Welcome from the CEO

Dear Doctor

Welcome to our first GP newsletter for 2018. This edition is filled with updates on our services, as well as ground breaking surgeries, treatments and research projects happening on campus.

As you would be aware Macquarie University Hospital, is part of a broader academic health sciences centre, called MQ Health. Within MQ health we’ve established seven clinical programs in which all our current surgical and medical specialities sit under. These programs include Neurosciences, Bone and Joint, Critical Care and Anaesthetics, Surgery and Gastrointestinal Services, Primary Care, Wellbeing and Diagnostic Imaging, Cancer and finally Cardiovascular and Respiratory Services. Within each of these clinical programs exciting research, education and clinical care are currently underway.

In each of our stories, we’ve identified which Clinical Program that story belongs to, as well as segmented each article into our purpose Heal, Learn, Discover.

In this edition our focus is very much on Neurosciences and Cancer. In our Neuroscience’s program, we provide an update on our Gamma Knife clinical data as well as our Ear, Nose and Throat services. We also showcase an exciting surgical collaboration between our ENT and Ophthalmology teams.

In research news, we’ve published the largest recent series of outcomes for patients receiving shunts. We also feature an interesting story from the Australian Hearing Hub that explores the role of hearing and memory in brain health. Recent research has shown that of all the modifiable risk factors for dementia, mid-life hearing loss is one of the most significant.

In cancer, our Lymphodema team are hosting public forums that are empowering patients with information about this condition. We also provide you with some exciting developments related to our immunotherapy clinical trials.

Again, we greatly value our relationship with GPs, a vital link in keeping patients and the community abreast of innovations in the healthcare sector and in facilitating access to specialist services and facilities best suited to an individual patient’s needs.

Carol Bryant, CEO
Macquarie University Hospital

If you would like to receive further information about our GP education activities for 2018, please email events@muh.org.au
MQ HEALTH RESEARCHERS HAVE PUBLISHED THE LARGEST RECENT SERIES OF OUTCOMES FOR PATIENTS RECEIVING A SHUNT TO TREAT SYRINGOMYELIA, SHOWING THAT SHUNTS CAN WORK WELL IN SELECTED CASES.

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SYRINGOMYELIA, SHOWING THAT SHUNTS CAN WORK WELL IN SERIES OF OUTCOMES FOR PATIENTS RECEIVING A SHUNT TO TREAT MQ HEALTH RESEARCHERS HAVE PUBLISHED THE LARGEST RECENT REDEFINING THE ROLE OF THE SHUNT PATIENT CASE SERIES:

Professor Marcus Stoodley explained Professor Stoodley. “So now we are close to understanding how this might cause a syrinx to develop – how other physiological processes affect fluid flow, of life as reported by patients.

Up to 108 months post-operatively, just three of the 41 patients (7 per cent) required re-operation for recurrence or enlargement. This is superior to the rates of re-operation following syrinx to subarachnoid shunting previously reported, which ranged from 17 to 33 per cent.

“This case series demonstrates that in patients experiencing deteriorating neurological function, a syrinx to subarachnoid shunt is a safe and effective treatment for Syringomyelia with no known cause or when treatment of the underlying condition has been insufficient or is not feasible,” said Professor Stoodley.

“The consistent efficacy of a syrinx to subarachnoid shunt, despite the diversity of pathologies in the current cohort, suggests shunting can be effective in many cases and the current findings should be broadly generalisable to other patients with Syringomyelia.”

CERVICOThoracic SYRINGOMYELIA: Understanding Sub-types

A second series of cases published looks at a sub-category of patients – those with scarring of the sub-arachnoid space at the juncture between head and spine, known as cranio-cervical junction arachnoiditis (CCJA). This scarring can be caused by previous surgery, by trauma or by infection. CCJA is commonly known to be associated with Syringomyelia. Treatment remains challenging with recurrence rates exceeding 50 per cent.

“Our research revealed these patients develop a specific kind of syrinx,” said Professor Stoodley. “So our treatment by posterior fossa decompression – opening up the space at the base of the brain – releases the fluid and is usually effective.

“The key, again, is the pathology of individual patient’s case. Patients showed a variety of pathological features, and surgical strategies should change slightly depending on the individual case.”

“We have always thought pressure changes and pulsations from heart and breathing influence fluid flow,” said Professor Stoodley. “So now we are closer to understanding how this might cause a syrinx to develop – how other physiological processes affect fluid flow.

Traditional treatment for Syringomyelia is to address the underlying condition. For patients with Chiari malformation, this involves creating more space at the base of the skull for fluid to flow between the head and the spine. For other groups of Syringomyelia patients where the underlying cause is unclear or where treatment of the underlying condition is too risky, there remain no consensus methods.

Given the rarity of Syringomyelia, surgeons around the world perform surgical shunt treatment infrequently and, in general, these procedures have yielded a poor success rate, with infection and blockages often resulting, and revision surgery common.

“At Macquarie University Hospital, we see large numbers of Syringomyelia patients,” explained Professor Stoodley. “We have gained a lot of experience – both clinical and laboratory – as part of our long-term research program.

“Having gathered significant knowledge on Syringomyelia, we now have a good idea of when a shunt is indicated.

“Using pre-operative MRI and intra-operative ultrasound imaging to understand the variability of causes has meant we can identify the specific pathology and can then adapt surgical techniques and employ the team’s skills in advanced microsurgery.

“So we determine not only when a shunt is indicated, but what particular surgical combinations or adjustments should be made to increase its effectiveness for each individual patient.”

Professor Stoodley and colleagues have recently published the world’s most comprehensive and contemporary series, looking at outcomes in syrinx to subarachnoid shunt surgery in 41 patients.

Results from the Retrospective Analysis

The retrospective analysis shows results from the series – including where no known cause or when treatment of the underlying condition has been insufficient or is not feasible – treated between 2000 and 2016 have now been published in World Neurosurgery. Results show that 90 per cent of cases experienced rapid and sustained reduction of the syrinx, and 98 per cent of cases had stabilisation or improvement of neurological signs and symptoms.

In contrast to the adverse outcomes reported in older case series, there was no incidence of infection, shunt malfunction, or spinal cord injury in the current cohort, and no decline in post-operative quality of life as reported by patients.

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By the middle of last year, Jennifer Geoghegan noticed that her nine-year-old son Stefan had an increasingly protruding eye.

“It was eventually bulging prominently,” said Jennifer. “However, his vision wasn’t being affected, and there was no pain. So we eventually sought some medical advice.”

A biopsy revealed a solitary fibrous tumour – benign, in Stefan’s case, and slow-growing tumour most commonly found in the lungs and very rare in paediatric populations. These lesions don’t respond well to chemotherapy or radiotherapy, which meant that surgical resection was Stefan’s next best option.

“The issue for surgical resection was the tumour’s location,” said Dr Krishna Tumuluri, ophthalmologist and oculoplastic surgeon who specialises in orbital disorders, and Stefan’s treating specialist.

“Because it extended back into the eye socket, where the orbit connects to the brain and houses the optic and a host of other nerves, a traditional approach entering via the eye socket would probably have put his vision at risk. It was also a large tumour, giving us very little space in which to manoeuvre.

“So we had to look at an endoscopic approach to give Stefan the best possible chance of removing the tumour while preserving his site.”

Dr Tumuluri talked to long-term colleague Macquarie University’s Professor Richard Harvey, who has trained with the world’s best rhinologists and skull base surgeons, and is unique in his ability to treat more serious and challenging orbital and sinus pathologies.

In October last year, they planned and performed a combined ENT-oculoplastic approach using the most advanced minimally invasive techniques for orbital and skull base tumours. Through a 100 per cent endoscopic approach, the two surgeons used endonasal and transorbital approaches to reach the tumour and, in an 8-hour surgery, were able to remove the tumour. A small area of less than one per cent on the lateral aspect of the optic nerve remains for observation.

Dr Tumuluri and Professor Harvey used Macquarie University Hospital’s Theatre 12: a dedicated neurosurgery, orbital and skull base surgery space. It is equipped with the latest endoscopes, multi-image guidance systems and an intraoperative CT scanner – all highly advantageous for pinpoint accuracy in the brain area.

“Stefan’s recovery from the surgery was rapid,” said Jennifer. “The bulging, of course, was gone, with bruising and swelling much less than I would have expected. He was so well looked after by the Hospital’s brilliant nursing staff.

“Before the operation, Krishna had been lovely in talking to Stefan about the operation and what might happen afterwards, and we’d prepared him ourselves for possible partial or full loss of vision in his left eye – one of the biggest concerns.

“So there was that tense moment when the eye patch was removed after the procedure when Stefan woke up in Recovery. Was he going to have full vision or not?

“And then an elated: ‘He can see!’ from everyone. It was just phenomenal.”

Stefan returned home and is leading a normal life. He will undergo ongoing monitoring for the next five years.

“This is an excellent result for Stefan,” said Dr Tumuluri. “I didn’t imagine it would be such a great outcome. To have removed the tumour to such an extent without loss to vision is really a demonstration of the excellent patient outcomes that Macquarie University Hospital and others are increasingly able to bring to patients through such advanced surgical approaches using highly advanced imaging and other services.”

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Just last year, Professor Ian Chubb – retired Vice-Chancellor of the Australian National University and Australia’s Chief Scientist from 2011 to 2016 – attended the 25 year anniversary of former colleague Peter Doherty’s winning of the Nobel Prize in Medicine. Doherty researched the effect a virus has on a cell, discovering how our immune system responds to a virus. That discovery, decades on, has informed the latest generation of cancer treatments: targeted immunotherapies. So when Professor Chubb himself began undergoing targeted immunotherapy for metastatic kidney cancer, he found himself the unexpected beneficiary of some great science. “The treatment I’m having has its origins in basic science research 30 to 40 years ago,” said Professor Chubb, who is receiving the drug through a clinical trial at Macquarie University Hospital. “It’s not just Peter Doherty, important as he was, but a great many scientists have made contributions over the decades to the treatment I’m getting. Even I myself had used more primitive monoclonal antibodies in my own lab as a young researcher in the neurosciences.” Professor Chubb was diagnosed with clear cell renal cancer in 2016. He had his kidney removed at the time, but a few months later, unexpectedly, metastatic lesions were found in his lungs. His oncologist in Canberra referred him to Professor Howard Gurney, Director of Clinical Trials in the Faculty of Medicine and Health Sciences at Macquarie University, to see if he was a suitable candidate for an immunotherapy trial. Macquarie University is a growing leader in making available to patients the latest and most promising medical treatments. Immunotherapy trials for treating cancer have become one of the Hospital’s biggest and most important. “What immunotherapies aim to do is switch the immune system back on at the microscopic level where cancer cells and immune cells interact,” said Professor Gurney. “The big change is that this approach doesn’t target the cancer. Instead, it targets the immune cells and tries to activate them to block the cancer. So far it is showing great promise. In some patients, we are seeing cancers disappear!” Such is the case for Professor Chubb, whose last CT scan and blood tests showed him to be cancer-free. The experimental drug has wiped away any trace of Chubb’s cancer. Chubb’s experience, while still not representative of the majority of patients, is an increasingly common story from the world of cancer immunotherapy, which is revolutionising the field of oncology. “My alternative to this treatment would have been chemotherapy, which would have had a very different effect on my quality of life and possibly, as it turns out, a very different prognosis,” he said. “With the immunotherapy treatment, in almost one and a half years of treatment, I’ve really only had four days of downtime, and to see CT scans of my lungs with no visible lesions is stunning. “I never expected to be a subject in a research project, but I am happy that the dedication of all the scientists and clinicians over many years has led to my treatment.”
Macquarie University Hospital held its second free public forum on lymphoedema in March as part of World Lymphoedema Day. The feared complication of cancer treatment impacts the daily lives of many patients.

The free forum discussed early detection, self-care, the role of exercise, surgery, consumer advocacy and current reimbursement schemes. It is our way of giving back to the community that supports us so much.

Macquarie University Hospital’s ALERT lymphoedema program offers life-changing treatment options. The ALERT program is one of the most comprehensive lymphoedema programs in the world, with advanced imaging, early detection programs, clinical trials and a range of surgical options (including lymph node transfer and lymph-venous anastomosis) in a not-for-profit research environment.

**PATIENT STORY:**

**JASMINE O’DONOGHUE**

After 15 episodes of infection requiring four hospital admissions, Jasmine found out about the ALERT lymphoedema program at Macquarie University. Jasmine was getting fed-up with the lack of success with massage and compression garments and the number of days she had to take off work because of infections. Her condition affected the way she dressed and the shoes she wore.

Lymphoedema causes swelling, pain and heaviness in affected limbs as well as directly impacting on living costs due to the need for increased medical and therapist consultations. Compression garments are currently not reimbursed by Medicare and health funds only provide limited coverage.

“I was desperate to find a solution and found the ALERT program through my GP,” said Jasmine. “I didn’t realise that lymphoedema caused fat deposition in my leg and that surgery was an option. I joined a health fund, waited a year for my cover to kick in, and had liposuction surgery under the care of Drs Mackie and Lam in November 2017. They removed 1.5Kg of excess fat from my left leg.”

“For Jasmine to be diagnosed with melanoma at 12 years old was hard enough, but to live with a swollen leg as a daily reminder of her diagnosis was mentally and physically draining. To then be hit with the added financial burden required to treat this life-long condition is a further slap in the face,” said Professor Boyages, director of the ALERT program.

“Approximately 20% of cancer survivors will develop lymphoedema,” Professor Boyages continued. “At the moment, surgical intervention for lymphoedema is very costly, with limited support from Medicare, so it is out-of-reach for many patients. Our aim is to continue lobbying the healthcare industry to make these life-changing treatments more accessible to the wider community.”

“The surgery changed my life,” Jasmine said. “Before the operation, I was very limited in what I could do. Now I’m able to start walking longer distances, and I’m jogging and trying out new sports. This has had a massive impact on my health and my wellbeing”, she continued.

**ABOUT PROFESSOR JOHN BOYAGES**

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**Heal. Learn. Discover.**

**Cancer**
Dementia is proving to be one of the greatest global health and social challenges of our time. With no disease-modifying treatment currently available, interventions targeting the modifiable risk factors of dementia currently are our ‘best medicine’.

Recent research has shown that of all the modifiable risk factors for dementia, mid-life hearing loss is one of the most significant.

“We know that untreated hearing loss is associated with an increased risk of developing dementia,” said Professor Amanda Barnier from the Department of Cognitive Science at Macquarie University, and part of an interdisciplinary group of hearing, memory and ageing practitioners and researchers at the Australian Hearing Hub.

“Hearing loss can lead to social disengagement, isolation and depression – themselves all risk factors for developing dementia. So together with collaborators from Cochlear Limited, Australian Hearing and its research arm National Acoustics Laboratory, and Macquarie University’s Centre for the Implementation of Hearing Research and Centre for Emotional Health, we are studying the relationship between hearing loss, successful communication, emotional health and cognitive decline.”

In one recently completed ARC-funded study, Professor Barnier, Dr Cella Harris (also from Cognitive Science) and Professor Greg Savage (from the Department of Psychology) worked with couples who have been married for, on average, 50 years. The researchers investigated whether shared remembering in intimate groups like this can compensate for, and possibly protect, older adults from the effects of cognitive decline and very early dementia.

This research was conducted in partnership with the Australian Imaging, Biomarkers and Lifestyle (AIBL) Study of Ageing, established in 2006 to discover the factors that predict subsequent development of Alzheimer’s disease. Professor Savage and Professor Ralph Martins (from Macquarie University’s Department of Biomedical Sciences) are two of the leaders of this study, the largest of its kind in Australia.

Working with AIBL, Professor Barnier, Dr Harris and Professor Savage interviewed long-married couples about their memories of daily life – such as the names of friends, holidays they had taken and events of their wedding day – first alone, and then together.

“We ask them to engage in memory collaboration – to remember different kinds of information together,” explained Dr Harris. “We compare their joint remembering with how they remember alone, and map the ways in which they support one another’s cognition. We hope to identify the communication or conversational strategies that couples use to successfully remember together.”

The researchers are testing ‘distributed cognition’ – an idea from philosophy that says we use and rely on people and things outside our head to support and scaffold everyday mental processes.

“As children, our parents teach us what is worth remembering and help us when we forget,” said Dr Harris. “As adults, we jog our memories with objects in our environment such as markers in the landscape, photo albums, travel souvenirs and iPhones. We also form ‘transactive memory systems’ with partners, family and friends to share the load of encoding, storing and retrieving important memories and information.”

An important finding is that couples remember much more on average when interviewed together than when interviewed alone, especially for more personally relevant memory tasks.

Additionally, the researchers are working to identify communication strategies that predict successful memory collaboration.

“Couples who agree on a strategy for remembering together, who offer memory cues to one another and who acknowledge and repeat their partner’s contributions typically remember better together,” explained Dr Harris. “Also, couples who are sensitive to one another’s memory abilities are more likely to use memory strategies that increase their collaborative success.”

The possibility that older adults may benefit cognitively from collaborating with their partner might help to explain fascinating new findings from an analysis of over 87,000 people involved in 15 studies of dementia from around the world: married people were found to have a 42 per cent lower risk of developing dementia than lifelong singletons and a 20 per cent lower risk than bereaved people.

In studying long-married AIBL couples, the researchers are also finding that not all couples collaborate successfully. Couples who disagree on a memory strategy or who correct or discount the contributions of their partners appear less successful when remembering together. Also, couples where one partner dominates the conversation show less evidence of the collaborative strategies that predict memory success.

The researchers noticed another important pattern – although they weren’t looking for it to begin with.

“Couples who report hearing difficulties in everyday life and who seem to have trouble hearing one another during our interviews appear to gain much less benefit from remembering together,” said Professor Barnier.

“Difficultly hearing your family and friends is not just socially isolating but is cognitively isolating as well. If you are cognitively isolated, you may miss out on the benefits of distributed cognition.”

The research team is about to embark on a large, cross-sectional, observational program to test possible links between hearing loss and cognitive impairment. This research will evaluate whether hearing treatment can improve communication and collaboration, can combat social isolation and depression, and have flow-on benefits for cognitive performance and health.
A DEFINITIVE TEXT:
ORDINARY SURGERY
Macquarie University’s Professor Ray Sacks and two Harvard University colleagues Professors Benjamin Bleier and Suzanne Freitag are co-authors of the newly released Endoscopic Surgery of the Orbit: Anatomy, Pathology, and Management. Published by Thieme, the book is the benchmark reference on endoscopic surgery of the orbit. It focuses on surgical innovations in lacrimal and orbital surgery, including endonasal and transorbital endoscopic approaches to the orbital apex and skull base.

AHEAD OF THE GAME: OUR OUTSTANDING SKULL BASE SURGERY TEAM

MACQUARIE UNIVERSITY HOSPITAL’S SKULL BASE SURGERY UNIT HAS A CONCENTRATION OF EXPERTISE THAT MAKES IT THE SINGLE BIGGEST AND MOST EXPERIENCED IN NSW, IF NOT AUSTRALIA. THIS MEANS THAT THE TEAM CAN TACKLE COMPLEX CASES USING THE LATEST PROCEDURES.

THE HEAD AND NECK SURGERY TEAM

Professor Richard Harvey, Rhinologist and Skull Base Surgeon
Professor Harvey completed three consecutive fellowships. Initially studying with Professor Valerie Lund at University College of London and then with Professor Rodney Schlosser at Medical University of South Carolina (both world-renowned rhinologists), he then elected to undergo a third fellowship under Professor Aldo Cassol Stamm at Sao Paulo in Brazil, widely regarded as the founder of modern-day endoscopic skull base surgery. Professor Harvey is also one of only two specialist rhinologists to have completed a PhD in NSW and has published in excess of 150 peer-reviewed papers. He has co-edited the textbook Endoscopic Sinus Surgery Optimizing Outcomes and Avoiding Failures with Rodney Schlosser.

Associate Professor Yuresh Naidoo, ENT Surgeon
Associate Professor Naidoo is the second rhinologist in NSW to have completed an advanced fellowship in endoscopic skull base surgery. He trained at the best academic hospitals in America, UK and Australasia with world leaders in advanced rhinology and endoscopic skull base surgery, the Macquarie team can perform highly specialised procedures by advanced endoscopic skull base and orbital surgery techniques.

Done 100 per cent internally, an endoscopic approach uses the nasal cavity, paranasal sinuses or ocular walls to remove brain or eye tumours, including very large lesions on the anterior skull base. Using an endoscopic approach means radiosurgery and external craniotomy are avoided, less damage is caused to surrounding tissues and structures, and patients recover much faster.

“Another reason we are able to offer innovative approaches and take on high-risk cases is because of the multidisciplinary nature of the team that we can assemble,” said Professor Ray Sacks who is Head of Otolaryngology–Head and Neck Surgery at Macquarie University and a world-renowned rhinological surgeon himself.

“Our rhinologists can team up with oculoplastic, plastic and neurosurgeons in treating either particularly big tumours or complex cases,”

“Macquarie University Hospital also has one of the most advanced neurosurgical programs in the country so by collaborating with them, we are able to offer patients what really is the best available by world standards.

“Patients who otherwise would have had patients invasive open surgery are able to be treated by our team through endoscopic means,” said Professor Sacks.

Dr Anjuma Ananda, ENT Surgeon
Dr Ananda was the very first ENT Surgeon to have been given the opportunity to undergo a fellowship and advanced training in endoscopic sinus and skull base surgery under the tutelage of Professor Peter John Wormald who, at that time, was leading the world in his revolutionary approach to endoscopic surgery of the nose and paranasal sinuses. Dr Ananda is also the Head of the Department of Otolaryngology–Head and Neck Surgery at Royal Prince Alfred Hospital in Sydney and is actively involved in the training of ENT SET trainees.

Dr Raewyn Campbell, ENT Surgeon
Dr Campbell completed three back-to-back fellowships. Having trained under Professor Sacks at Hornsby and Concord Hospitals as a registrar, she then completed an advanced rhinology fellowship at Auckland City Hospital with Professor Richard Douglas, followed by a fellowship in rhinology and skull base surgery at the world-renowned unit at the University of Pennsylvania under Professor James Palmer. Finally, she completed her training with a further 12 months at Ohio State University Hospital/The James Comprehensive Cancer Centre with Professor Ricardo Carras, who is regarded as the ‘father’ of anterior skull base reconstructive surgery.

Professor Ray Sacks

Professor Sacks is an internationally renowned rhinological surgeon. He was Chief Examiner in Otolaryngology–Head and Neck Surgery for the Royal Australasian College of Surgeons from 2012 to 2014 and President of the Australian and New Zealand Rhinologic Society from 2008 to 2010. He is Past President of the NSW branch of the ASOHNS Society. Professor Sacks has received multiple awards, including the Australian Society of Otolaryngology–Head and Neck Surgery Medal for Outstanding Contribution to the Art and Science of Otolaryngology–Head and Neck Surgery, the International Rhinology Society Medal for Distinguished Service to the International Rhinologic Community and, just recently, the NSW Royal Australasian College of Surgeons Merit Award for services to surgery.

ABOUT PROFESSOR RAY SACKS

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Located within the Department of Otolaryngology–Head and Neck Surgery at Macquarie University and engaged in clinical practice through the Hospital, the team is made up of five skull base surgeons, all of whom have completed multiple advanced international fellowships.

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In November 2017 a new Paediatric service started at Macquarie University Clinic. The Centre for Paediatrics (CentrePaeds) is a Centre of excellence for quality multi-disciplinary paediatric care that brings together a wide range of experienced Paediatricians and Allied Health Professionals.

CentrePaeds is the first private comprehensive and integrated care Paediatric service in the Northern Sydney Local Health District (NSLHD). The dedicated Paediatric service at Macquarie University Hospital Clinics aims to service the local area, it is ideally situated between the two major Tertiary Children’s Hospitals; Sydney Children's Hospital in the east and the Children’s Hospital at Westmead in the west.

The Centre has begun to see a number of complex medical patients that require the integrated services provided by the team. A child with delayed speech and poor social interaction can be quickly diagnosed with Autistic Spectrum Disorder (ASD) through a number of investigations and assessments which will enable the parents to get an accurate diagnosis early to allow intervention and application for NDIS funding to occur.

In teaching and training events for interns and registrars from Sydney University, and currently provides clinical supervision to interns and registrars from several universities. John's clinical and research interests focus on the diagnosis and treatment of neurodevelopmental disorders (in particular, Autism Spectrum Disorders, ADHD and Dyslexia) as well as children in care due to trauma and abuse. John is a supervising member of the APS College of Clinical Psychologists and is actively involved in teaching and training events for parents, teachers and colleagues around the country.

**Associate Professor Daniel Lin** (General Paediatrician)
Daniel the founder and director of CentrePaeds, is a General Paediatrician who has been clinical practice for over 25 years. Dr Lin was trained at the Royal Alexandra Hospital for Children located at Camperdown before it moved to Westmead under the vision and direction of Dr John Yu. Dr Lin was the first Fellow in General Medicine at the Children’s Hospital at Westmead.

He has trained and completed further studies in Medical Education and Allergic diseases. He has a children. He sees all Paediatric patients from simple to chronic complex problems and has a special interest in allergic diseases. His vision is to provide quality diagnostic and management care in a timely manner. Daniel speaks Chiu Chow and limited Cantonese and Mandarin.

**Dr Elizabeth Pickford** (Paediatric Allergist)
Elizabeth has been a Consultant Paediatrician since 1993, working in her own practice, as well as at the RPAH Allergy Unit since 1999. She specialises in food intolerance and allergy, and its contribution to babies’ and children’s health and development. She graduated from the University of Sydney in 1986 with Honours, gaining first place in her year in Paediatrics and therefore earning the Carnation Prize for “Profiency in Paediatrics”. She completed her Specialist training at The Children’s Hospital Camperdown, and has since had many years in a busy Paediatric practice. She has two children of her own, which makes her very approachable, and gives her a special understanding of the problems which parents sometimes face.

**Dr John Widger** (Paediatric Respiratory and Sleep Physician)
John is a Paediatric Respiratory and Sleep Physician. He is the Head of Respiratory Medicine at Sydney Children’s Hospital, John grew up in Ireland where he graduated from the Royal College of Surgeons Medical School. He began his paediatric training in Dublin before moving to Melbourne in 2004. He completed fellowships in Respiratory Medicine at the Royal Children’s Hospital in Melbourne and in Sleep Medicine at the Melbourne Children’s Sleep Center at Monash Children’s, John has expertise in childhood lung conditions such as asthma, cough and chest infections. He is also an expert in childhood sleep issues such as obstructive sleep apnoea, night time waking and bedtime refusal. John has published research in several peer reviewed journals and has an ongoing involvement in research and teaching. His patients have access to the state of the art respiratory laboratory at Sydney Children’s and to sleep studies at St Luke’s Hospital.

**Dr Monique Stone** (Paediatric Endocrinologist)
Monique is a Consultant Paediatrician and Paediatric Endocrinologist. She works part time in private practice, and in a senior medical role at the Therapeutic Goods Administration. She is also a lecturer at the University of Sydney, and a member of a number of Paediatric Endocrine groups. She studied medicine at The University of Sydney where she graduated with honors. After completing her training in General Paediatrics, she pursued further training in Paediatric Endocrinology at the Sydney Children’s Hospital. Special interests include adolescents, obesity, and public health. She has enjoys working with children and their families to enable all to lead a fulfilling life despite health concerns. Working with and in the community in private practice is an ideal way to tailor health care to fit the needs of her patients.

**John Blythe** (Psychologist)
John is a clinical child psychologist who directs several paediatric clinics across Sydney. He has served as a Lecturer and adjunct fellow in the School of Psychology at Western Sydney University, and currently provides clinical supervision to interns and registrars from several universities. John’s clinical and research interests focus on the diagnosis and treatment of neurodevelopmental disorders and young people with attention deficit hyperactivity disorder, hyperlexia, dyslexia, as well as children in care due to trauma and abuse. John is a supervising member of the APS College of Clinical Psychologists and is actively involved in teaching and training events for parents, teachers and colleagues around the country.

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Joseph Hong (Psychologist)
Joseph is a registered psychologist and a clinical psychology registrar with experience working with children, adolescents, and their family members who may present with a wide range of paediatric presentations relating to psychological and behavioural concerns, including but not limited to: autism spectrum disorder, Attention Deficit/Hyperactivity Disorder (ADHD), Down syndrome, Oppositional Defiant Disorder (ODD), intellectual disability and learning difficulties, and other problematic behaviours. Joseph maintains an enthusiastic, warm, and empathic person-centred approach in working with all clients and their family members. Joseph draws knowledge from various evidence-based interventions, including but not limited to Cognitive Behavioural Therapy (CBT), Acceptance-Commitment Therapy (ACT), motivational interviewing, mindfulness, and play therapy.

Melissa Compton (Speech Pathologist and Feeding Specialist)
Melissa has over 19 years of clinical experience working in Sydney, in rural communities, and hospitals in England. She has worked in the Special Care Nursery, Neonatal Intensive Care Unit and Postnatal Ward at Westmead Hospital where she has gained extensive experience in the assessment and management of feeding difficulties in neonates and infants. Her areas of expertise include feeding difficulties related to craniofacial anomalies, cleft lip and/or palate, prematurity, complex medical conditions in the newborn and tongue tie. She has experience in salivary management working with infants and children with disabilities. She has a certificate of accreditation in the Sequential Oral Sensory (SOS) Feeding Program. She is a registered provider with the National Disability Insurance Agency (NDIS).

Jane Dostine (Dietician Specialising in Allergy)
Jane has expertise in food intolerance and allergy and has been working in her own private practice for many years having gained 15 years of experience with the specialized team at The Royal Price Alfred Hospital Allergy Unit. She completed her Masters in Human Nutrition and Dietetics at The University of Sydney in 1992, is recognized as an Accredited Practising Dietitian and is a member of the Dietitians Association of Australia. Jane also has a Certificate in Home Economics, has travelled extensively, contributed to pilot studies for Aboriginal maternal health and worked as a respiratory technician. Her interests include creating great food, outdoor activities and balancing family.

CENTREPAEDS LINKS WITH A NUMBER OF OTHER SERVICES INCLUDING:
- WISE Emergency wristmedical.com.au
- MQENT - Prof Catherine Birman and Dr Mark Smith
- Macquarie University - Hearing Clinic and Paediatric Speech Pathologists
- Macquarie University Health - Paediatric Ophthalmology
- Macquarie University Health - Gastroenterology and Physiotherapists
- Douglas Hardy Moir Pathology
- Macquarie Medical Imaging

There are future plans to develop other specific subspecialty Paediatric Services including:
- Paediatric Cardiology and Paediatric Surgery
- Integrated Autism Service

HOW TO REFER?
Phone (02) - 9812 3950
Fax (02) - 9475 4565
Email contact@centrepaeds.com
Website www.centrepaeds.com

TREATING ACUTE STROKES MECHANICALLY

WHEN A PATIENT UNEXPECTEDLY SUFFERED A STROKE WHILE WAITING FOR ANOTHER PROCEDURE, MACQUARIE UNIVERSITY HOSPITAL RAPIDLY ASSEMBLED AN EXPERT TEAM TO PERFORM A SUCCESSFUL MECHANICAL STENT THROMBECTOMY – INCREASINGLY RECOGNISED AS A SUPERIOR PROCEDURE FOR CERTAIN ACUTE STROKE PATIENTS.

In January this year, a patient, while waiting to have an elective coronary angiogram at Macquarie University Hospital, found himself unexpectedly undergoing a different procedure after suffering an acute stroke in the waiting area of the Hospital’s Angiography suite.

The patient’s sudden inability to talk and loss of movement with severe weakness on one side of his body alerted staff, and a code blue was called.

Imaging, which was immediately arranged through Macquarie Medical Imaging, demonstrated occlusion of the middle cerebral artery. The patient deteriorated further and was returned to the Angiography lab for an emergency acute mechanical stent thrombectomy, performed by Dr Brendan Steinfort, Interventional Neuroradiologist at Macquarie University Hospital.

“There are 50,000 acute strokes in Australia each year,” explained Dr Steinfort, a pioneer in acute stroke treatment with advanced expertise in carotid stenting, cerebral aneurysm treatment and intracranial hypertension.

“Standard treatment includes intravenous tissue plasminogen activator to break down blood clots.

“However, approximately 20 per cent of acute stroke patients would potentially benefit from mechanical thrombectomy – a new treatment that uses ‘stent-trievers’ devices to remove the thrombus.

“Although fully approved for use in Australia, in New South Wales, only about 400 of a potential 2000 patients who may benefit from this procedure receive it. This is due to factors such as delayed presentation, lack of clinician awareness and difficulty accessing resources in a timely fashion.”

The team treating the patient was rapidly assembled.

Admitting physician and cardiologist Dr Ru-Dee Ting, neurologist Professor Dom Rose, anaesthetists, cath lab staff and the ICU all worked alongside Dr Steinfort to provide the best possible outcome. The complex procedure required multiple thrombectomy runs and Respo inhalation.

The patient was transferred to ICU following the procedure. He improved overnight and was discharged three days later with no neurological deficit from the stroke.

“This treatment is nothing short of a ‘miracle cure’ as evident by the patient walking away from hospital, symptom free, three days later,” added Dr Steinfort.

Dr Steinfort was the first person in Australia and probably the second in the world to perform a mechanical stent thrombectomy for acute stroke. Working collaboratively with Dr Kenneth Faulder and Dr Timothy Harrington – also at Macquarie University Hospital – Dr Steinfort has participated in extensive research, including one of the first case series of mechanical stent thrombectomy. This IRN team was the only Australian unit in the Solitaire Thrombectomy for Acute Revascularisation (STAP) trial and the only Sydney unit to participate in the seminal EXTEND-IA trial.

ABOUT DR BRENDAN STEINFORT
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Heal. Learn. Discover. Neurosciences
Macquarie University Hospital
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BECTON DICKINSON PUBLIC REALM UPGRADE

CONSTRUCTION ON THE BECTON DICKINSON (BD) PUBLIC REALM UPGRADE BEGAN ON MONDAY 26 FEBRUARY WITH THE ESTABLISHMENT OF A CONTRACTOR SITE COMPOUND. THE COMPOUND WILL BE SITUATED ON THE SECTION OF ROAD ON RESEARCH PARK DRIVE THAT’S BEEN CLOSED TO TRAFFIC SINCE DECEMBER. PEDESTRIAN TRAFFIC TO THE HOSPITAL AND CLINIC FROM THE STATION WILL BE DIVERTED TO THE FOOTPATH ON THE WESTERN SIDE OF RESEARCH PARK DRIVE, AS PER THE MAP BELOW.

WHEN DO THE WORKS COMMENCE?
Works commence on 26 February 2018.

HOW LONG WILL THE WORKS TAKE?
Construction will be completed by mid-October 2018.

WILL MY ACCESS TO THE HOSPITAL AND CLINIC BUILDING BE DISRUPTED?
Access to the main entry to the Hospital and Clinic building will not be affected. The rear access to the hospital from Innovation Road will remain open but restricted to a safe corridor through the construction zone.

WILL MY ACCESS TO THE HOSPITAL BASEMENT CARPARK BE DISRUPTED?
Access to the Hospital carpark and loading dock off Research Park Drive will not be affected by the works and its business as usual. However, vehicle access via Herring and Innovation Roads will not be possible for periods during construction and staff and visitors to the Hospital and the East 2 and East 3 car parks are advised to get into the routine of using Talavera Road to enter the University and stay clear of Innovation Road altogether.

Regular construction updates will be issued throughout construction to advise of road closures and changed access.

MACQUARIE RHINOLOGICAL SURGEONS RECOGNISED

TWO ENT SURGEONS FROM MACQUARIE HAVE BEEN GIVEN THE SOCIETY MEDAL FOR DISTINGUISHED CONTRIBUTION TO THE ART AND SCIENCE OF OTOLARYNGOLOGY, HEAD AND NECK SURGERY.

Professor Richard Harvey and Professor Catherine Birman were both recognised for their outstanding contribution to their field of medicine.

Professor Harvey has obtained three international fellowships working with the leading ENT endoscopic surgeons in the world and now has an outstanding national and international reputation as an educator, researcher, surgeon and leader in the field.

Associate Professor Birman is one of the most experienced cochlear implant surgeons in the world, having performed over 1,000 cochlear implant procedures. She is a pioneer in the field of cochlear implants for children with complex medical conditions.

AOSHN recognises just two recipients each year and this year, both are at Macquarie. Two years ago, Professor Ray Sacks, also from Macquarie University Hospital, received the same award.

The Hospital is delighted to have three medal recipients all actively working in the Department of Otolaryngology, Head and Neck Surgery.

GAMMA KNIFE UPDATE

SUCCESS IN ARTERIOVENOUS MALFORMATIONS

The Gamma Knife team to date have treated 26 arteriovenous malformations. Eighteen have been treated from 2016. As the majority of these cases have only been treated in the last 2 years, the follow up period is short.

It is extremely encouraging however that the lesions that have been treated at MUH are responding as predicted in comparison with worldwide treatment data.

Obliterated on DSA
Obliterated on MR angiogram but the team are awaiting a longer period before DSA is performed
decreased in size with reduced flow through them
have not had follow up imaging yet
STAGE 1 WORK HAS STARTED ON ROADS AND MARITIME SERVICES’ MACQUARIE PARK BUS PRIORITY AND CAPACITY IMPROVEMENTS PROJECT.

The Stage 1 road and intersection upgrades will support the running of the additional buses that will replace trains for around seven months between Epping and Chatswood (including at the Macquarie Park and Macquarie University train stations) from late 2018 during the Sydney Metro Northwest construction.