Welcome to the second issue of the School of Women’s & Children’s Health Research Newsletter. This is a triennial publication with issues circulated in April, August, and December.

It has been a busy time for all those involved in the Sydney Partnership for Health, Education, Research & Enterprise (SPHERE) with the recent accreditation of the SPHERE Clinical Academic Groups (CAGs) and recognition as an NHMRC Advanced Health Research and Translation Centre (AHRTC). I know that many of you have been involved in a number of workshops and meetings and hopefully this will all pay off as the Medical Research Future Fund (MRFF) announces funding calls. Please note that the SPHERE 2017 International Symposium is being held on the 22nd-23rd November and I urge anyone interested to attend.

Another note for your diary is UNSW Paediatrics Research Week, which will be held from 13th-17th November 2017. A similar format will be followed from last year with a symposium of presentations from higher degree research students from the Discipline of Paediatrics and Children’s Cancer Institute with the ILP Awards to be held on Wednesday 15th November during Grand Rounds.

A symposium session will follow the awards, which will feature the recipient of the Margaret Dance Honours Award. Please remember, that for those undertaking a higher degree in child health research (including those from CCI), student attendance is compulsory for the Symposium held from Monday-Wednesday. It is also expected that supervisors attend their student’s presentation and remain for the entire session. A draft program for Research Week will be circulated in the coming weeks.

Also, please diarise the 6th Health Science Alliance Symposium which has been coordinated by Professor Bill Ledger on “The Future of the Clinical Academic”. Please register online.

I would like to take this opportunity to introduce the newest members of the School:

Sandra Lowe, Research Program Manager (Paediatric Respiratory). Sandra has held various roles in Clinical Research as a Clinical Research Associate (CRA), Project Manager and line manager in the pharmaceutical industry as well as research roles in public hospital. Her most recent role was Clinical Research Manager of the Sydney Children’s Hospital Clinical Research Centre.

Professor Raghu Lingam, has been appointed Professor of Paediatric Population Health, who will be joining the team early next year. Dr Lingam is currently a Clinical Senior Lecturer in Epidemiology and Child Health at the University of Newcastle and a Consultant Community Paediatrician at the Great North Children’s Hospital.

He was the Academic Convenor of the British Association of Community Child Health and a consultant to the World Health Organisation around Early Child Development. His research is structured into three strands:

- Health services research;
- Mental health and multiple risk taking behaviour; and
- Child growth and development.

We have also had a number of promotions which are detailed on page 6.

A big thank you to Nancy Briggs for agreeing to stay on as statistical support one day a week until Kylie-Ann Mallitt’s return in February 2018.
Finally, a reminder that Operational Excellence is continuing across UNSW. We are seeing huge changes that are impacting on everyone at UNSW. I ask that you be respectful and mindful of those colleagues who may be personally affected by these changes. If you have any concerns or questions, please reach out to Bill, Tracey or myself.

Enjoy this issue of the and please remember to send any news or suggestions for content to Samantha McFedries, Research Manager for inclusion in future editions.

Best wishes,

Professor Adam Jaffe

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NEWS

MEET FIVE YOUNG AUSTRALIAN SCIENTISTS WHO WANT TO CHANGE THE WORLD

8 June 2017 | Patrick Carey | ABC News

From applied mathematics to zoology, young Australian scientists are conducting world-leading research in a variety of fields every day.

In collaboration with UNSW, RN has tracked down five of the most impressive and dynamic minds in the country.

In the Top 5 Under 40 program these bright young things will work with ABC journalists and broadcasters to spread the word about science.

We sat down with them to discuss their goals, their careers and what Australia needs to know about their research.

Dr Ursula Sansom-Daly: Psycho-oncologist

What we still don’t know is why some young people adjust relatively well to serious illnesses like cancer and why some struggle a bit more in the long term.

I want to nail down the factors predict which young people are likely to struggle the most psychologically.

I think when people, especially young people, go through cancer treatment and become “cured” there’s a bit of a misconception on the part of society that they’re fine and dandy.

Although the treatment period for illnesses like cancer is gruelling in terms of getting chemo and feeling terrible, I think a lot of people don’t realise that, in many cases, finishing cancer treatment can be a more challenging time in a psychological sense. Especially when it comes to reintegrating into your old life patterns — work, school, relationships — as well as worrying that the cancer might return.

Read More...
Four UNSW PhD candidates have won funding for PhD scholarships announced by NSW Health Minister Brad Hazzard.

An analysis of mucinous ovarian cancers is among the successful studies awarded in the inaugural round of the NSW Health PhD Scholarships Program.

Four UNSW PhD candidates won funding for the scholarships announced by NSW Health Minister Brad Hazzard, matched by the host universities or partner organisations.

UNSW PhD candidate Nicki Meagher, with South East Sydney Local Health District, will analyse large datasets of histological and molecular information to better characterise mucinous ovarian cancers.

Mucinous cancers are rare subtypes of cancer affecting different organs, usually the colon, appendix and ovary. Incidence estimates of mucinous ovarian cancers vary, but they likely comprise around 4% of all ovarian cancers.

Making a diagnosis of mucinous ovarian cancer is especially challenging, particularly when the cancer has spread. There is often uncertainty about whether it started in the ovary or elsewhere in the gastrointestinal tract.

Ms Meagher says this makes treatment recommendations difficult, and women with later stage disease respond poorly to standard ovarian cancer chemotherapy.

Developing a better understanding of the genetic make-up of these cancers will not only help improve diagnosis, but also help uncover treatment targets, and design clinical trials that guide treatment options for these patients.

Ms Meagher will work with the Ovarian Tumour Tissue Analysis (OTTA) consortium, an international collaboration established by her primary supervisor Professor Susan Ramus.

“It gives me the access to very large datasets generated from their pooled biobanks and collaborative studies,” she says.

“It also gives me the opportunity to work with international experts across disciplines of molecular biology, pathology and epidemiology. Susan has brought extensive international experience to UNSW and I am very lucky to be supervised by her.”

The NSW Health PhD scholarship program was open to PhD candidates who work within, or closely with, NSW local health districts (LHDs), Ambulance Service of NSW and specialty health networks.

The other UNSW scholarship winners were: Kelly Thompson (with George Institute for Global Health), Jeanette Walsh (NSW Ministry of Health) and Shiying Zheng (South East Sydney Local Health District).

Australia is lagging behind the US and Europe in providing consistent services to help childhood cancer survivors successfully reintegrate into their schools, UNSW cancer specialists and psychologists say.

“This is an issue that society is blind to, and it’s not just cancer but other chronic illnesses of childhood where the kids are spending significant time in hospital,” says Professor Glenn Marshall, Head of Translational Research at Children’s Cancer Institute UNSW, and a senior oncologist in the Kids Cancer Centre at the Sydney Children’s Hospital.

“When they get better, these kids want to go back to the same classes with their mates. But because of missed school due to the illness we often see them struggle with work and fall behind, which can cause them to act out and develop low self-esteem which follows them for the rest of their scholastic career.”

Fixing the problem will require government funding and better systems of communication between healthcare systems and education departments, Professor Marshall says.

“In an ideal world, we would like to see each child have an individualised learning plan that accommodates them for the duration of their time away from the classroom.”

Professor Marshall is the senior author of a report recently published in the Journal of Paediatrics and
Child Health, which compares Australia’s lagging system to the best practices used in Europe and the US.

It suggests teachers in Australia are uncertain about their role in supporting students with chronic illnesses; schools inconsistently provide learning support for home and hospital study; and current communication frameworks between hospitals, parents and schools are inadequate.

The paper makes four recommendations: improve the implementation policies around current legislation; establish better hospital-to-school communication structures; improve teacher knowledge of the educational implications of childhood cancers; and provide nationwide homebound learning support.

“We hope this paper will be used as a tool to negotiate a better position for these kids within the education system,” Professor Marshall says.

The need for improvement is clear

Each year, 500-600 school-aged children are diagnosed with cancer in Australia. While cure rates are now higher than 80%, the educational impacts of childhood cancer are still significant and diverse.

They include missing time from school for treatment (up to two years in some cases) and also side-effects such as poor concentration and attention, fatigue, social isolation, and mobility difficulties.

When children return to school, they require targeted support services to prevent longer-term consequences, such as failing grades, deteriorating mental health, and/or dropping out of school.

These services are particularly important for facilitating communication between the hospital, home and school, and help keep teachers informed about the child’s condition, their progress, and any special educational needs they might have.

But UNSW experts say the communication needs to begin earlier, with statutory guidelines at the federal level.

“At the moment, there’s no clear understanding about whose responsibility this is: the healthcare system or the education system,” says Barb Donnan, an educational psychologist at UNSW Medicine and previously with Ronald McDonald House Charities.

“Once a child is diagnosed, the school steps back and they leave the student and family alone because they are dealing with an illness. It’s almost like they’re forgotten sometimes.”

TRANSPLANT ORGAN REJECTION: TEENAGERS MOST AT RISK DUE TO PLAYING FAST AND LOOSE

24 June 2017 | Rose Brennan | The Daily Telegraph

TEEN transplant recipients have been warned failures to stick to rules mean they are 11 times more likely to suffer organ rejection than younger children and at least double that of adults.

The shock findings came as a new Australian-first centre has opened at Sydney Children’s Hospital in Randwick specifically for teens and adolescents to combat the organ rejection rates and ensure their care is tailored to their age and unique social circumstances.

The hospital’s head of nephrology Sean Kennedy found transplant recipients aged 16-24 have the highest risk of losing their kidneys from rejection caused by noncompliance, such as with diet or medication. The risk peaked in recipients aged 19-21.

Dr Kennedy said the age-related findings would be similar for other organ recipients when they don’t stick to medication regimes.

“We can make a difference because transplants fail for a lot of different reasons that can be hard to manage but non-adherence is avoidable," he said.

“It’s not the teenagers fault — their behaviour in some ways is understandable. It’s really up to us as a healthcare system to adjust to them and provide the best care that is patient centred for them.”

The research, published in the journal Nephrology, found that of the 3048 kidney recipients examined, 757 transplants failed, with 15 per cent of these cases due to non-adherence.

Read More...

SUPERSTARS OF STEM TO INSPIRE GIRLS INTO SCIENCE AND TECHNOLOGY CAREERS

03 July 2017 | Deborah Smith | UNSW Newsroom

UNSW’s Caroline Ford is among the first 30 researchers to be named Superstars of STEM, a national program aimed at smashing stereotypes and forging a new generation of role models for young women.

UNSW cancer researcher Dr Caroline Ford is among the first 30 female scientists and technologists to be named Superstars of STEM, in a national program aimed at smashing stereotypes and forging a new generation of role models for young women and girls.
Minister for Industry, Innovation and Science, Senator Arthur Sinodinos, announced the successful candidates at an event at Mrs Macquarie’s Chair launched by UNSW Dean of Science Professor Emma Johnston.

More than 300 women vied for a spot in the inaugural Superstar program, run by Science and Technology Australia. Winners will receive training and development to use social media, TV, radio and public speaking opportunities to carve out a more diverse face for science, technology, engineering and mathematics (STEM).

Dr Caroline Ford

“Superstars of STEM is the first program of its kind and will prove vital for the future of STEM in Australia,” said Professor Johnston, who is President-Elect of Science and Technology Australia.

“Often, when you ask someone to picture or draw a scientist, they immediately think of an old man with white hair and a lab coat. We want Australian girls to realise there are some amazing, capable and impressive women working as scientists and technologists too, and they work in and out of the lab in places you might not expect.

“Science and technology have made our lives longer, happier, healthier and more connected. With more girls considering STEM careers, we have the potential to achieve so much more,” she said.

Senator Sinodinos said that only one in four IT graduates and fewer than one in 10 engineering graduates are women. Women also occupy fewer than 20 per cent of senior research positions in Australian universities and research institutes.

“Science and Technology Australia’s Superstars of STEM program – a world first – will support and train these outstanding women to become prominent role models, promoting gender equity and inspiring more young women and girls to choose to study and work in STEM,” he said.

“I commend the significant commitment of these outstanding women for playing this important leadership role. Australia needs greater gender balance in the overall STEM workforce, where women occupy less than half of all positions.”

The successful applicants work in areas including archaeology, robotics, medicine, education, psychology, neuroscience, agriculture, mathematics and engineering. They come from almost every state and territory and work in public, academic and private sectors.

Dr Ford leads the Metastasis Research Group at the Lowy Cancer Research Centre at UNSW, whose aim is to understand how cancers metastasise or spread and identify targets for novel therapies.

She has extensive experience researching the molecular biology of breast and ovarian cancer and she also developed a massive open online course, or MOOC, on the impact of the genetic revolution on wider society, which has attracted more than 20,000 students from 158 countries in the past two years.

Other Superstars of STEM announced today include Director of the Australian Museum Research Institute Dr Rebecca Johnson, Bureau of Meteorology Chief Scientist Dr Sue Barrell and evolutionary scientist Dr Celine Frere of the University of the Sunshine Coast, who gained her PhD from UNSW.

The initiative was supported by a grant of $178,500 over two years from the Australian Government’s $8 million Women in STEM and Entrepreneurship competitive grants program.

See the full list of winners online.

RESEARCHERS URGE CELIAC DISEASE SCREENINGS FOR CHILDREN WITH TYPE 1 DIABETES

05 July 2017 | Jack Woodfield | Diabetes.co.uk

Screenings for celiac disease in children and young people who are newly diagnosed with type 1 diabetes should always be carried out, researchers have recommended.

Celiac disease, an autoimmune condition, occurs when a person’s immune system reacts negatively to gluten and causes damage to the gut’s lining. Gluten is a protein found in foods such as wheat, rye and barley.

A link between celiac disease and type 1 diabetes has previously been identified, but now a large
Australian study has discovered a high prevalence of celiac disease in the early stages of diabetes in young people.

The research team, led by Dr Maria Craig, a professor of pediatrics at the University of Sydney and The Children's Hospital at Westmead, used data from around the world to collect their findings.

The study has been published online in Diabetes Care.

BRITTANY MCGILL INTERVIEWED ABOUT ‘IN THE RAINBOW’

03 August 2017 | Gabrielle Dunlevy | UNSW Newsroom

A storybook that empowers children to cope with the loss of a parent to brain cancer has been developed by Victorian mum Tracey Newnham with the support of UNSW clinical psychologist Brittany McGill.

The interview with Brittany can be viewed online.

PLUS ALLIANCE PRIZE

Congratulations to Dr Keith (Chee Yee) Ooi and Dr Michael Coffey who were shortlisted for the inaugural PLuS Alliance Prize.

Ooi and Coffey were nominated in the category of Education Innovation for PlayMed developed by the pair in conjunction with Lionsheart Studios.

PlayMed is an online, highly immersive role-playing game designed to educate medical students through experience-based learning in a virtual hospital environment.

Unfortunately, they didn’t take out the top prize of US$25,000. However, we are immensely proud of their achievements.

The PLuS Alliance was formed in 2016, bringing together King's College London, UNSW Sydney and Arizona State University. The aim is to create, enable and deploy innovative research and education linkages to contribute to a sustainable future by collaborating in the areas of sustainability, global health, social justice, technology and innovation.

The inaugural PLuS Alliance Prize awards USD $50,000 annually to highlight innovation in research and innovation in education that:

- Addresses a globally-significant issue
- Makes a direct and positive impact, and helps, or has the potential to help communities globally.

QUEEN’S BIRTHDAY HONOURS

Congratulations to two of our conjoint staff who were named in the Queen’s Birthday Honours in June:

- Conjoint A/Prof Annie Bye who was awarded Member in the General Division of the Order of Australia (AM) for significant service to medicine in the field of paediatric neurology as a clinician, academic and mentor; and
- Dr Caroline Homer, Conjoint Senior Lecturer Officer in the General Division of the Order of Australia (AO) for distinguished service to medicine in the field of midwifery as a clinician, researcher, author and educator, through the development of worldwide education standards, and to professional organisations.

PROMOTIONS

Congratulations to staff and conjoints who have received promotions so far in 2017.

Professor
- Dr Claire Wakefield

Senior Lecturer
- Dr Amanda Henry

Conjoint Professor
- Dr Edwin Kirk

Conjoint Associate Professor
- Dr Emmanuel Karantanis

Conjoint Senior Lecturer
- Dr Michael Cardamone
- Dr Jennifer Cohen
- Dr Marjan Khajehei
- Dr Timothy Schindler

Conjoint Lecturer
- Dr John Frew
NEW STAFF

A number of new staff have recently joined the School of Women’s & Children’s Health and we would like to take this opportunity to welcome them and to encourage them to become involved with all School activities.

- Sandra Lowe, Research Program Manager, Paediatric Respiratory
- Lauren Carlson, Research Officer, Behavioural Sciences Unit
- Jessica Watts, Project Officer, SPHERE Chronic Illness in Children CAG
- Pirathat (Pete) Techakesari, Research Assistant, Behavioural Sciences Unit

For those needing a NSW Health Stafflink ID and Workforce Clearance, please contact Samantha McFedries and she will help you navigate the process. The Stafflink ID will enable you to log-in to hospital computers, and also a hospital ID card. Sydney Children’s Hospital ID cards will give you access to Level 8 of the Bright Alliance.

UNSW OPEN ACCESS POLICY

Effective 1st June 2017, UNSW has adopted an Open Access policy for all scholarly research outputs which applies to all staff (including conjoint and adjunct staff) and students undertaking research at UNSW. This includes scholarly research outputs co-authored by research students and staff.

Scholarly outputs must meet the definition of research, for this policy to apply.

The policy requires all research outputs i.e. papers are deposited in UNSWorks (the institutional repository) within twelve months of publication, for the purpose of providing open access to their research.

Publications are deposited via the UNSW Research Output System (ROS). ROS will tell you the version you are able to upload, subject to the journal’s copyright.

Only scholarly outputs completed after the effective date of 1st June 2017, are subject to the UNSW Open Access Policy.

For further information, please refer to the following documents:

- Open Access Policy
- Open Access and UNSWorks Guidelines

This Open Access Policy also ensures researchers are compliant with the conditions of ARC and NHMRC funding agreements.

GRANTS

SUCCESSFUL GRANTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>Dr Caroline Ford</td>
<td>Ovarian Cancer Research Foundation</td>
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<tr>
<td>Dr Kristina Warton</td>
<td>Ovarian Cancer Research Foundation</td>
</tr>
<tr>
<td>Nicki Meagher</td>
<td>NSW Health PhD Scholarship</td>
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Three of our researchers have been awarded prestigious fellowships which are currently under embargo, awaiting announcement from the funding organisation. We hope to be able to share these results with the wider research community, soon.

The grants listed above were announced between May and August 2017. If your grant has not been listed please contact Samantha McFedries.

SCHF PhD SCHOLARSHIP 2018

Currently, there is no update when the Sydney Children’s Hospital Foundation PhD Scholarship 2018 will open for applications.

Once more information is available, details will be circulated via email, shared on the School of Women’s & Children’s Health website and Sydney Children’s Hospitals Network intranet.

THE CONVERSATION

Explainer: what is nanomedicine and how can it improve childhood cancer treatment?

A recent US study of people treated for cancer as children from the 1970s to 1999 showed that although survival rates have improved over the years, the quality of life for survivors is low. It also showed this was worse for those who were treated in the 1990s.

About 70% of childhood cancer survivors experience side effects from their treatment, including secondary cancers. And as survival rates improve, the worldwide population of childhood cancer survivors is growing.

Side effects cause stress for survivors and families and increase demand on health systems. But an emerging
area of medicine, nanomedicine, offers hope for better children’s cancer treatment that will have fewer side effects and improve quality of life for survivors.

Read More...

- **Prof Maria Kavallaris**, Head of the Tumour Biology & Targeting Program, Children’s Cancer Institute and Director of the Australian Centre for NanoMedicine, UNSW Sydney; **Dr Joshua McCarrol**, Project Leader, Children’s Cancer Institute and Senior Lecturer, UNSW Sydney; and **Prof Thomas P Davis**, ARC Laureate Fellow, Monash University.

Women now have clearer statistics on whether IVF is likely to work

Australian women considering IVF will now, for the first time, have a more meaningful idea of their chances of having a baby, whether it’s their first or subsequent round of IVF.

Overall, for women starting IVF, 33% have a baby as a result of their first cycle, increasing to 54-77% by the eighth cycle.

Our research, published today, reports the probability of IVF success from a patient’s perspective after repeated cycles, rather than how it is usually reported, for each cycle.

This will help women of all ages to make informed decisions, with their fertility doctor, about whether to start IVF, or if they have already started, whether to proceed to their next cycle.

Unlike previously reported statistics, our data better reflects that IVF can include both fresh and frozen embryos, and that many women undergo multiple IVF cycles over a course of treatment.

These questions strike at the heart of our relationship between sickness and health and our reluctance to confront illness as part of our everyday lives.

Read More...

- **A/Prof Georgina Chambers**, Director of the National Perinatal Epidemiology and Statistics Unit (NPESU).

RESEARCH GROUP UPDATES

**PAEDIATRIC PAIN RESEARCH UNIT**

Dr Tiina Jaaniste

Sara Sarraf commenced work in June as a Hospital Scientist with the Pain & Palliative Care Research Team (Department of Pain & Palliative Care, SCH), working with Dr Tiina Jaaniste and A/Prof David Champion. Sara has a background in neuroscience research.

Genevieve Pfeiffer, an ILP student in 2017 working with Dr Jordan Wood, Dr Tiina Jaaniste and Conjoint A/Prof David Champion in the Pain Research Unit, Sydney Children’s Hospital, recently presented the findings of her ILP research in a workshop presentation in Kuala Lumpur at the International Symposium on Paediatric Pain. Her presentation was titled “Psychosocial Predictors of Pain Following Short-Stay Surgery.”

Dr Tiina Jaaniste also joined Dr Melanie Noel (University of Calgary) and Dr Laura Simons (Stanford University) to present a workshop on “Unravelling the
Roles of Learning and Cognition in Pediatric Pain,” during the symposium in Kuala Lumpur.

Genevieve Pfeiffer

A/Prof David Champion joined Dr Natoshia Cunningham (Cincinnati Children's Hospital Medical Center) and Soumitri Sil (Emory University) to present their workshop titled “Practical office/bedside somatosensory testing for insight into localized or generalized central sensitization in chronic pediatric pain disorders.”

THE PERITONECTOMY UNIT

Dr Rhonda Farrell

Dr Rhonda Farrell, Conjoint Senior Lecturer and Gynaecological Oncologist at the Royal Hospital for Women is currently using her long service leave to work with Professor David Morris at Peritonectomy Unit, St George Hospital. Dr Farrell’s attachment is a great example of cross-fertilisation of knowledge, skills and research in the area of a complex surgical oncology field.

Her work involves a close relationship with the peritonectomy surgical team to learn the advanced surgical techniques of peritonectomy and techniques used to give heated intraperitoneal chemotherapy (HIPEC). She is also working in the laboratory managed by Professor Morris investigating drug therapies for ovarian and other types of cancers that spread to the peritoneum of the pelvic and abdominal cavity (including cancers of the appendix, colon, and mesothelioma).

Dr Farrell has also commenced a PhD at UNSW, looking at the current and future role of Peritonectomy and Heated Intraperitoneal Chemotherapy for women with advanced ovarian cancer in Australia. This is a treatment that is widely used in Europe and the USA, and some Asian countries, and evidence is accumulating showing significantly improved outcomes for women with a diagnosis of primary or recurrent ovarian cancer with this treatment.

“This has been very interesting as it has allowed me to expand my radical surgical skills and management of acute peri-operative surgical problems, whilst using existing knowledge I have gained in my previous experience in gynaecological cancer.”

Prior to this, Dr Farrell completed a Masters of Surgery (Surgical Oncology) and worked closely with national cancer groups such as Cancer Australia, Cancer Institute NSW, and Cancer Council on various projects relating to gynaecological cancer.

She is now operating on, and caring for males with cancer.

“A new experience for a Gynaecological Oncologist!”

Dr Farrell is hoping to improve outcomes for women with ovarian cancer particularly by fostering collaboration between general surgeons with experience in treating peritoneal malignancies, and gynaecological oncologists.

“Professor Morris has been very welcoming and encouraging of this project. As he has the greatest experience of any surgeon in Australia in this area, he has been a wonderful mentor and teacher.”

The project also involves a number of ILP students from UNSW who get great experience carrying out scientific work in the laboratory, whilst also gaining experience in attending ward rounds and surgical cases of complex surgical patients.

BEHAVIOURAL SCIENCES UNIT

Amazing Grace Goes to School

Dr Joanna Fardell, Deputy Program Leader, Behavioural Sciences Unit, Kids Cancer Centre at Sydney Children’s Hospital, Randwick, and Postdoctoral Research Fellow for The Kids’ Cancer Project, is developing a comprehensive national online support program called Ready, Steady, School for children living with cancer.

Ready, Steady, School was initiated through findings that children with cancer who had supportive teachers and a supportive school environment were happier and more motivated than kids who weren’t given the same support.

“We spoke to parents and a range of health professionals,” Dr Fardell said. “And discovered we could really help Australian children with cancer, along with their families, by ensuring their school was engaged and informed.”
The program has been created on the solid foundation of extensive research. The output will be a website that enables parents, students and education professionals to share information and resources.

Read More...

Establishing Australian school re-entry service guidelines for children diagnosed with cancer
Alistair Lum

The Behavioural Sciences Unit recently examined Australia’s school re-entry guidelines for students with cancer in comparison with those published internationally, and found that Australian guidelines were not meeting the international standards.

Four recommendations were made to improve school re-entry services in Australia to ensure that Australian students with cancer have access to support that can help them achieve their best at school and into adulthood.

The four recommendations were

1. To develop implementation policies for current Australian legislation
2. To establish better hospital-to-school communication structures
3. To improve teacher knowledge of the educational implications of childhood cancer and its treatment
4. To provide nationwide homebound learning support.

The findings were published in the Journal of Paediatrics and Child Health and received subsequent media attention following a press release.

A very positive response was received from parents and researchers nationally and internationally, and it is hoped this support will be able to be harnessed to advocate for policy level changes.

By My Side

Congratulations to Dr Leigh Donovan and the Behavioural Sciences Unit who received two prizes at the International Creative Summit Awards for ‘By My Side,’ an audiovisual resource for bereaved families.

‘By My Side’ was awarded Gold in the non profit marketing category and Silver in the animation category.

‘By My Side’ is a resource produced in partnership with RedKite. It features stories from bereaved parents who have lost a child to cancer. It discusses their family’s journey through illness to bereavement.

The video can be viewed here and free copies of the full written resource can be ordered from RedKite via email or phoning 1800 733 548.

Further congratulations goes to Dr Donovan who was awarded her PhD from UNSW. Leigh was supervised by Prof Claire Wakefield, Vera Russell, and Conjoint Professor Richard Cohn. Leigh will continue to work closely with the Behavioural Sciences Unit in her postdoctoral work on ‘By My Side.’

Conferences
Dr Janine Vetsch

The Behavioural Sciences Unit (BSU) research has been well-represented at scientific conferences over the past few months.

Three BSU team members presented at the Australian and New Zealand Children’s Haematology and Oncology Group’s (ANZCHOG) Annual Scientific Meeting (ASM) in Adelaide on 13-15 June, 2017.

At the same time, Christina Signorelli, presented a poster at MASCC/ISOO Annual Meeting on Supportive Care in Cancer, held in Washington DC, United States, on survivors and parents confidence in GPs’ ability to deliver survivorship care, and GPs’ confidence in doing so.

As a result, she was awarded the MASCC/ISOO Young Investigator Award for being 1 of the top 10 abstracts submitted to the conference. Alistair Lum won best student oral poster at Australasian Society of Behavioural Health and Medicine (ASBHM) Conference in Gold Coast on 13-15 July.

COMMUNITY CHILD HEALTH RESEARCH
A/Prof Susan Woolfenden

It has been a busy time in population health for the Department of Community Child Health in the last few months.

The department has had a total of 17 publications since January 2017 in the areas of child health equity, refugee health, out of home care, health services evaluation, prevention of childhood injury, early childhood nutrition and development, international child health.

There have also been a number of significant grant

Conjoint A/Prof Karen Zwi is the principal investigator of a grant from NSW Health (2016-2018) titled ‘Enhanced refugee health program at SCHN.’ This study was awarded $340,000 (Zwi K, Isaacs, Maycock A, Gunasekera H, Brydon M.)

The department was also awarded the Rue Wright Memorial Award at the RACP Congress in Melbourne for ‘Research translation in urban aboriginal health: the search and heals model’ (Gunasekera H, Purcell A, Woolfenden S, Craig J.)

The Sydney Children’s Hospital Foundation was successful in receiving a grant from the Randwick Club Grants Committee ($10,000 from South Sydney Juniors & $2,000 from Maroubra Seals) for Ngala Nanga Mai pARENt Group Program, a departmental initiative. Michelle Jersky is now employed as the Arts in Health Coordinator for the program.

The Department has welcomed Natasha Larter as an Aboriginal Population Health Trainee employed with Sydney Children’s Hospital Network and located in Randwick. Natasha is mid-way through her Masters of Public Health studies at UNSW and employed to undertake project work while addressing learning competencies set by the NSW Ministry of Health. She engages with community and stakeholders to evaluate, review and implement programs to promote and improve health in the South Eastern Sydney local health district.

A/Prof Susan Woolfenden received a Career Development Grant from the Cerebral Palsy Alliance which funds her Senior Research Fellow position for one day per week. Her research is investigating ‘Opportunities for prevention and early detection of Cerebral Palsy in Australia and globally through the examination of sociodemographic profiles.

Dr Paul Hotton has commenced as a staff specialist and Jennifer Stephenson is the new Aboriginal social worker. Karen Edwards has also joined the team as project officer working on the SPHERE /SCHF funded developmental surveillance project.

The department continues to provide medical student supervision and Therese Kemp from TAFE Western Sydney Institute OTEN (Open Training and Education Network) is completing a Diploma of Community Services at the Ngala Nanga Mai Parent Group.

Experts in their fields, members of the department are often speakers at local and international conferences. A/Prof Susan Woolfenden recently spoke at the closing plenary of the RACP Congress examining the role of doctors tackling poverty.

Conjoint A/Prof Karen Zwi will soon travel to Budapest, as an invited speaker at the 2017 Annual Meeting of the International Society of Social Pediatrics & Child Health (ISSOP). She will speak on the health needs of refugee and asylum seeking children in Australia.

Earlier this month, Michelle Jersky was invited to speak on ‘Creating Connection with Arts in Health’ and host a workshop on ‘Connecting Knowledge: An Arts in Health Approach’ at the ‘Health Education and Training (HETI) and Training & Support Unit (TSU) for Aboriginal Mothers, Babies, and Children Creating Connections’ workshop in Sydney.

The Sydney Children’s Hospital Foundation was successful in receiving a grant from the Randwick Club Grants Committee ($10,000 from South Sydney Juniors & $2,000 from Maroubra Seals) for Ngala Nanga Mai pARENt Group Program, a departmental initiative. Michelle Jersky is now employed as the Arts in Health Coordinator for the program.

The Department has welcomed Natasha Larter as an Aboriginal Population Health Trainee employed with Sydney Children’s Hospital Network and located in Randwick. Natasha is mid-way through her Masters of Public Health studies at UNSW and employed to undertake project work while addressing learning competencies set by the NSW Ministry of Health. She engages with community and stakeholders to evaluate, review and implement programs to promote and improve health in the South Eastern Sydney local health district.

A/Prof Susan Woolfenden received a Career Development Grant from the Cerebral Palsy Alliance which funds her Senior Research Fellow position for one day per week. Her research is investigating ‘Opportunities for prevention and early detection of Cerebral Palsy in Australia and globally through the examination of sociodemographic profiles.

Dr Paul Hotton has commenced as a staff specialist and Jennifer Stephenson is the new Aboriginal social worker. Karen Edwards has also joined the team as project officer working on the SPHERE /SCHF funded developmental surveillance project.

The department continues to provide medical student supervision and Therese Kemp from TAFE Western Sydney Institute OTEN (Open Training and Education Network) is completing a Diploma of Community Services at the Ngala Nanga Mai Parent Group.

Experts in their fields, members of the department are often speakers at local and international conferences. A/Prof Susan Woolfenden recently spoke at the closing plenary of the RACP Congress examining the role of doctors tackling poverty.

Conjoint A/Prof Karen Zwi will soon travel to Budapest, as an invited speaker at the 2017 Annual Meeting of the International Society of Social Pediatrics & Child Health (ISSOP). She will speak on the health needs of refugee and asylum seeking children in Australia.

Earlier this month, Michelle Jersky was invited to speak on ‘Creating Connection with Arts in Health’ and host a workshop on ‘Connecting Knowledge: An Arts in Health Approach’ at the ‘Health Education and Training (HETI) and Training & Support Unit (TSU) for Aboriginal Mothers, Babies, and Children Creating Connections’ workshop in Sydney.

THE GRACE GROUP
A/Prof Jason Abbott

The Gynaecological Research and Clinical Evaluation (GRACE) Group is based at the Royal Hospital for Women and includes senior academics; PhD, Honours and ILP students; as well as junior medical staff.

The GRACE Group is very active with both clinical and research outputs. To date the groups successes include supervision of 18 ILP / Honours students and 19 published papers, with more in the pipeline.

Earlier this year, Lucy Aitchison, ILP student was awarded the prize for outstanding research presentation from a field of 91 presentations at the Australasian Gynaecological Endoscopy (AGES) and Surgery Society meeting.

At the same meeting, Amy Arnold received the award for best presentation, Gemma Blain - best video presentation (she won the top award 2016) and Sarah Maheux-Lacroix won best new presenter.

Lucy will represent both the GRACE group and AGES later this year at the American Meeting in Washington DC which attracts in excess of 2500 delegates. A/Prof Jason Abbott has also been invited to present at the plenary session on Endometriosis - Medical versus Surgical Treatments.

Dr Rebecca Deans was recently awarded her PhD for her outstanding work on Asherman syndrome (adhesions in the uterus that lead to infertility). Congratulations to Bec for her diligence in managing to complete her PhD, have two more children through the course of her thesis (to add to the two she already had), complete her subspecialty training and build a house.
Superwoman indeed.

**Dr Erin Nesbitt-Hawes** is competing for the cape though, with two children of her own and at the pointy end of her PhD. In addition to this, she already has several publications from her work on 4D ultrasound examination of the pelvic floor for women with and without pelvic pain.

**Dr Aaron Budden** is working hard on his thesis looking at stress response in surgery and is aided and abetted by Honours student **Sophia Song**.

Brand New Professor *roars from the crowd* **Clare Wakefield** is making a guest appearance with the team to help with our anxiety levels (well to give advice for Aaron’s thesis in her area of expertise) and is an honorary GRACE member.

The team had joined up with the Oocyte Biology Group led by **Associate Professor Rob Gilchrist** to undertake a series of translational studies involving markers for endometriosis, fertility and fertility preservation. **Dr Angelique Riepsman**, Masters student **Aiat Shamsa** and the big boss (Prof Ledger) are also working in this exciting area.

**Dr Rachel Rodgers** is deep in her PhD examining the effect of AMH (a female reproductive hormone) on ovarian function and oocyte preservation with chemotherapy and is working with **Dr Kirsty Walters** and **Dr Michael Bortoldo**. Together they are studying both mice ovaries, and also xenografted human ovary into mice.

The clinical team are currently running multiple randomised trials, with the vaginal laser study reaching the **media**. A/Prof **Jason Abbott** also featured on **Channel Ten’s The Project** discussing endometriosis.

The team have five publications this year another 11 book chapters and papers that are in press without a DOI or have been submitted for peer-review. An impressive workload from the team, with more good work to be shared as it arises.

**SCHN HUMAN RESEARCH ETHICS UPDATE**

Please find below a brief summary of important news from the SCHN Research Ethics Office. For more information please refer to the SCHN Research Ethics website, or contact the office directly by email or phone - (02) 9845 1253.

Two information sessions have been organised to discuss these changes in detail. The Ethics Office realise that there are a number of changes taking place concurrently and understand that it may cause confusion and uncertainty for the research community.

If you cannot attend the information sessions, please do not hesitate to contact the SCHN Ethics Office directly to discuss the changes and what they mean for you and your research.

Individual appointments are also available to assist with your applications. As always, thank you for your patience, understanding and continual support for the SCHN HREC.

**New Submission Process for NEAF / Greater than Low Risk Applications**

The SCHN HREC has modified the submission process for NEAF / Greater than Low Risk applications following receipt of feedback from researchers. Please refer to the website for more information and a detailed updated submission guideline.

**HREA Launches in Online Forms**

On 31st August 2017*, the NHMRC’s Human Research Ethics Application (HREA) will replace the National Ethics Application Form (NEAF) in Online Forms.

From that date, all NEW ethics applications to NSW HREC’s (regardless of study risk level) should be generated as an HREA via Online Forms. Relatedly, all NSW SSA applications should be submitted on a “full” SSA form regardless of study risk level.

This change applies to all National Mutual Acceptance (NMA) jurisdictions, so that all multi-jurisdictional projects regardless of study risk level may be submitted on a HREA under NMA. NEAF, NSW LNR and NSW LNR SSA applications that are already in progress as of 31 August will not be affected, and can still be completed and submitted.

*The 31st August launch date is dependent on NHMRC issuing a final notification of the HREA licence to Infonetica, the provider of Online Forms.

For more information please refer to the NSW Health website.
**Western Australia Joins NMA**

As of 31st August 2017, Western Australia will be joining the National Mutual Acceptance (NMA) scheme of single ethical review for health and medical research conducted in more than one participating jurisdiction’s public health organisations (PHOs). Currently Australian Capital Territory, New South Wales, Queensland, South Australia, Victoria and Western Australia are participating in National Mutual Acceptance (NMA).

The SCHN Research Ethics Office has organised the following information sessions to discuss these changes in detail. Please RSVP via email.

- **SCH** – Tutorial Rooms A & B, Level 8, Bright Alliance Building
  Tues 5th Sept | 12noon-1pm
- **CHW** – Doreen Dew Room, Education Centre
  Wed 6th Sept | 9:30am-10:30am

If you require any further information, please don’t hesitate to contact the SCHN Research Ethics Office via email or phone - (02) 9845 1253.

**MEDICAL DEVICE COMMERCIALISATION TRAINING PROGRAM (MDCTP)**

Dr Antonio Penna, Executive Director, Office for Health and Medical Research (OHMR) announced the newly expanded Medical Device Commercialisation Training Program (MDCTP).

This is a free program aiming to develop the commercialisation skills of innovators of novel medical devices, to keep research talent in NSW.

The MDCTP is delivered through three streams:

- **Ignition CORE** is a full-day training course for 12 week that guides clinicians and researchers through the complexities of translating their technology from benchtop to market. The next intake will be in November 2017 for the program to start 1 February 2018.

- **Ignition Health** is a half-day training course for 12 weeks in which candidates solve real world problems sourced directly from the State Health system. The intake for this year has been finalised and will commence on 2 August. The next intake will be held in the second quarter of 2018.

- **Ignition IP** a one-day workshop that focuses on intellectual property management strategies for medical devices. The next workshop will be held on 11 September and applications are currently open.

The quality of the training has been recognised by UNSW and University of Wollongong who have awarded the MDCTP 12 credit points towards their respective MBA Programs.

To date, graduates of the MDCTP have launched nine companies, engaged industry partners and raised more than $15 million in grants and private investment, creating job opportunities in Australia and abroad.

For more information, visit the OHMR website or phone (02) 9391 9228.

**STATS CENTRAL - WORKSHOPS**

Stats Central, the UNSW statistical consulting unit, has released a preliminary timetable of Stats Central short courses for 2017.

Anyone can register for these courses, and they are available at greatly reduced rates for UNSW staff and students, thanks to support from the Research Division.

- Statistics for Epidemiology – early November 2017
- Statistical Methods for Research Workers – mid-November 2017

All courses include catering and have daily fees of $100 for UNSW students, $200 for UNSW staff and $500 for external attendees (no UNSW affiliation).

Learn more about the courses and to register online.

**SEMINARS**

**SHIFTING LANDSCAPES IN MEDICAL RESEARCH FUNDING**

UNSW Medicine and the Division of Research are holding a two part seminar series to inform all UNSW researchers about the changing landscape of acquiring research funding.

The NHMRC restructure and the new Medical Research Future Fund signal significant changes to the funding landscape, and this series aims to inform and encourage researchers to start planning their research strategies with these changes in mind. In addition, traditional category 1 and other funding sources also require substantial re-evaluation to maximise success, particularly in the wake of HERDC funding extending its focus to industry and end user funding.

All UNSW researchers are encouraged to attend this session, where Professors Nicholas Fisk (DVCR), Anthony Kelleher (Acting Dean of Medicine), Warwick Dawson (Director RSPO), and Chris Levi (Executive Director SPHERE), amongst other eminent research leaders, will discuss the changes and opportunities and what they mean for research at UNSW into the future.
Shifting Landscapes in Medical Research Funding – recent policy developments

**When:** 8:30 -11:30am, 13 September 2017

**Where:** Leighton Hall, Scientia Building (map ref G19), UNSW Kensington

**Register:** Please register [online](#) for the session

This session will be livestreamed for those unable to attend- details will be updated on the event page in the weeks ahead.

A second workshop will follow later in 2017 or early 2018, when more details about these schemes become available.

The Division of Research is available to assist with any enquiries via [email](mailto:).

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**Virology Research Laboratory – Seminars**

A reminder that the Virology Research Laboratory based at Prince of Wales Hospital holds regular, lunchtime research seminars from both local and international speakers on a broad range of subjects. The seminars are held on a Tuesday, between 1pm and 2pm.

The next seminar is scheduled for 5th September 2017.

For more information on the Virology Research Laboratory Seminar Series, please contact organisers [Sonia Isaacs](mailto:) and [Dr Sacha Stelzer-Braid](mailto:).

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**ILP & Honours Supervisors & Students**

**ILP & Honours 2018 Cohort**

It is time to start thinking about your Ethics & Governance applications for your 2018 students. It is of the **upmost importance** that you receive these approvals BEFORE the students commence in February 2018.

If you need any assistance, with what is required for your project - whether it be a full application or an amendment - please get in touch with [Samantha McFedries](mailto:), Research Manager.

Sam is available to help your students navigate the ethics and governance pathways, but ultimately it is the supervisors responsibility to ensure regulatory approvals are in place before the start of the academic year.

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**Higher Degree Researchers Students & Supervisors**

**Christina Signorelli awarded The Barbara Hale Fellowship**

Congratulations to Christina Signorelli who recently received The Barbara Hale Fellowship from the Australian Federation of Graduate Women Inc.

Only three out of a total of 77 applicants received the fellowship, therefore this is great achievement.

Christina is currently completing her PhD in paediatric psycho-oncology within the Behavioural Sciences Unit, Kids Cancer Centre and School of Women’s & Children’s Health. The title of her thesis is ‘Improving follow-up care for long term survivors of childhood cancer: a new model of care.’

This fellowship will enable Christina to expand the scope of her project to include an electronic triaging tool and linked database to facilitate the appropriate risk-stratification and treatment options of long term survivors of childhood cancer, who often develop lifelong health problems related to after-effects of their cancer treatment.

[Read More...](#)

**Dr Erin Nesbitt-Hawes 3MT Winner**

Congratulations to Dr Erin Nesbitt-Hawes who won the 3 Minute Thesis Medicine Faculty Heat. Dr Nesbitt-Hawes now goes on to compete in the Interfaculty Final on 13th September 2017 with first prize being $3,000 plus entry into the 2017 Asia-Pacific Competition at the University of Queensland as well as the U21 final, a virtual event with judges watching video entries rather than live presentations.

The 3 Minute Thesis (3MT) is an academic competition developed by the University of Queensland for PhD and Research Masters candidates. With just three minutes to give a compelling presentation on their thesis topic and its significance, the 3MT competition forces research candidates to consolidate their ideas and crystallise their research discoveries.

The School encourages all higher degree students to take part. If you are interested in the 2018 competition, please visit the [UNSW Research Gateway](http://www.unsw.edu.au/) for more information.
UNSW PhD Scholarships

UNSW Sydney Postgraduate Research Scholarships will now be open for and assessed in four Rounds throughout the year. These rounds, named Round 1-4, will be open to both International and Domestic applicants.

The round numbers do not correspond with the same number Semester, so applicants need to ensure they visit the Key Dates page to check which scholarship round you should apply for. Late or Out of Round applications will not be accepted.

Rounds 1-3, 2017 have already closed. However, Round 4 is open for applications. Who should apply:

• Applicants currently in Australia wishing to start in Semester 1, 2018 should apply for this round.
• Applicants residing outside of Australia wishing to start in Semester 2, 2018 should apply for this round.

The deadline for applications is 11th October 2017.

The UNSW scholarships available to Domestic students are:

• Domestic Research Training Program (RTP) - previously called Australian Postgraduate Award (APA)
• University Postgraduate Award (UPA)
• Faculty top ups – attached to RTP or UPA

The UNSW scholarships available to International students are:

• International Research Training Program (RTP) - previously called International Postgraduate Research Scholarship (IPRS)
• University International Postgraduate Award (UIPA)
• Tuition Fee Scholarship (TFS) plus a Research Stipend

More information is available online.

Supervising Research: Supporting HDRs’ academic reading and literature review

7 September 2017, 9.30am - 12.30pm

The aim of this workshop is to provide you with tools to support your HDRs in reading and thinking about literature, so that timely completion (by census) is achieved.

Further information or to register.

Research Progress Review Seminar

27 September 2017, 10.30am - 11.30am

The Research Progress Review Seminar covers everything you need to know to get the best out of your Review. Staff from the Graduate Research School, the UNSW Learning Centre and an experienced academic staff member will explain who attends your yearly Reviews, how you should prepare for them and the associated policies and procedures.

Further information or to register.

EARLY CAREER RESEARCHERS

From the ECR Rep

This year has seen the commencement of the School’s ECR best publication award. This initiative is to make ECR’s more competitive for Fellowship applications and has the added bonus of promoting research within the School. Plus it comes with a $250 prize!

So far this year we have had two worthy winners and the Research Committee is looking forward to judging more research papers of the same calibre. Just remember, to be eligible you need to be lead or senior author and the School must be listed as one of your affiliations. For a full list of criteria please contact myself or Sam.

If any of you have and ideas or initiatives that you would like to see in the School please contact me. Below are some of the initiatives currently in progress.

Best wishes
Michael Bertoldo
- Oocyte Biology Research Unit

SWCH Early Career Researcher Best Publication Award

The School of Women’s and Children’s Health (SWCH) recognises the significance of increasing the competitiveness of ECRs, and acknowledges the importance of this period in attracting and retaining...
the best researchers to a career in women’s and children’s health. The aims of this award are to promote the publishing of high-impact, fundamental and translational research, and to increase the competitiveness of ECRs for fellowships. Applications will be called quarterly with 4 awards given per year.

ROUND 1 RECIPIENT:

Dr Keith CY Ooi, Senior Lecturer & Paediatric Gastroenterologist
*Differences in Outcomes between Early and Late Diagnosis of Cystic Fibrosis in the Newborn Screening Era*
Abstract included on page 17.

ROUND 2 RECIPIENT:

Dr Michelle Farrar, Senior Lecturer & Paediatric Neurologist.
*Burning pain: axonal dysfunction in erythromelalgia*
Abstract included on page 17.

Round 3 closes on 22nd September 2017.

Please read the guidelines and email your entries to Samantha McFedries, Research Manager.

The ECR mentoring program

Your supervisor is naturally your mentor; however researchers benefit from interactions with mentors external to their research group. Through this program, you can meet with a senior researcher outside your field (i.e. with no direct interest in your research) who will help you develop your career goals and build your CV by offering independent advice on your career development.

Mentoring can play a significant role in our career paths and having a mentor has been shown to be tremendously beneficial to your research success. Thanks to Susan Ramus and Alec Walsh, the committee is in the final stages of establishing this program for its ECRs. We will have more information coming out to you soon.

Research benchmarking

As you may be aware, UNSW has introduced a new system, the Boris System, for compiling research metrics on UNSW researchers. This will draw research metrics from ROS (Research Output System) and InfoEd - UNSW’s grants management system.

Research techniques and capabilities exchange

This is a new initiative ensuring more efficient collaboration across our School. Its aims are to create a platform for collaboration between ECRs and HDRs in the School, to get expert advice, achieve our research goals quicker and potentially outsource experiments

More details on the research techniques and capabilities exchange was in the last UNSW School of Women’s & Children’s Health Research Newsletter, available online.

A reminder, if you would like to be involved with the initiative or to learn more, please email Dr Shafagh Waters.
Abstracts below are the recipients of Round 1 and 2 of the School of Women’s & Children’s Health Early Career Researcher Best Publication Award 2017.

**Differences in Outcomes between Early and Late Diagnosis of Cystic Fibrosis in the Newborn Screening Era.**

The Journal of Pediatrics, 6 (4), pp. 374-379

**Objectives:**
To evaluate children with cystic fibrosis (CF) who had a late diagnosis of CF (LD-CF) despite newborn screening (NBS) and compare their clinical outcomes with children diagnosed after a positive NBS (NBS-CF).

**Study Design:**
A retrospective review of patients with LD-CF in New South Wales, Australia, from 1988 to 2010 was performed. LD-CF was defined as NBS-negative (negative immunoreactive trypsinogen or no F508del) or NBS-positive but discharged following sweat chloride <60 mmol/L. Cases of LD-CF were each matched 1:2 with patients with NBS-CF for age, sex, hospital, and exocrine pancreatic status.

**Results:**
A total of 45 LD-CF cases were identified (39 NBS-negative and 6 NBS-positive) with 90 NBS-CF matched controls. Median age (IQR) of diagnosis for LD-CF and NBS-CF was 1.35 (0.4-2.8) and 0.12 (0.03-0.2) years, respectively (P<.0001). Estimated incidence of LD-CF was 1 in 45 000 live births. Compared with NBS-CF, LD-CF had more respiratory manifestations at time of diagnosis (66% vs 4%; P<.0001), a higher rate of hospital admission per year for respiratory illness (0.49 vs 0.2; P=.0004), threshold electrotonus and current-voltage relationships demonstrated greater changes of thresholds in both depolarizing and hyperpolarizing preconditioning electrotonus in both EM cohorts compared with controls in sensory axons (P < 0.005).

When average temperature was raised from 31.5°C to 36.3°C in EMSCN9A+ patients, excitability changes showed depolarization, specifically SDTC significantly increased, in contrast to the effects of temperature previously established in healthy subjects (P < 0.05).

With treatment, 4 EMSCN9A+ patients (4/9) reported improvement with mexiletine, associated with reduction in SDTC in motor and sensory axons. This is the first study of primary EM using threshold tracking techniques to demonstrate alterations in peripheral axonal membrane function.

**Conclusions:**
LD-CF, despite NBS, seems to be associated with worse health before diagnosis and worse later growth and respiratory outcomes, thus providing further support for NBS programs for CF.

Access full text paper online.

**Burning pain: axonal dysfunction in erythromelalgia**


Erythromelalgia (EM) is a rare neurovascular disorder characterized by intermittent severe burning pain, erythema, and warmth in the extremities on heat stimuli.

To investigate the underlying pathophysiology, peripheral axonal excitability studies were performed and changes with heating and therapy explored. Multiple excitability indices (stimulus-response curve, strength-duration time constant (SDTC), threshold electrotonus, and recovery cycle) were investigated in 23 (9 EMSCN9A+ and 14 EMSCN9A-) genetically characterized patients with EM stimulating median motor and sensory axons at the wrist.

At rest, patients with EM showed a higher threshold and rheobase (P < 0.001) compared with controls. Threshold electrotonus and current-voltage relationships demonstrated greater changes of thresholds in both depolarizing and hyperpolarizing preconditioning electrotonus in both EM cohorts compared with controls in sensory axons (P < 0.005).

With treatment, 4 EMSCN9A+ patients (4/9) reported improvement with mexiletine, associated with reduction in SDTC in motor and sensory axons. This is the first study of primary EM using threshold tracking techniques to demonstrate alterations in peripheral axonal membrane function.

**Conclusions:**
Taken together, these changes may be attributed to systemic neurovascular abnormalities in EM, with chronic postischaemic resting membrane potential hyperpolarization due to Na/K pump overactivity. With heating, a trigger of acute symptoms, axonal depolarization developed, corresponding to acute axonal ischaemia.

This study has provided novel insights into EM pathophysiology.

Access full text paper online.
Cancer


Infectious Disease, Immunity & Inflammation


Luo, A., Leach, S.T., Barres, R., Hesson, L.B., Grimm, M.C., Simar, D. The microbiota and epigenetic regulation of t helper 17/regulatory T cells: In search of a balanced immune system (2017) Frontiers in Immunology, 8 (APR), art. no. 417.


Turner, P.J., Wainstein, B.K. Crossing the threshold: Can outcome data from food challenges be used to predict risk of anaphylaxis in the community? (2017) Allergy: European Journal of Allergy and Clinical Immunology, 72 (1), pp. 9-12.

Neuroscience, Mental Health, & Addiction


Non-Communicable Diseases


Special Populations and Clinical Settings: Women & Children


