

#20 Spring 2024

*South West*

# THRIVE

*Leading care, healthier communities*



**Imagination**

Fuels innovation

**Pioneering**

research

**Evidence**

Based care

**More news inside!**



South Western Sydney Local Health District

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**Health Beyond** Research Innovation Showcase

## Harnessing Diversity

25 and 26 September 2024

For more information visit [healthbeyondshowcase.org.au](http://healthbeyondshowcase.org.au)

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# CE message

Healthcare is complex and ever evolving with new challenges and opportunities emerging every day, many distinct to particular groups of individuals such as those represented across our diverse communities.

That's why we embed research and innovation within our care delivery, creating an environment that encourages creativity and curiosity in everything we do.

Translating research into practice means working with clinicians, patients, consumers and community to review and refine the way we work to achieve better health outcomes.

We empower individuals and teams to tackle current and emerging challenges, ensuring that we remain at the forefront of healthcare innovation and ultimately deliver better outcomes for our patients and communities.

Every year we hold the Health Beyond Research & Innovation Showcase, highlighting different research and innovation projects across the District.

This edition features just some of the many clinicians and researchers who have shared their successes turning ideas into reality.

Our 2024 Health Beyond Research & Innovation Showcase will be held in September 2024. Health experts, partners and community are invited to join us to hear about research "Harnessing Diversity" from those leading the future of healthcare. Event and registration details can be found at [www.healthbeyondshowcase.org.au](http://www.healthbeyondshowcase.org.au)

### Sonia Marshall Chief Executive



### Occupational Therapy Paediatric Team Leader Sarah Deeth

# Welcome to the world

## A switch to a transdisciplinary care approach in Campbelltown Hospital's special care nursery is ensuring newborns are receiving the right care at the right time, setting them up for the rest of their lives.

"After a few years following a more traditional multidisciplinary approach, we started trialling a transdisciplinary model of care," Occupational Therapy Paediatric Team Leader Sarah Deeth said.

"This means one of our specialists – an occupational therapist, speech pathologist or physiotherapist – is assigned to a patient and their family and acts as a key worker for their care delivery."

Having a 'key worker' streamlines the care experience for patients and reduces the number of appointments needed overall. The key worker is an expert in their own discipline, and those skills and knowledge often overlap with those of their colleagues. They are able to identify when the additional expertise is needed and organise for another specialist

to begin working closely with the patient and their family.

"Our specialists work closely together to discuss the patient's care needs and progress, ensuring that they're sharing their knowledge and skills to provide holistic care," Ms Deeth said.

**"Taking this approach means professionals are coming in at the right time to achieve maximum results. Sometimes a speech pathologist is most effective later in care when a baby is ready for suck feeding," she said.**

The transdisciplinary approach has proven to be effective.

"We reviewed the records of 140 patients who had received either multidisciplinary or transdisciplinary care between 2016 and 2020," Ms Deeth explained.

"The research found that through the transdisciplinary model of care, patients received a wider range of assessments and interventions, that better aligned with best practice and clinical guidelines, and all in a more timely manner.

"This is one of the first studies to explore a transdisciplinary model of care in this unique neonatal setting and we're really thrilled by the results.

"We've seen the potential and are hoping to continue expanding and making this a regular care option." ■

# The future of research in south west Sydney

**Our District's strong, vibrant culture of research and innovation is vital to transforming the health care and experiences of the people of south western Sydney.**

It allows us to translate research into care, contributing to improved health outcomes both locally and globally. Across our facilities and services, researchers and innovators promote and drive improvements in all areas of care.

The healthcare revolution is rapidly advancing. Harnessing the opportunities before us, as well as understanding the complexity of current and future healthcare challenges south western Sydney is facing and the importance of finding and creating solutions to address these effectively, requires the brightest minds, academic rigour and true imagination.

We cannot do this alone. Our partnership with the Ingham Institute for Applied Medical Research, established in 2012, continues to thrive, with plans for further expansion as our hospitals and services are enhanced, while our well-established partnerships with universities and research partners also continue to grow.



**Professor Les Bokey, Director of Research**

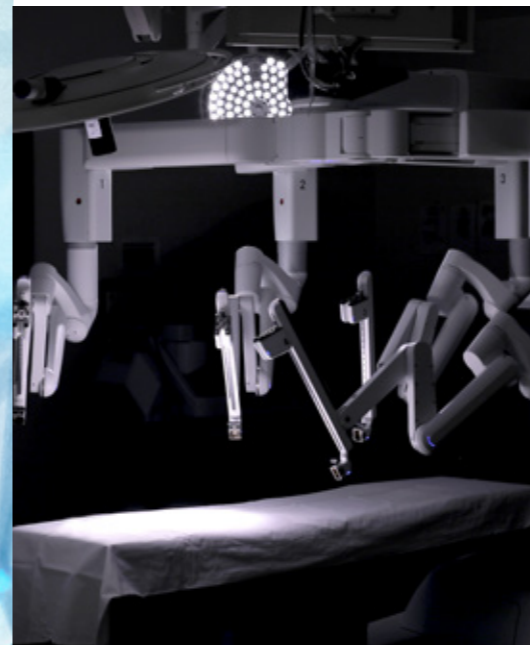


## Growing research capability

Research drives advances in clinical care, ensuring patients benefit from receiving the best and latest care available. Ten Academic Units have been established, designed to connect research and clinical practice. They focus on key areas such as women's health, mental health, stroke, diabetes and radiation oncology. The units, led by senior clinicians, undertake research projects and build research capability across clinical and professional fields. Research Chairs are established in areas including nursing and midwifery, neurology and stroke, with new Chairs in paediatrics, population health and cardiovascular disease.

## Establishing expertise

Our research continues to attract some of the finest, internationally recognised clinician researchers in their fields. New Professor of Paediatrics, Michael Kohn, will be instrumental in guiding the District's delivery of children's care, building a healthier future for families and children. New Cardiovascular Chair, Professor Kazuaki Negishi joins us to address heart disease thanks to our partnership with the Victor Chang Cardiac Research Institute, the Ingham Institute for Applied Medical Research and UNSW Sydney. Rod McClure, new Professor in Population Health brings to the District expertise in epidemiology and public health. Having locally-based experts ensures the complex needs and particular experiences of south western Sydney communities are understood and ultimately met.



## Harnessing technology

New technology is rapidly changing the delivery of healthcare. Technologies elevate the work of our expert clinicians and researchers and improve patient outcomes, care experiences and quality of life. Every area of health is being revolutionised by technology such as medical devices, data and analytics, digital platforms, assistive technology, surgical robotics, diagnostics, wearable devices, health system automation, artificial intelligence and virtual reality. The District and the Ingham Institute for Applied Medical Research have delivered world-leading accredited surgical robotics training in NSW for the first time through a Memorandum of Understanding with the International Medical Robotics Academy (IMRA). The training equips the surgeons of today and tomorrow with the skills and hands-on experience they need to deliver high-quality, minimally-invasive surgical procedures using robotic technologies that offer pinpoint precision.

# Healing Hands, Healing Minds



**At the South Western Sydney Hand Centre, based at Fairfield Hospital, clinicians observed a notable trend where many people with traumatic hand injuries were also facing mental health problems.**

The team assessed around 400 patients on their first visit and again three months after their surgery. The aim was to understand their recovery, particularly focusing on their mental health.

The study found more than one in five patients (22 per cent) had a pre-existing mental health diagnosis, slightly higher than the general population in south western Sydney (17

per cent). Interestingly, fewer patients identifying as 'non-Australian' (13 per cent) reported having a pre-existing mental health condition compared to those identifying as Australian (29 per cent).

**“This points to potential under-reporting or lack of diagnosis,” said lead researcher Professor Justine Naylor.**

Patients with pre-existing mental health conditions experienced worse mental health, more pain and poorer overall health at follow-up, even though their hand function was similar to those without such conditions.

Patients who identified as 'non-Australian' were more likely to be worried or bothered by their injury and reported worse hand

outcomes, regardless of any pre-existing mental health conditions. Those with pre-existing mental health issues showed significantly worse mental health and overall health three months post-surgery.

These findings highlight the importance of monitoring mental health in patients with traumatic hand injuries. By identifying those at risk early on, clinicians can offer appropriate support or referrals.

**“However, culturally sensitive approaches are essential, given the higher risks faced,” Professor Naylor said.**

This study, undertaken with funding from The Lincoln Centre, serves as a powerful reminder of the interconnectedness of physical and mental health. ■



Team members from Fairfield Hospital's Hand Clinic

# Maternity access for all



Nicole Greig, Antenatal Redesign Project Manager

**Bridging the identification gap for pregnant women with disability is the first step to ensuring safe, equitable, individualised and accessible maternity care and supports.**

Disability identification is the first of four recommendations to come from Antenatal Redesign Project Manager Nicole Greig's research.

**“My aim is to improve care and promote a positive experience for women with disability,” she said.**

Ms Greig's research involved interviewing midwives to identify which tools and resources were required to care for pregnant women with disability.

An examination of data from 2016-2020 identified only 0.62 per cent of pregnant women identified as having

a disability in South Western Sydney Local Health District, compared to the national average of 9.1%.

“This highlighted a significant gap in the identification process,” Ms Greig said.

Ms Greig's research led to the introduction of specific questions about disability to be asked at the midwifery booking appointment in both South Western Sydney and Sydney Local Health Districts.

“This is just the first step. By recognising disability early in pregnancy, maternity care clinicians can provide individualised and integrated care, which will improve maternal and neonatal outcomes,” Ms Greig said.

**“Providing women with disability access to continuity of care models and providing disability training for midwives will also improve women's experiences.”**

Data gathered from the new questions will also be used to address other themes raised in Ms Greig's research, including continuity of care, health equity, processes and resources, effective partnerships, and training and education.

“We want to lead the way in caring for pregnant women with disability.”



Guests attend the Communication for Safe Care workshop

## Transforming our communication

**“Working with consumers with lived experience is crucial to improving the way we deliver care, and ultimately, their overall health and wellbeing,” said Nicole Chapman, Communication for Safe Care Project Manager.**

Aimed at making communication in healthcare services more accessible and inclusive, the project focuses on ensuring people with communication support needs can access information, be understood, listened to, and included in making decisions about their care.

Initial research included 129 surveys and 25 interviews with health staff, and 32 interviews with consumers with lived experience. Data was gathered across four sites, capturing both metropolitan and regional experiences.

The project also developed and implemented an assessment tool to evaluate sites' communication accessibility, capturing information across three key areas: environment, interactions and resources.

Research was conducted by speech pathology students during their placements and was integral to the project's success.

**“The students were able to learn first hand how best to support people with communication support needs, which is important in ensuring the future workforce understands inclusive communication,” Ms Chapman said.**

“We found communication between healthcare staff and consumers works best when there is open communication and collaboration with the individual and their support network”

Suggestions for areas of improvement included increasing health worker awareness and knowledge about disability, reducing the use of medical

jargon, and physical environmental barriers that impact communication such as bright lights and noise.

“Once we identified these, we held workshops with project staff, consumers with lived experience and healthcare workers to discuss a way forward together. Participants shared experiences, problem solved ideas, prioritised a preferred solution and mapped out how the solution could be implemented in a service.”

The project is now developing and implementing solutions at each of the sites including early identification of communication support needs, establishing pre-appointment processes and the development of accessible consumer resources.

The project, a collaboration between the District, University of Sydney and Western NSW Local Health District, is funded by a NDIS Information, Linkages and Capacity Building grant. **T**



Principal Project Officer Alexandra Sechi (left) and Professor Susan Connor

# Breaking the silence

## These diseases are expected to affect more than 300,000 Australians by 2030 – many of them young people – but they are rarely spoken about.

Crohn's disease and ulcerative colitis (referred to as inflammatory bowel disease or IBD) are painful, debilitating autoimmune diseases which attack the digestive system and are, as yet, incurable.

Professor Susan Connor, Senior Staff Specialist in Gastroenterology and Hepatology and Head of the IBD Service at Liverpool Hospital, said IBD affected sufferers both physically and mentally.

**“IBD manifests with symptoms including blood in the stool, diarrhoea and an urgency to go to the toilet. Incontinence and a loss of control of your bowels, particularly in a public place, can have a devastating impact,” Professor Connor said.**

“Apart from the physical symptoms, there is a stigma around these diseases. Sufferers often feel embarrassment and shame and experience higher rates of depression and anxiety than the rest of the community.

“Some have developed Post Traumatic Stress Disorder because their experience has been so devastating.”

Professor Connor, a leading researcher and advocate for patients with IBD, is part of a not-for-profit charity Crohn's Colitis Cure which has developed and implemented a world-leading

IBD-specific cloud-based disease management platform.

Co-designed with clinicians and consumers, the eHealth platform called Crohn's Colitis Care (CCCare) includes a consumer portal, electronic medical record and a clinical quality registry.

Liverpool Hospital is one of the key centres in Australia and New Zealand using CCCare, which now has more than 15,000 patients and more than 300 clinicians registered since its 'go live' in 2018 at the first site in Adelaide.

Professor Connor said the platform offered patients a portable lifelong IBD record, of great benefit if they moved to a new region or interstate, or changed doctors or hospitals, providing consistent care and documentation.

Patients are at the core of data collection, incorporating their own reported outcomes, quality of life metrics and treatment preferences to offer a well-rounded perspective on disease management.

“Researchers also benefit from a large multi-national clinical quality registry and de-identified database, including patient demographics, disease characteristics and progression and treatment, providing opportunities for analysis and investigation,” Professor Connor said.

Already this year 14 research abstracts have been submitted to Australian conferences, 11 to Europe and eight to the US.

“We are excited CCCare has now expanded to include a paediatric module and offers such incredible research and advocacy opportunities as we continue to develop and refine the platform.

“We are using technology to have equity in health – it's 'techquity' in action,” Professor Connor said.

“Everything we are trying to achieve comes back to our vision to improve IBD care and find a cure. This is what we are striving towards.”

## World-leading technology

- Crohn's Colitis Care is a cloud-based disease management platform, including a consumer portal, electronic medical record and clinical quality registry.
- It delivers equity of access and is patient and clinician-centric, removing traditional silos in care.
- The unique software links patient reported data with clinical data which is automatically de-identified and placed in the clinical registry in real time.
- The platform is the largest dynamic inflammatory bowel disease – structured dataset in Australia and one of the largest globally.

# Viruses a path to discovery

**A specialist virologist is part of a group of scientific investigators at the District's research partner, Ingham Institute for Applied Medical Research, aiming to make a difference to the lives of people with cancer.**

In 2012 the institute's Gastrointestinal Viral Oncology Group, led by Professor Shan Rajendra, made a ground-breaking discovery on the correlation between high-risk Human Papillomavirus (hr-HPV) and oesophageal adenocarcinoma (OAC), a form of oesophageal cancer.

Dr Mohammad Rabiei, who joined the Liverpool-based group in 2022, is continuing its investigations into the correlation in associated lymph nodes through a world-first pilot study.

**“The research in south western Sydney is conducted at a deeply molecular level,” Dr Rabiei said.**

“Studying how viruses interact with cancer is showing promise for better patient care.

“Patients with virus-related cancers tend to survive longer. We're figuring out how viral infections help the immune system fight cancer, leading to better outcomes.

“Understanding this could help us trigger similar responses in all cancer types, potentially improving treatment without needing chemotherapy or radiation. By activating the immune system early, we hope to tackle cancer in its earliest stages more effectively.”

Dr Rabiei embarked on his academic journey in Iran where he earned undergraduate degrees in veterinary medicine and medical laboratory science.

His research career began in 2005 at the Islamic Azad University, Shahrekord, where he laid the foundation for his investigations. He gained a master's degree in medical microbiology in 2013.

After 12 years of dedicated work in research and industry, the father-of-two moved to Australia in 2017 after he was awarded a scholarship from the University of Adelaide.

This opportunity marked a significant new chapter in both his academic career and his life in Australia, where he investigated the molecular pathogenesis of newly emerged strains of the Newcastle disease virus, a common cause of poultry losses, in Indonesia.

Dr Rabiei said he is driven every day to uncover more about hr-HPV virus-driven cancers and has dedicated his research to his father who passed away from cancer.

“Through the meticulous analysis of tissue samples from OAC patients, using the most sensitive testing available, we have been able to observe hr-HPV's presence in both primary tumours and for the first time in the world in associated lymph nodes, suggesting a potential role in cancer development and dissemination,” the University of

NSW Conjoint Senior Lecturer said.

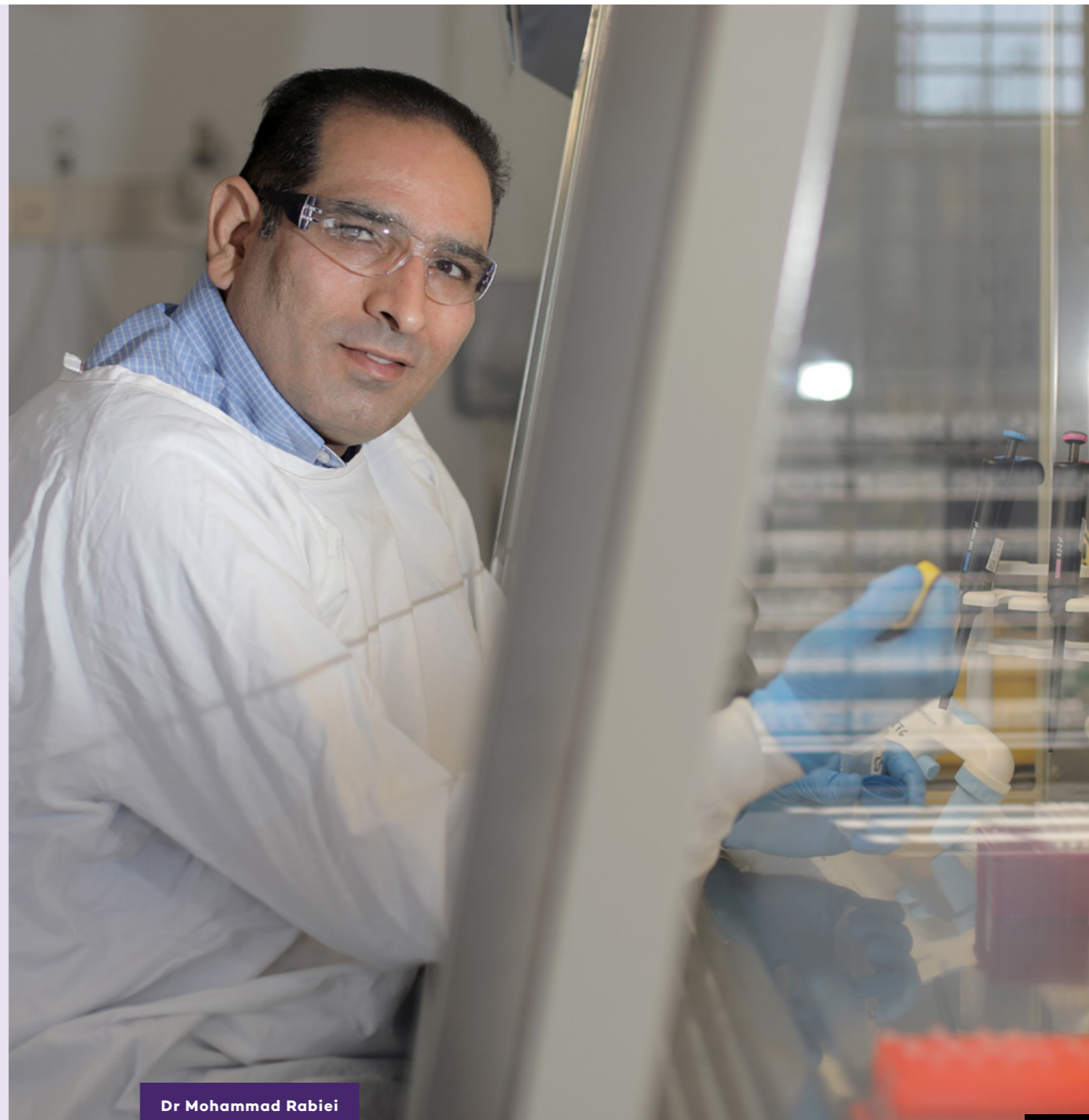
“I love what I do. Our work is fascinating and I'm passionate about making a difference.”

In addition to his research, Dr Rabiei enjoys mentoring and supervising PhD students bringing further expertise to his specialist field.

**“Supervising PhD students allows me to pass the torch to the next generation of researchers. It's incredibly rewarding to share my knowledge and experience, fostering their growth and contributing to the future of our field,” Dr Rabiei said. ▣**

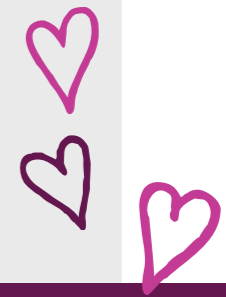
The Ingham Institute for Applied Medical Research is South Western Sydney Local Health District's major research partner.

The strategic partnership aims to embed research into clinical practice to improve the delivery of healthcare, both locally and internationally.



Dr Mohammad Rabiei

# A more inclusive space



**In 2021, Campbelltown Hospital's Mental Health Adolescent Inpatient Unit identified a need to improve delivery of LGBTIQ+ inclusive care to ensure a trauma-informed approach.**

"A lot of the young people we support are dealing with a range of challenges, all unique to them," said Clinical Psychologist Talia Burton.

"When you combine this with a period of self-discovery, where sometimes the gender they identify with isn't known or necessarily accepted by others, this can contribute to the challenges they're facing.

"It's important we're creating a safe space where they feel welcome."

In response, Ms Burton led the development of 'The Gender Sphere' project, improving gender affirmative practices for consumers at the unit.

This included gender diversity training for all allied health and nursing staff, research through consumer focus groups on the supports needed, and the development of a consumer resources package and carer resources.

**"One of the key things we also implemented was the Gender Sphere Screening Tool, updating our intake form to allow for consumers to share their pronouns and other key information the standard form didn't include."**



Clinical Psychologist Talia Burton



"We collected data through the screening tool over four months and found 57 per cent of our consumers identified as gender and/or sexually diverse," Ms Burton said.

**"That means more than half of consumers may not have received LGBTIQ+ inclusive care from the moment they entered the unit, because there was no established mechanism for them to share their status."**

With an established pathway now in place, Ms Burton and the team continue to review current processes and participate in the annual Health and Wellbeing Equality Index, which assesses LGBTIQ+ inclusive service provision and workforce inclusion.

The team was also pivotal in forming the District's Rainbow Inclusion Committee, which aims to develop LGBTIQ+ inclusive practices across services.

The Gender Sphere project has been awarded the 'Rainbow Inclusion Award' by WayAhead Mental Health Matters recognised as a 'Bronze level' service provider for gender and sexual diversity inclusivity, ranking third nationwide in the public health sector. **T**

The team has received positive feedback from consumers who have shared the immediate sense of safety they feel walking into the unit.

"The first thing I noticed when I came into Gna Ka Lun (A83) were the hearts and recognised the colours and knew it was a safe space."

"I felt like people understand me, like I'm in a space where people won't judge me."

"We like the pride hearts. We like that they make people who are questioning their identity feel safe."



Team members from Campbelltown Hospital's Mental Health Adolescent Inpatient Unit

# Gloves are off for environmental health!



**Emina Ryan is reducing South Western Sydney Local Health District's carbon footprint – one glove at a time.**

As Nurse Manager for Infection Prevention and Control, Emina knows the importance of gloves in keeping clinicians and their patients safe from all manner of nasty bugs, but when added up they create a different problem.

**“On average, our District uses nearly 790,000 gloves per week,” she said.**

“That’s 340kg of waste each day. While glove use is necessary for exposures to blood and bodily fluids and harmful medications and chemicals, they’re not necessary for everything we do.”

In 2023, Emina won a Sustainable Futures Innovation Fund grant for her Gloves Are Off project, which started with some research to establish a baseline of staff understanding.

“The research showed that while staff were knowledgeable about hand hygiene and its importance, 21 per cent believed gloves were necessary when treating all patients,” Emina said.

This informed the design of a campaign to reduce glove usage by raising awareness about situations where glove use is unnecessary.

**“Touching or comforting a person, checking blood pressure or temperature, pushing a wheelchair or bed and dispensing medication are all areas where glove use is not necessary,” she said.**

“Working together we can reduce the environmental impact of our health service.”

**“Even a one per cent decrease would mean more than 1,200 kg less waste each year.”**



**Emina Ryan, Nurse Manager for Infection Prevention and Control, South Western Sydney Local Health District**



**Dr Simon Kos, Chief Medical Officer, Microsoft**

# At the heart of AI

**A partnership between Liverpool Hospital and Microsoft is harnessing the potential of artificial intelligence (AI), streamlining research and education with a prototype that allows clinicians to interact with an extensive body of cardiology literature.**

The hospital worked with Microsoft technologists to create a bespoke prototype to allow cardiologists and those training in the field to query vast volumes of literature to answer clinical questions or make nuanced comparisons.

‘The Cardiology Canon’, was built using Microsoft Azure OpenAI Service, and programmed on clinical trials from the past 40 years and guidelines from eminent cardiac societies in Australia, Europe and the United States.

The solution also successfully generated a comprehensive six-day training program on aortic

stenosis, a common clinical problem among patients, and generated comprehensive learning resources in hours, rather than days. Dr Simon Kos, Chief Medical Officer at Microsoft Australia and New Zealand, said this unique collaboration demonstrates the invaluable contribution of hospital clinicians in refining the solution’s large language model to suit clinical need.

“We’re excited to collaborate with Liverpool Hospital on this initiative and unlock the incredible potential of generative AI in healthcare. This innovative approach is empowering the hospital’s cardiologists to stay

ahead in their field, ensuring the highest standard of patient care,” Dr Kos said.

Professor Rohan Rajaratnam, Cardiovascular Stream Clinical Director at South Western Sydney Local Health District, said this marks an important milestone for the partnership. “We’re looking forward to working with our clinicians and Microsoft to bring this technology to fruition.”

**Project team:**  
Dr Zaidon Al-Falahi and Dr Tu Hao Tran from Campbelltown Hospital. **T**

# Growing Healthy Kids



Faye Southcombe (left) and Slavica Krstic

**“The sooner health conditions are identified in an individual the better, as we can support people to receive the appropriate care as soon as possible for the best long-term gain,” said Faye Southcombe, Director Healthy Kids & Families.**

“Weight management issues can be treated, even when complicated by factors such as metabolic comorbidity, psychosocial vulnerability and mental health.

“That’s why helping kids as they grow is so worthwhile, we can help them identify any challenges they may have and develop coping

mechanisms that can help them well into adulthood.”

In 2018, the District established the Growing Healthy Kids framework and investigated clinical practices for supporting children with weight management.

“There wasn’t a clear approach or

an entire multidisciplinary service for supporting children with weight management issues. In the treatment of childhood obesity, there’s quite a large gap between practice guidelines and actual clinical practice. So we set about filling this knowledge gap.”

A nursing and medical team developed and trialled a set of clinical assessment tools, protocols, training and clinical competencies to support an interdisciplinary approach.

Dietitians and exercise physiologists then developed clinical protocols that define a broad range of effective interventions, creating a menu of interventions which could be tailored to meet the individual child’s needs.

Six community and health services were selected as pilot sites and a total of 552 children were recruited. Of these, 437 were given an ‘intervention’ approach, which consisted of a six-month period of comprehensive medical assessment and dietary intervention specific to the individual. Where appropriate, exercise and behaviour change tools were also implemented.

The remaining 106 children received the ‘waitlist’ approach, with children receiving a comprehensive medical assessment and one-off goal setting. Children with abnormal pathology received a follow-up phone call or appointment with the treating medical officer.

Children who received the interventional approach saw a five per cent change to their body mass index (BMI), compared to those on the waitlist.



Growing Healthy Kids staff with a client,



Paediatric Transitional Nurse Practitioner Slavica Krstic works closely with children and their families as part of the service.

“Now with a multidisciplinary service of paediatricians, GPs, allied health and counselling staff, we’re able to

not just tackle the current weight management goal but we can also look at the different factors that may be contributing to a child being under or overweight, and work with the child and their family to address them.”

Alongside the reduction in BMI, participants also saw significant improvements in their blood pressure, liver function and overall wellbeing and behaviour, demonstrating the multiple benefits of weight management techniques.

**“These findings have been translated into clinical practice improvements. This kind of change is enabled when research is embedded in practice,” Ms Southcombe said.**



Team members from the Growing Healthy Kids service.



# Hub of possibilities

**Improving lives and fostering independence for people with a brain injury through research, social worker, psychologist and researcher Associate Professor Grahame Simpson has high hopes for the Assistive Technology Hub.**

The culmination of years of work involving Liverpool Hospital's Brain Injury Rehabilitation Unit and various research partners, the Hub, a central partner within the Ingham Institute for Applied Medical Research's Perich Centre, will offer technology solutions to help clients while bringing researchers together to push the boundaries of what's possible.

"In the first instance, we will be working with clients with traumatic brain injury which may have resulted from a motor vehicle accident, a fall or an assault," Associate Professor Simpson said.

"Our key partner will be the Liverpool Hospital Brain Injury Rehabilitation Unit, the largest in NSW."

The Hub will work with patients as they transition to home life after a period of inpatient rehabilitation.



Associate Professor Grahame Simpson

**“After you’re discharged from hospital you may have problems with executive function like planning, sequencing and problem solving,” Associate Professor Simpson said.**

The technologies themselves were often low-cost, mainstream solutions, such as apps on a smart phone, motion sensors and other smart devices. The exciting developments lie in using these to build solutions tailored for each client.

A recent Smart Home trial funded by the Transport and Accident Commission of Victoria and icare NSW, delivered in collaboration with Monash University and Sydney University, involved a young man

with a brain injury who needed to take daily medication.

"His reduced memory meant that he would forget to take it, then his mum would have to prompt him, which impacted his independence and her time," Associate Professor Simpson said.

The co-designed solution involved playing a song from a list he'd chosen, which would get and maintain his attention, followed by a prerecorded verbal prompt to take the medication.

Multiple smart speakers around the home ensured prompts were played where he could hear them, while a sensor was positioned above the medication box which, when triggered, would stop the audio prompt and confirm the medication was taken.

"It isn't necessarily just about technology, but also the wrap-

around services," Associate Professor Simpson said.

"We assess the support needs of the person, then build the solution with their lifestyle and their goals in mind".

**“Even with the technology already in the mainstream, there is so much potential to give people more independence and improve their lives. The Assistive Technology Hub will unlock this potential for the benefit of clients with brain injury across the Local Health District.”**

Senior Aboriginal Health Worker Tanya Dennis Ikhinmwin (left) and Senior Speech Pathologist Susanne Rigby.



# Look who's talking

**New research has shown Aboriginal children have received enormous benefit from a culturally responsive speech pathology and occupational therapy program.**

The multidisciplinary research project team reviewed the progress of children between the ages of two and school entry who were

enrolled in the 2 to School Program, where Aboriginal Health Workers and Child and Family Health Nurses regularly visit families.

Speech pathologists and occupational therapists provided support when a child's development needed assistance, and conducted routine assessments at three years of age for all children.

**“The biggest surprise was realising just how big a difference we've made,” Senior Speech Pathologist Susanne Rigby said.**

Out of 32 children receiving speech pathology, 78 per cent had a significant clinical change during at least one visit, while 64 per cent of visits resulted in an improvement.

“With our study, we have been able to prove the effectiveness of allied health services within a specialised program,” Ms Rigby said.

The results of this study are already informing care, as the District further enhances the Aboriginal Child and Family Service and improves access to culturally-responsive care. **T**

# Watch Me Grow

**After a successful pilot, the Watch Me Grow electronic (WMG-E) platform, an innovative weblink for child developmental screening, is expanding across south western Sydney and nationally to help parents monitor and identify any child development issues such as speech delay or autism.**

“Health literacy and engaging with preventative programs such as child developmental checks can be a common obstacle for many families, particularly those from diverse backgrounds,” Professor Valsamma Eapen, clinical academic leading the Academic Unit of Child Psychiatry South West Sydney, said.

“Many people think they need to engage with health services only when their children are sick and often don't have the time or the awareness to do routine health and developmental checks for early identification of difficulties that may impact their child's wellbeing long-term. As a result, they seek help only after the condition has become worse.”

WMG-E was initially rolled out across 60 GP practices in south western Sydney and Melbourne. During COVID-19 it was shared with families at their homes and communities via trusted services such as child and family health nurse clinics, early childhood education centres, Aboriginal health services and during contact with social service providers. The platform is available in English, Mandarin, Vietnamese and Arabic, with hopes to expand in the future.

Once families engage with the program by completing the checks, automated reminders with the link are sent to them to complete the assessment again at the next recommended ages and stages to

ensure ongoing monitoring of the child's developmental progress.

“We've found the platform to be incredibly useful. Data from Fairfield, a culturally diverse region, and Murrumbidgee, a rural community, indicated WMG-E has the potential to break down some access barriers for families, including Aboriginal people. We saw a significant increase in parental engagement in completing the developmental checks, with 86 per cent engaging in the intervention group compared to 16 per cent in the control group at 12-month follow up,” Professor Eapen said.

“Now that we know the platform is useful for families, the next stage is expanding it further and connecting families with appropriate early intervention programs through the platform.

“Currently, parents can raise any concerns to their health care provider and seek further assessment and early intervention as needed, but a lot of the onus relies on them making that call.

“We want to be able to make it easier for families and empower them to complete the developmental checks as recommended by the NSW Health Personal Health Record (Blue Book) program,” she said.

WMG-E was recognised as one of 10 national programs of impact by the Australian Health Research Alliance. **T**



Professor Valsamma Eapen



# Get to know our staff...

**Full name:** Sarah Dennis

**Position:** Professor of Allied Health in SWSLHD and University of Sydney

**What is your role:** My role is quite varied, generally research focused with a small amount of teaching. In the District my work focuses on developing the research capacity of allied health clinicians, as well as supporting large research projects and conducting my own health services research. At the university, I lead research in primary care, focusing on addressing health inequity by increasing access to evidence-based allied health in primary care.

**Why is your role important?** My role is important because it highlights some of the challenges some people face trying to access allied health services, and that we need evidence to help change policy and improve access.

**What do you love most about your job?** The variety of my work and the fact that I work across two systems – universities and health. I am also lucky to work with such inspiring clinician researchers who are changing practice in their District and improving the lives of the local population.

**Why did you choose your career?** I fell into it – I was a physio but didn't enjoy it, so I went back to university and developed a passion for research. I wanted to make a difference and this career helps me to generate evidence that might change policy – it is a long game!!

**Greatest career achievement?** I have been named Australia's leading primary health researcher for the last three years by The Australian newspaper. I also value my role as a PhD supervisor where I develop the next generation of health services researchers, several of whom are going on to do great research.

## Really get to know our staff...

**Interests or hobbies:** I am a Masters rower. I started at university in the UK and got back in a boat in 2019. Last year I competed in the Australian National Masters Championship.

**Who inspires you?** Women who challenge the system, especially those who fight for justice. My favourite examples from history include Boudica – who tried to stop the Roman invasion of the UK but lost, and more recently Ruth Bader Ginsburg.

**Tell us something about you that would surprise people:** I once covered for the Arsenal physio for an Arsenal U21 match – fortunately no one was injured.

**Talent you wish you had:** Musical ability – I love listening to music but can't sing to save my life and can only play the recorder, badly.

**What did you think you were going to be when you grew up?** Something in health or an archaeologist.