying within five years of diagnosis.

“I am still in shock and it is so wonderful to be acknowledged for work in this field. I hope to be able to encourage more women to study medicine and pursue careers in medicine and cancer research,” says Dr Merlot, who, in 2018, was named as Australia’s youngest ever National Health and Medical Research Council Grant recipient.

Premier Gladys Berejiklian and Minister for Women Tanya Davies presented Dr Merlot and five other outstanding women with awards across six categories.

“I would like to congratulate all the incredible women who have deservedly been recognised as winners and finalists. Your achievements are paving the way generations of women to come,” Ms Berejiklian said.

Mrs Davies said this year’s awards program attracted an unprecedented number of nominations and more than 9000 votes. The NSW Women of the Year Awards is a NSW government program celebrating the outstanding contribution made by women across the state to industry, communities and society.

For more information or biographies for winners and finalists click here.

THE BEST CHILDREN’S CANCER CENTRE IN THE WORLD COMING TO SYDNEY
1 March 2019 | Kate Aubusson | Sydney Morning Herald

Children with cancer will have access to Australia’s first Comprehensive Children’s Cancer Centre and a new emergency department at the Sydney Children’s Hospital in Randwick.

Director of the Kids Cancer Centre Associate Professor Tracey O’Brien said that although survival rates have improved tremendously it is still the leading cause of death by disease among children.

“TO cure quickly requires the rapid translation of research breakthrough and discoveries from the research laboratories to the patient’s bedside … rapid integration of innovation into the health system,” including the latest genomic technologies, Dr O’Brien said.
"It will propel us closer to our united goal of curing all children with cancer."

Read More.

**IMPROVED TREATMENT AFTER PREGNANCY COMPLICATED BY HIGH BLOOD PRESSURE: WORLD-FIRST STUDY LAUNCHED**

25 February 2019 | SESLHD / UNSW

A new study – led by a UNSW lecturer – will trial the best strategies for women and their babies who experienced high blood pressure during pregnancy.

A new study launched last month at St George Hospital will trial the best follow-up and lifestyle behaviour change strategies for women and their babies after experiencing a hypertensive disorder (high blood pressure) during pregnancy.

About one in 10 women in Australia have a hypertensive pregnancy, which equates to approximately 30,000 women affected annually.

Hypertensive disorders include preeclampsia, gestational hypertension or chronic hypertension.

The world-first study is aiming to recruit 500 women, and will be performed at five hospitals across Sydney including St George Hospital, the Royal Hospital for Women, Royal Prince Alfred Hospital, Liverpool Hospital and Campbelltown Hospital.

Study Chief Investigator, **Dr Amanda Henry**, Obstetrician, St George Hospital and Senior Lecturer, School of Women’s and Children’s Health, UNSW Sydney, said women who experience a hypertensive pregnancy were at increased risk of long-term health problems.

"Many studies have demonstrated that although blood pressure will return to normal for most women after a hypertensive pregnancy, they have at least double the long-term risk of heart attack, stroke and developing diabetes, and triple the risk of chronic high blood pressure, compared to women who had an uncomplicated pregnancy," Dr Henry said.

"However, it is unknown whether monitoring or treatments in the first few years after a hypertensive pregnancy can improve health risks or outcomes for either a mother or her baby.

"The Blood Pressure Postpartum Study – or BP² – is aiming to answer that question by trialling different methods of follow up and encouraging a healthy lifestyle after a hypertensive pregnancy," Dr Henry said.

Study participants will be assigned one of three pathways for ongoing care, including follow up with a GP, attending a postpartum clinic or participating in a lifestyle program.

Women and their babies will return to the hospital where they gave birth for further follow up and assessment six months after birth, and then at annual intervals from when their baby turns one.

"The study methods being investigated differ from the standard treatment offered after a woman has a hypertensive pregnancy because they include structured, consistent information packages, education tools and a specific hospital postpartum clinic for women," Dr Henry said.

“Currently, few women receive appropriate follow-up, counselling or tools to support their long-term health.

“Because pregnancy identifies a group of relatively young women at higher risk of heart disease, our team of researchers are hopeful the study will identify effective interventions that can improve the future health of thousands of Australian women,” Dr Henry said.

BP² is funded by the NSW Health Translational Research Grants Scheme, and is supported by the NSW Health Get Healthy Service.

Study partners include the Heart Foundation and patient advocacy group Australian Action on Preeclampsia (AAPEC).

This study is supported by the NSW Health Translational Research Grants Scheme which has provided funding of $632,843 over two years, starting in July 2018.

For further information about BP², please contact **Lynne Roberts**, Study Coordinator.

Read More.

**CHILDREN WITH CHRONIC LUNG DISEASES AT HIGHER RISK OF FLU HOSPITALISATION**

1 February 2019 | Lachlan Gilbert | UNSW Newsroom

Flu vaccination is provided free for children with chronic illnesses, yet uptake is low prompting UNSW researchers to call for renewed efforts to get this message out to parents in order to keep affected children out of hospital.

Efforts to prevent children with chronic lung disease being hospitalised with influenza need to be stepped up following high rates of flu hospitalisation in these children.

This is one of the recommendations of a UNSW study that found children with underlying lung conditions such
as asthma, cystic fibrosis, bronchopulmonary dysplasia and other congenital chronic conditions are at least five times more at risk of being hospitalised with influenza than other children.

The study, which looked at a cohort of 11,058 children with chronic lung diseases residing in NSW, found that not only are children with chronic lung disease substantially more at risk of hospitalisation from flu, but the average cost of these hospitalisations is almost four times more expensive.

The cost per episode of influenza-associated hospitalisation was $19,704 for children with chronic lung diseases compared to $4557 for children without.

In addition, 13% of children with chronic lung condition hospitalised with influenza required referral to another hospital for ongoing care compared to 7% without.

Study lead author Dr Nusrat Homaira from UNSW’s School of Women’s and Children’s Health says despite the fact that vaccination against influenza is free for children with chronic lung conditions, unpublished data suggests uptake is low and more needs to be done to encourage parents of children with the condition to take advantage of the service.

"Influenza is a vaccine preventable disease and Australian children with chronic lung disease are entitled to free flu vaccination," Dr Homaira says.

"However the uptake – particularly in children with asthma – is reported to be very low. Our research suggests that current efforts to prevent flu in children with chronic lung conditions are either suboptimal or ineffective."

Dr Homaira and her co-authors say an immediate first step is to conduct further research into the effectiveness of vaccine in these children and to look for ways to improve vaccine uptake.

"Vaccination against influenza is highly recommended for children with chronic lung conditions and the vaccine should be repeated every year for these children," Dr Homaira says.

The research paper was published in the Influenza and Other Respiratory Viruses journal.

Read More.

ANNOUNCEMENTS

HIGH QUALITY RESEARCH PAPERS SCHEME

To encourage quality publishing at UNSW Sydney, the High Quality Research Papers incentive scheme has been launched to reward and support researchers and research groups achieving publication excellence.

There are three key incentives available:

Key Incentive 1: Increase the number of Articles and Reviews in High Quality Journals

$500 awarded to each article or review published in the Nature Index, SJR journals >8, or in the top 1% journals in Humanities and Arts and Social Science disciplines.

Key Incentive 2: Increase the number of Highly Cited Journal Articles and Reviews

$1,000 awarded to each article or review that has received enough citations to place it in the top 1% of its academic field. Articles and reviews published within the most recent rolling 5 year Times Higher Education and Quacquarelli Symonds rankings reference period, are eligible when they first become a Highly Cited Paper in Web of Science.

Key Incentive 3: Increase the number of Nature & Science Articles

$10,000 awarded to the lead Corresponding Author of articles published in Nature or Science where UNSW is listed as the primary affiliation. Only papers classified as an ‘Article’ in Web of Science are eligible with sliding amounts for the award depending on the position of the author and UNSW by-line on the paper.

The School would like to congratulate the following researchers who have received awards under this scheme.

- Prof Kei Lui
- Conjoint Prof Richard Cohn
- Conjoint Prof Edwin Kirk
- Conjoint Prof Glenn Marshall
- Conjoint A/Prof David Ziegler
- Dr Karen Mackenzie
- Dr Emma Palmer

More information regarding the scheme is available online.

The Office of the Executive Director (Research) is responsible for managing the scheme. They will proactively undertake a review of publications two times per year (approx. August and February) to identify outputs that meet the criteria for each of the incentives in the scheme. All current UNSW authors of eligible publications will be notified of the award. In the case of papers with multiple UNSW authors, one person will be appointed to administer the funds.

As such, you do not need to do anything to access the scheme. However, if you feel you have not been notified after the review window and are eligible, please email.
INTRODUCING THE NEW UNSW STAFF LEARNING PORTAL
UNSW HR has launched the UNSW Staff Learning Portal; a new central SharePoint site that brings staff development offerings available across UNSW together in one place.

Staff are now able to browse through the range of high-quality offerings from faculties and divisions, including content on career development, teaching, research, safety and wellbeing, and leadership. These learning opportunities are available in a variety of formats, with face-to-face training, seminars and online courses all available.

The UNSW Staff Learning Portal makes it quick and easy for staff to browse through the extensive offerings available and links them to the various UNSW sites for registration details or to find out more.

More information.

iTHENTICATE AT UNSW
iThenticate is the new plagiarism detection tool that is available for researchers to aid in reviewing and assessing research outputs. Supervisors of HDR candidates should use iThenticate to regularly review and evaluate their candidates writing and in the final stages of Thesis preparation.

More information.

Career Collaborator - UNSW Staff Mentoring Program
Career Collaborator is a UNSW-wide mentoring program. The program is open to all UNSW staff, affiliates and partners. The program will enable you to connect with peers across the UNSW network to have meaningful conversations about your career.

More information.

Mindgardens Neuroscience Network - White Paper
This new white paper illustrates the magnitude of burden associated with the neurological, mental health and substance use disorders in Australia and the vast negative impact they have on patients, families, the community, health costs and lost national productivity. Key messages are as follows:

Globally, the burden of neurological, mental health and substance abuse disorders account for 11.1 per cent of the total burden of disease, approximately half the Australian share which sits at 20.5 per cent over the overall disease burden highlighting the relatively high burden of these disorders within Australia.

In 2017, the burden of neurological, mental health and substance use disorders was nearly 1.2 million DALYs[1] or 20.5 per cent of Australia’s total burden of disease (Figure 2.1). Compared to 2010, this figure has increased by 13.5 per cent from 1.04 million DALYs. These results reinforce the findings from earlier key studies highlighting the substantial contribution from neurological, mental health and substance disorders to the total burden of disease.

More information.

AVATAR ACCEPTABILITY STUDY
The team at miCF Research Centre (UNSW and Sydney Children’s Hospital) are asking for people’s opinions on personalised medicine technology that allows pre-testing treatment on patient-derived cell models (avatars). If you wish to participate please watch the short video and complete the questionnaire.

More information.

RESEARCH GROUP UPDATES
CHILDREN’S CANCER INSTITUTE
Subscribe to stay up-to-date with stories, events & research.

Minderoo Foundation’s $5 million donation to Zero Childhood Cancer will help kids like Jack beat brain cancer
15 May 2019 | Tania Ewing | CCI News

Today Minderoo Foundation’s Eliminate Cancer initiative announced a $5 million partnership with Zero to help scale the program in Australia, drive further research into personalised medicine in childhood cancer and help established standardised international protocols.

Read More.

Childhood cancer scientist rewarded for research excellence
1 April 2019 | Tania Ewing | CCI News

Children’s Cancer Institute researcher Professor Maria Kavallaris AM – who in January this year was appointed a Member of the Order of Australia for her significant service to medicine and to medical research – today received further recognition for her work, winning the prestigious Lemberg Medal.

Read More.
Leading children’s cancer scientist awarded for outstanding research
15 March 2019 | Tania Ewing | CCI News

Professor Murray Norris AM, Deputy Director of Children’s Cancer Institute and Director of the Centre for Childhood Cancer Research at the University of New South Wales, has won the inaugural Sally Crossing AM Award for an Outstanding Outcome in Cancer Research.

Read More.

World-Class Comprehensive Children’s Cancer Centre Announced
1 March 2019 | Tania Ewing | CCI News

State and Commonwealth Health Ministers, Brad Hazzard and Greg Hunt, announce that a new, world-class Comprehensive Children’s Cancer Centre will be built on the Randwick Hospital Campus, as a new home for Children’s Cancer Institute, and also for an expanded Kid’s Cancer Centre at Sydney Children’s Hospital.

Read More.

Australian Scientists Discover a Potential Way to Treat and Prevent Cancer in Children with Neuroblastoma
1 February 2019 | Tania Ewing | CCI News

In new research published this week, a team jointly led by Professors Michelle Haber and Murray Norris has revealed that the polyamine pathway is entirely regulated by the MYCN oncogene

Read More.

Maria Kavallaris receives Order of Australia
26 January 2019 | Tania Ewing | CCI News

Children’s Cancer Institute is thrilled to announce that Professor Maria Kavallaris – a leading childhood cancer researcher and a pioneer of nanomedicine in Australia – is to be appointed a Member of the Order of Australia. She will be included in the 2019 Australia Day Honours List for her significant service to medicine, and to medical research, in the field of childhood and adult cancers.

Read More.

CYSTIC FIBROSIS & THE GUT RESEARCH

It has been a busy first half of the year in the Ooi Lab, with members of the research group presenting at a number of international conferences.

- Mckay, I, Ooi, CY. Identifying correlations between dietary intakes and microbiota in cystic fibrosis. TSANZSRS Annual Scientific Meeting, Australia, Apr 1, 2019. Presented by McKay, I (ILP student) supervised by Senior/Principal Investigator Ooi CY.
RESPIRATORY RESEARCH

Students who completed their ILP or honours research within paediatric respiratory in 2018 have been given the opportunity to present at the Annual Scientific Meetings of The Australia and New Zealand Society of Respiratory Science and The Thoracic Society of Australia and New Zealand, held in the Gold Coast in April 2019.

HIGHER DEGREE RESEARCH

PHD PROJECT: POLYCYSTIC OVARY SYNDROME

A PhD project is currently available with the Ovarian Biology Laboratory, School of Women’s & Children’s Health, investigating the development of mechanism-based interventions for polycystic ovary syndrome.

More information is available here and by contacting Dr Kirsty Walters.

COMPLETIONS

Congratulations to the School of Women’s & Children’s Health and Children’s Cancer Institute PhD and Masters students who have completed their higher degree in 2019. Source: Boris.

Obstetrics & Gynecology - PhD

• Dr Natasha Donnolley
  A validation study of the Maternity Care Classification System (MaCCS).
  Supervisors: A/Prof Georgina Chambers; Prof Michael Chapman.

• Dr Erin Nesbitt-Hawes
  The structure, function and treatment of the pelvic floor in women with chronic pelvic pain.
  Supervisors: Prof Jason Abbott, Prof William Ledger

Paediatrics - PhD

• Dr Tejaswi Kandula
  Chemotherapy-induced peripheral neuropathy in children.
  Supervisors: A/Prof Michelle Farrar, Dr Susanna Park, Prof Arun Krishnan

• Dr Yulia Makeyeva
  Supervisors: Prof William Ledger, Dr Steven Leach, Prof David Ryugo.

• Dr Shailender Mehta
  Therapeutic Hypothermia for Neonatal Hypoxic Ischaemic Encephalopathy.
  Supervisors: Prof Kei Lui

Biomedical Engineering - PhD

• Dr Kajal Chaudhry
  The dynamics of anti-tumour responses generated by chimeric antigen receptor-modified immune effector cells.
  Supervisors: Dr Robert Nordon, Dr Alla Dolnikov

Chemistry - PhD

• Dr Mingxia Lu
  Fructose-based Nanoparticles for Ruthenium Drug Delivery.
  Supervisors: Prof Martina Stenzel, A/Prof Caroline Ford

Conjoint A/Prof Karen Zwi (right) at her PhD graduation ceremony, pictured with supervisor Conjoint A/Prof Pamela Palasanthiran.
COMMENCEMENTS
The School of Women’s & Children’s Health and Children’s Cancer Institute has welcomed a number of new higher degree research candidates who have commenced in 2019.

Obstetrics & Gynaecology - PhD
- **Daria Di Filippo**  
  CBGM-Continuous Blood Glucose Monitoring as a screening tool for gestational diabetes.  
  Supervisors: **Prof Alec Welsh**.

Paediatrics - PhD
- **Dr Didu (Sandi) Kariyawasam**  
  Novel strategies for the management of neuromuscular disease: The pathway from diagnosis to treatment.  
  Supervisors: **Dr Michelle Farrar**
- **Suzanne Nevin**  
  Exploration of the challenges, experiences and information preferences of parents who have a child with severe-early-onset epilepsy, to inform the development of targeted multimedia information resources for families and doctors.  
  Supervisors: **Prof Claire Wakefield, Conjoint Prof Annie Bye**.
- **Clarissa Schilstra**  
  Social anxiety among adolescent and young adult cancer survivors.  
  Supervisors: **Dr Toby Trahair, Dr Joanna Fardell**.

Children’s Cancer Institute - PhD
- **Louise Doculara**  
  Biosensors for the detection of minimal residual disease in Leukaemia.  
  Supervisors: **Conjoint Prof Richard Lock**.
- **Chelsea Mayoh**  
  Multi-Omics Integration of Paediatric High-Risk Cancers.  
  Supervisors: **Conjoint A/Prof Mark Cowley**.
- **Yashar Mesbahi**  
  A personalised medicine approach to the treatment of acute myeloid leukaemia in children.  
  Supervisors: **Conjoint Prof Richard Lock**.
- **Filip Michniewicz**  
  Investigating emerging therapeutic strategies in DIPG - understanding immune-response and the potential application in immunotherapies in DIPG.  
  Supervisors: **Dr Orazio Vittorio, Conjoint A/Prof David Ziegler**.
- **Caitlin Ung**  
  This project aims to investigate new therapeutic strategies for DIPG by understanding the role of the blood brain barrier during the pathogenesis and determine whether its integrity can be manipulated to enhance delivery of chemotherapeutic.  
  Supervisors: **Dr Maria Tsoli, Conjoint A/Prof David Ziegler**.
- **Jing Wu**  
  Histone methyltransferases in N-Myc-induced neuroblastoma tumourigenesis and as therapeutic targets.  
  Supervisors: **Conjoint A/Prof Tao Liu**.

Other Faculties / Schools:
- **Laurel Mimmo**  
  Health care quality and safety for children with disabilities and health systems research.  
  Supervisors: Dr Reema Harrison, A/Prof Susan Woolfenden, Conjoint A/Prof Joanne Travaglia.
- **Benjamin Jordan**  
  Democratising Data: 3D Virtual Reality (VR) and the Biomedical Aesthetic.  
  Supervisors: A/Prof John McGhee, A/Prof Katherine Moline, **Conjoint Prof Maria Kavallaris**.
SUCCESSFUL GRANTS

Congratulations to School of Women’s & Children’s Health, Centre for Childhood Cancer Research, and Children’s Cancer Institute researchers who have been successful in receiving competitive grant funding in 2019.

Grants currently under embargo or administered outside of UNSW Sydney, will not be listed. Grant information obtained from Boris.

If your grant is missing from the list, please email Samantha McFedries, Research Projects Officer.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>WCH / CCI INVESTIGATORS</th>
<th>ORGANISATION/SCHHEME</th>
<th>TOTAL $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat. 1</td>
<td>FARRAR, MA, KASPARIAN, NA, CAREY, K</td>
<td>Motor Neurone Disease Research Institute of Australia (MNDRIA) / MND Research Grants - Innovator Grants</td>
<td>$97,507 1 Year</td>
</tr>
<tr>
<td>Cat. 1</td>
<td>LUI, K, CHAMBERS, GM</td>
<td>National Health &amp; Medical Research Council / Rare Cancers, Rare Diseases and Unmet Need (MRFF)</td>
<td>$1,596,631 5 Years</td>
</tr>
<tr>
<td>Cat. 2</td>
<td>FORD, C, WARTON K, FARRELL, R, ARORA V.</td>
<td>Translational Cancer Research Network / Major Pilot Funding Grant</td>
<td>$180,000 1 Year</td>
</tr>
<tr>
<td>Cat. 2</td>
<td>HENRY, A, SHAND, A</td>
<td>National Blood Authority / National Blood Sector Research and Development Program Seed Grant</td>
<td>$46,125 1 Year</td>
</tr>
<tr>
<td>Cat. 2</td>
<td>LINGAM, RP, WOOLFENDEN, S, EASTWOOD, J, ZWI, K, WAKEFIELD, C, CHAMBERS, G,</td>
<td>NSW Health / Paediatric Innovation Fund</td>
<td>$199,926 18 Months</td>
</tr>
<tr>
<td>Cat. 2</td>
<td>LINGAM, RP, WOOLFENDEN, S.</td>
<td>South Western Sydney Local Health District (SWSLHD) / Academic Unit Grant</td>
<td>$1,050,000 5 Years</td>
</tr>
<tr>
<td>Cat. 2</td>
<td>MIMMO, L</td>
<td>Sydney Partnership for Health, Education, Research &amp; Enterprise (SPHERE) / Translational Research Fellowship</td>
<td>$315,000 3 Years</td>
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<tr>
<td>Cat. 2</td>
<td>WAKEFIELD, C</td>
<td>Paediatrics Limited / NSW Health Paediatric Precision Medicine Shared Grant</td>
<td>$895,481 4 Years</td>
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<tr>
<td>Cat. 3</td>
<td>ANTOUN, C, WAKEFIELD, CE, COHN, RJ</td>
<td>Neuroblastoma Australia / Research Grants</td>
<td>$57,559 2 Years</td>
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<tr>
<td>Cat. 3</td>
<td>DOLNIKOV, A, O’BRIEN, T</td>
<td>Anthony Rothe Memorial Trust / Project Grant</td>
<td>$260,000 2 Years</td>
</tr>
<tr>
<td>Cat. 3</td>
<td>DOLNIKOV, A; O’BRIEN, T</td>
<td>Inner Wheel Australia Foundation Trust / Cord Blood Research Grant</td>
<td>$65,000 1 Year</td>
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<tr>
<td>Cat. 3</td>
<td>DOLNIKOV, A; O’BRIEN, T</td>
<td>Tour de Cure / Senior Research Grant</td>
<td>$194,491 1 Year</td>
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<td>Cat. 3</td>
<td>FORD, C</td>
<td>Rivkin Center for Ovarian Cancer Research / Pilot Study Projects</td>
<td>$107,019 1 Year</td>
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<td>Cat. 3</td>
<td>WATERS, S, JAFFE, A, WONG, SL, AWATADE, N, WIDGER, J, FAWCETT, L, BELESSIS, Y</td>
<td>Cystic Fibrosis Australia / David Millar Giles Innovation Grant</td>
<td>$45,000 1 Year</td>
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<tr>
<td>Cat. 3</td>
<td>WATERS, S</td>
<td>Rebecca L. Cooper Medical Research Foundation / Project Grants</td>
<td>$100,000 1 Year</td>
</tr>
</tbody>
</table>
**GRANTS**

**HCF Research Foundation - Health Services Grants**

EOI’s are invited for research projects that specifically address the following topics:

- Innovative health care models that encourage the right care in the right setting with a particular emphasis on providing safe and high quality alternatives to hospital based care which facilitate consumer choice and access;
- Research projects that provide a solution to reduce known health care variation in hospital care as demonstrated in The Australian Atlas of Healthcare Variation Series published by the Australian Commission for Safety and Quality in Health Care.

Applications involving collaborations between investigators from a range of backgrounds, including career researchers, practicing clinicians, policy makers, and the private sector are encouraged. Those proposals that demonstrate a considered approach to translation of the findings into practice will be given priority.

EOIs close 27th June 2019.

[More information.](#)

**Jagdish & Lalitha Gupta Scholarship**

The Jagdish & Lalitha Gupta Scholarship in Paediatric Research is open for applications. We are fortunate to have the generous philanthropic support of Jagdish and Lalitha Gupta who have decided to fund a research project for one year, to the value of $20,000.

The Gupta Scholarship will be awarded to an applicant of excellent research potential, enabling them to undertake a research project in the field of paediatrics within the School of Women’s & Children’s Health, UNSW Medicine.

The purpose of the scholarship is to support an allied health, nursing, medical professional or scientist to advance their career by providing them training and mentorship to build their capacity to undertake original research.

The intention of this scholarship is to support an applicant who has limited research experience therefore current higher degree research candidates (or those who have already completed a research higher degree) are unable to apply. The Guptas are very passionate about research and supporting that initial step into the field.

Applications close on 30th June 2019. Late applications will not be accepted.

[More information.](#)

**Infectious Disease, Immunity and Inflammation (Triple I) Seed Grants**

In 2019, a total of $375,000 of seed funding will be available through this scheme, thanks to Maridulu Budyari Gumal (SPHERE) and UNSW Sydney.

Five seed grants of $75,000 will be available to collaborative networks developed or nurtured through the Triple I initiative. One grant must be led by an early or mid-career researcher (E/MCR) and one grant must be primarily a laboratory-based grant, with laboratory/clinician co-leadership.

Applications will be reviewed by an external grant review panel prior to the award being made. Please see the EOI form for further details. Instructions for completion of the EOI form are also available.

**Key dates:**
- EOI to apply for Seed Grant Funding due midnight on 14th June 2019
- Advice of review of EOI 1st July 2019
- Seed Grant Funding applications close midnight on 1st August 2019

Please contact Rebekah Puls with any questions.

**Australian-American Fulbright Commission - Fulbright Scholarships**

The Australian-American Fulbright Commission offers scholarships to Australian citizens across all career stages. Awardees take part in an academic and cultural exchange, pursuing research or study at a U.S. institution, experiencing life abroad and bringing back their knowledge and experience to share with their communities in Australia.

The Australian-American Fulbright Commission offers scholarship opportunities to Australian citizens across various academic and career stages:

- Postgraduate
- Postdoctoral
- Scholar
- Distinguished Chair

UNSW Internal Deadline: 1st July 2019  
Sponsor Deadline: 15th July 2019

[More information.](#)

**Kids Cancer Alliance (KCA) Early Career Researcher Travel Grants**

KCA invites applications from early- and mid-career researchers for grants of $3,000 for international travel to attend medical or scientific meetings for the purpose of furthering the researcher’s expertise in the study of child cancer.

[More information.](#)
Frontiers Technology 2019 Seed Funding Scheme

This scheme aims to facilitate projects developed by Frontiers Technology Clinical Academic Group members.

Funding requests can range from $15,000 to $50,000 for projects of up to 1 year. They may be systematic literature reviews, pilot studies, development of methods, needs analyses, joint writing projects or other projects that align with Frontiers Technology priorities. Applications that include matching cash contributions from one or more collaborating organisations are encouraged.

Deadline: 2nd July 2019
More information.

EVENTS

LGBTIQ Awareness Training & Ally Training

Training related to our LGBTIQ (Lesbian, Gay, Bisexual, Transgender, Intersex, Queer and Questioning) community has been reconfigured, and we are proud to offer UNSW staff and students the opportunity to partake in both LGBTIQ Awareness Training (delivered by Pride in Diversity) and a refreshed Ally Training (designed and delivered by the Network’s new convenor Andrew Addie).

- **LGBTIQ Awareness Training**
  This 2 hour session is aimed at staff and students looking to increase their basic knowledge around LGBTIQ people and communities. You will be introduced to the LGBTIQ acronym and expand your understanding of sexual orientation, gender identity, gender expression, and sex characteristics. Managers are especially encouraged to attend this session to assist with providing support to LGBTIQ student and colleagues. Upon completion of this session, you may wish further your knowledge by attending Ally Training.

- **Ally Training**
  This 2.5 hour session provides an in-depth discussion of diverse gender, sex and sexuality. It will build upon the knowledge gained from prior training or your own lived experience, exploring the issues facing the LGBTIQ community. The focus is on community building through open group discussions, case studies and problem solving.

Once this training is completed, you will have the option to join the ALLY@UNSW Network. The network provides access to ongoing professional learning, resources and support services available at UNSW; and invitations to participate in events like Mardi Gras, IDAHOBIT and Wear It Purple.

More information.

2019 Women and Heart Disease Forum

The one-day Women and Heart Disease Forum will highlight emerging research and clinical advances from across medical disciplines, to shine a light on the prevention, treatment and management of heart disease among women.

The objectives of the forum are to:

- bring together experts in cardiology, obstetrics & gynaecology, midwifery, emergency medicine, nursing, oncology, general practice, community and public health. You will also hear from women directly impacted by heart disease.
- identify emerging opportunities to impact on women’s heart health trajectories using a life course approach.
- assess the need for a gender and sex perspective in relation to the experience of heart disease in women as well as to research and cardiology professions.

The Keynote Presentation will be delivered by Professor Robyn Norton on “Change of Heart: a move to sex and gender disaggregated cardiovascular research and practice across the life course.”

19th June 2019
Roundhouse, UNSW Sydney
Cost: $150 (registration)
More information.

UNSW Medicine’s Digital Operations and Optimisation (DOO) Day

Do you need help on your website? Want to make website updates but don’t know how? Are you looking to improve your Google search results? We invite you to come to Medicine’s DOO Day. We are holding two information sessions to answer your questions about Medicine’s websites, and an all-day drop-in clinic to help fast-track your web requests.

At the information session, we will answers questions like:

- What is DEx and who is the digital team? How do you contact us?
- What is Medicine’s digital plan?
- What is a DEx request? How do I submit one?
What kind of things can I request?
- What is search engine optimisation (SEO) and search engine marketing (SEM)? Is this important? How do I make my website come up in Google?

For the drop-in clinic, nominate an approximate time of when you’d like to come in, and we’ll do our best to help you on the spot with School and Faculty website updates, including updates and/or removals of:
- Text
- Links
- Images
- Documents
- For bigger projects, we'll help you fill in a request for work

We want to help you fast track your website content changes, make updates on the spot or find out how to get ongoing support for your digital needs.

21st June 2019
Drop in clinic: 9am-5pm
30 minute information sessions at 9am and 1pm.

To make the most efficient use of your time, we suggest each team or area consolidates any requests, feedback, and questions before the drop-in. Content approvers are as follows:
- School of Women’s and Children’s Health / Prince of Wales Clinical School: Samantha McFedries

More information.

10th International Nanomedicine Conference

Brought to you by the Australian Centre for NanoMedicine (ACN) and the ARC Centre of Excellence in Convergent Bio-Nano Science and Technology (CBNS), this conference will share novel research that may lead to prevention, diagnosis and/or treatment of some of the most challenging diseases, in an environment conducive to networking with colleagues from around the world.

Five prominent scholars will give plenary presenations – Professors Joe Wang, Milica Radisic, Chunying Chen, Ranjeny Thomas and Alan Rowan – leading delegates through an exploration of conference themes.

15 Keynote speakers and 20 Invited speakers will head discussions in the conference theme areas of Sensors and Imaging, Drug Delivery, Bioactive Materials, Social Aspects & Regulatory, Bio-Nano Interactions & Nanotoxicology, Industry Session and Microfluidic & Bioengineered Models. The unique Clinical Challenges session brings medical doctors into the conference to discuss opportunities for improving the treatment of patients in the clinic.

24th-26th June 2019
Pier One Sydney Harbour Hotel

More information.

School of Medical Sciences (SoMS) Research Information Night

The SoMS Research Information Night is essentially a ‘one-stop-shop’ for future research projects and will be a great opportunity to meet with researchers (potential supervisors and current students) to find out more about honours & research projects on offer through the School of Medical Sciences (SoMS), Prince of Wales Clinical School (POWCS), Children’s Cancer Institute (CCIA), Garvan Institute of Medical Research, Kirby Institute, Neuroscience Research Australia (NeuRA), Victor Chang Cardiac Research Institute, and other schools in the Faculty of Medicine as well as affiliated research institutes and centres.

5th July 2019 at 5pm.
Ground Floor Atrium, Wallace Wurth Building, UNSW Sydney

More information.

Maridulu Budyari Gumal - SPHERE 2019 International Symposium

In partnership with Sydney Health Partners (SHP) and NSW Regional Health Partners (NSWRHP) in conjunction with the Association of Academic Health Centers International (AAHCI) presents ‘Partnerships for Better Health.’

The future of healthcare is together in Darling Harbour at this international gathering of influential minds. We invite people from every discipline, industry and country to join us as we challenge, innovate and ideas-make. As we move healthcare forward, from where it is, to where we imagine it to be.

29th-30th August 2019
International Convention Centre, Darling Harbour, Sydney

More information.

Inaugural Psychology in Medical Education Symposium

Students and junior doctors are expected to counsel and support patients, and face an arduous road in their training. Whether for entry to an undergraduate or graduate medical program, selection is a well-known and very considerable hurdle. Between four and six
years of education follow prior to the award of a basic medical qualification, with a further period of up to ten years postgraduate training after that. Yet while the psychological challenges are significant, they are under represented in the discourse.

The Psychology in Medical Education Symposium seeks to address this imbalance. Join us at UNSW Medicine where we invite you to help shine a light on the psychological journey of medical trainees.

Symposium Themes:

- Selection of medical students and trainees for psychological attributes
- Teaching and assessment (including simulation) of psychology-based-skills in medical programs
- Medical student and junior doctor well-being and workplace relationships
- Psychology in medical education: aligning theory and language to inform approaches to education and research

13th September 2019
Kirby Institute, Level 6, Wallace Wurth, UNSW Kensington Campus.

More information.

PUBLICATIONS

Early-Career Researcher Best Publication Award Round 2, 2019

The School of Women’s & Children’s Health Best Publication Award Round 2 for 2019 is now open for papers published between April and June 2019.

Please be sure to check your eligibility and submit your best papers. Guidelines are available here.

A reminder, that you need to affiliate all papers to the School of Women’s & Children’s Health, UNSW Sydney (in addition to any other affiliations) to be eligible.

Applications close on 12th July 2019.

Dr Orazio Vittorio is the recipient of the School’s Early Career Research Best Publication Award Round 4, 2018 for his publication “In vivo [64Cu]CuCl2 PET imaging reveals activity of Dextran-Catechin on tumor copper homeostasis” published November 2018 in Theranostics.

Dr Vittorio is senior and corresponding author in this paper published in Theranostics, which is the most cited journal in Nuclear Medicine and Molecular Imaging (Impact factor 8.537). Vittorio conceptualized the work, funded this research with his grants, planned and performed the biological experiments, supervised the immunohistochemistry staining of tumours from 90 neuroblastoma patients, planned the imaging work and wrote the Result and Discussion sections of the manuscript.

Recent research has shown that copper levels are significantly higher in many types of cancer, such as ovarian, prostate and breast cancer, than in normal cells. This makes copper an attractive target when designing new anti-cancer drugs. Dr Vittorio found that copper levels are also higher in neuroblastoma. Moreover, Dr Vittorio showed that a drug that targets copper, called Dextran-Catechin, significantly slows tumour growth in a mouse model of neuroblastoma. To take this further there was the need of a tool to measure copper levels inside neuroblastoma tumours in vivo. So, Dr Vittorio was awarded a grant from ANSTO to develop a method using [64Cu]CuCl2-PET imaging to measure copper in a mouse model of neuroblastoma. With it he could study the effects of therapies like Dextran-Catechin.

This study represents the first application of [64Cu]CuCl2-PET imaging to assess the molecular mechanism of copper-targeting drugs for cancer treatment. These results may advance the potential clinical use of copper-targeting drugs. Importantly, [64Cu]CuCl2-PET imaging (already FDA approved) could be used to treat and monitor neuroblastoma and other types of tumours. Moreover, this minimally invasive diagnostic approach based on [64Cu]CuCl2 PET, could identify patients with higher chances of responding to copper targeting drugs, providing a personalized medicine approach to treatment.

Read More.

Dr Ki Wook Kim is the recipient of the School’s Early Career Research Best Publication Award Round 1, 2019 for his publication “Higher abundance of enterovirus A species in the gut of children with islet autoimmunity” published February 2019 in Scientific Reports.

Dr Kim was first author on this paper published in Scientific Reports. It investigated the gut and blood virome of 45 case children with islet autoimmunity and 48 controls. In total, 182 stool and plasma specimens collected prior to and at the development of islet autoimmunity were examined, representing one of the largest and most comprehensive virome
studies of T1D. Generating >2.6 billion reads, 28 genera of eukaryotic viruses were detected from 62% of children. Despite no significant differences in viral frequency between cases and controls, 129 viruses were differentially abundant in the gut. This included five enterovirus A species significantly more abundant in cases, further supporting the contribution of enteroviroses in T1D.

The significance of this finding is that to date, nearly all enteroviruses associated with T1D belong to the species B group. Our data indicate a previously unrecognised association of enterovirus A abundance and islet autoimmunity and provide a catalogue of viruses to be interrogated further to determine a causal link between virus infection and T1D. Dr Kim designed and performed all experiments, analysed and interpreted the data and wrote the manuscript. His research team’s ultimate goal is to define the complete breadth of diabetogenic viruses such that vaccines can be developed to prevent T1D.

Read More.

**PUBLICATION LIST**

Publications available online from January 2019 and authored by UNSW School of Women’s & Children’s Health academics, conjoints, & students.

Publications are listed under UNSW Medicine Themes to illustrate how the School of Women’s & Children’s Health is contributing in all areas of medical research at UNSW Sydney.

**Cancer**


Infectious Disease, Immunity & Inflammation


Neuroscience, Mental Health, & Addiction


Special Populations and Clinical Settings: Women & Children


