

# SURGICAL & PERIOPERATIVE SERVICES



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**Dr Barry O'Loughlin**  
Executive Director  
Surgical and Perioperative Services

Surgical and Perioperative Services is made up of twelve speciality departments and the operating rooms service at the Royal Brisbane and Women's Hospital. The Service Line provides a wide range of surgical services to Metro North Hospital and Health Service and is a major tertiary referral centre for Queensland. The importance of clinical research is reflected by significant research activities in the departments.

In 2019, the programs of research have greatly expanded across all departments with increased grants awarded and enrolments in higher research degrees. A significant number of our clinicians hold concurrent university academic appointments for research and teaching. Our clinician researchers have been recognised by awards within Queensland, nationally and internationally.

Our clinicians have a strong history of presenting clinical cases at conferences, and in 2019 there were an increased number of research presentations as the result of extensive collaborations. Many of the presentations have also been published in peer-reviewed journals. The rotation of junior clinicians has provided many new research opportunities.

The research momentum continues to build and bodes well for a very productive 2020. Many of our speciality departments have completed preliminary planning for research collaborations with the Herston Biofabrication Institute in association with academics and industry partners.

We acknowledge our continuing growth in research capacity across Surgical and Perioperative Services and look forward to strong research infrastructure and capabilities in the coming year.

# DEPARTMENT OF ANAESTHESIA & PERIOPERATIVE MEDICINE/RESEARCH

## INTEREST IN ANAESTHESIA (RIGA)

The Department of Anaesthesia and Perioperative Medicine research team continues to grow and expand through collaborations at state, national and international level. Our research aims to improve the efficiency and efficacy of anaesthesia care as well as improving the patient experience. There have been many highlights in 2019 including when the Centre for Excellence and Innovation in Anaesthesia (CEIA) hosted the 3<sup>rd</sup> Royal Brisbane and Women's Hospital Perioperative Patient Blood Management Symposium. This two-day event showcased local, national and international experts presenting state of the art knowledge and the latest research in Perioperative Patient Blood Management.

The department has been awarded five scholarships and over \$638,000 in grant funding this year. Departmental members have been awarded prizes at the ASA Society of Anaesthetists conference and at the 2019 Herston State of the Art Symposium. This year we are proud to announce that **Assoc. Prof Kersi Taraporewalla** was the recipient of the Stuart Henderson Award, for his excellence and outstanding contribution, scholarship, and mentorship to medical education in the field of anaesthesia and **Prof André van Zundert** has been listed as one of the Top Ten World Experts in Airway Management for 2019, being placed in the top 0.1% of scholars writing about Intratracheal Intubation worldwide over the past 10 years. **Assoc. Prof Kerstin Wyssusek** was awarded the overall Winner of the "Individual Award for Outstanding Achievement" for the 2019 Queensland Health Awards for Excellence with her team also gaining the "Minister Award for Excellence" on their commitment to recycling in operating theatres and received one of three financial prizes from the Honourable Steven Miles, Minister for Health and Minister for Ambulance Services in Queensland.

The department facilitates a research culture providing mentorship, group support and guidance. The department participated in the UQ Summer Research Program which provided three UQ medical students an opportunity to gain research experience with our leading researchers. Three anaesthetists have also completed their PhD confirmation.

With many new research opportunities in our forecast for 2020, our aim of research in anaesthetics is to advance optimal anaesthetic care for patients based on world class, research based clinical practice.

Photo taken at the 2019 Queensland Health Awards for Excellence



Left to right: Honourable Steven Miles, Minister for Health and Minister for Ambulance Services in Queensland, **Assoc. Prof Kerstin Wyssusek**, **Prof André van Zundert**, Alexa Chadwick (RN), Kate Mason (Deputy Executive Director RBWH), Dr Maggie Keys

## Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
<b>Dr Julie Lee</b>	PhD (UQ 2015-2019)	ROTEM Thromboelastometry in Obstetrics	<b>Prof André van Zundert, Assoc. Prof Jeremy Cohen, Assoc. Prof Kerstin Wyssusek, Assoc. Prof Victoria Eley</b>
<b>Dr Michelle Roets</b>	PhD (UQ 2017-2021)	Intraoperative Cell-Salvage: a cost benefit analysis	Assoc. Prof David Sturgess, <b>Prof André van Zundert, Assoc. Prof Kerstin Wyssusek, Dr Melinda Dean</b>
<b>Dr Angela Tognolini</b>	MPhil (UQ 2018-2020)	Intraoperative lignocaine infusions development of an optimised infusion dosing regimen of obese patients	<b>Assoc. Prof Victoria Eley, Prof Jason Roberts</b>
<b>Adj. Assoc. Prof Kersi Taraporewalla</b>	PhD (UQ 2017-2021)	Teaching and learning psychomotor skills in anaesthesia	<b>Prof André van Zundert, Prof Jeffrey Lipman</b>
<b>Dr Louis Guy</b>	MPhil (UQ 2018-2020)	Oxygen delivery in obese patients undergoing bariatric surgery	<b>Assoc. Prof Victoria Eley, Prof André van Zundert, Prof Jeffrey Lipman</b>
<b>Cienwen Town</b>	PhD (UQ 2017-2021)	Regional anaesthesia as an intervention for the treatment of burn related procedural pain	Dr Haakan Strand, <b>Prof André van Zundert, Dr James Johnson</b>
<b>Dr Sue Lawrence</b>	MPhil (2017-2019)	Lumbar interspinous ligament: a detailed anatomical and imaging investigation	Assoc. Prof David Reutens, Assoc. Prof David Sturgess

## RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Assoc. Prof Victoria ELEY</b>	Associate Professor	0.125 0.625	Fellowship Operational	Faculty of Medicine	University of Queensland
<b>Dr Louis GUY</b>	Senior Lecturer	0.125	Scholarship	Faculty of Medicine	University of Queensland
<b>Dr Julie LEE</b>	Senior Lecturer	0.25 0.25	Scholarship Grant	Faculty of Medicine	University of Queensland
<b>Dr Michelle ROETS</b>	Senior Lecturer	0.125 0.125	Scholarship Grant	Faculty of Medicine	University of Queensland
<b>Dr Angela TOGNOLINI</b>	Senior Lecturer	0.03125 0.03125	Scholarship Grant	Faculty of Medicine	University of Queensland
<b>Christine WOODS</b>	Research Coordinator Nurse Manager	0.8	External	Anaesthetic Department	RBWH
<b>Molly CLARRIS</b>	Clinical Research Nurse	0.6	External	Anaesthetic Department	RBWH
<b>Simon HOLZ</b>	Clinical Research Nurse	0.6	External	Anaesthetic Department	RBWH
<b>Dr Heather REYNOLDS</b>	Clinical Research Nurse	0.5	Operational	Anaesthetic Department	RBWH

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Cienwen Town</b>	<b>Dr James Johnson, Dr Julie Lee, Prof André van Zundert, Dr Jason Brown</b>	Ultrason-Guided Regional Anaesthesia in Patients receiving Dressing Change After Split-Skin Grafting for Upper Limb Burn Injuries: A Prospective Randomized Study, REPAIR Study
<b>Cienwen Town</b>	<b>Dr James Johnson, Dr Julie Lee, Prof André van Zundert, Dr Jason Brown</b>	Ultrason-Guided Regional Anaesthesia in Patients receiving Split-Skin Grafting for Various Burns with Donor Sites from the Upper Thigh: A Prospective Randomized Study, RELIEVE study
<b>Dr Julie Lee</b>	<b>Prof André van Zundert, Assoc. Prof Jeremy Cohen, Assoc. Prof Kerstin Wyssusek, Assoc. Prof Victoria Eley, Dr Amy Krepska, Dr Claire Manning</b>	ROTEM® and platelet function in pre-eclamptic obstetric patients
<b>Dr Julie Lee</b>	<b>Assoc. Prof Victoria Eley, Dr Rebecca Kimble, Prof Andre van Zundert, Dr John Rowell, Assoc. Prof Kerstin Wyssusek</b>	ROTEM® thromboelastometry in obstetrics: baseline parameters in normal and complicated pregnancies. A prospective observational study on labour ward inpatients
<b>Assoc. Prof Kersi Taraporewalla</b>	<b>Assoc. Prof Kersi Taraporewalla, Penelope Sanderson, Marcus Watson, Dr Heather Reynolds, Prof Andre Van Zundert</b>	Respiratory Sonification Trial
<b>Assoc. Prof Kerstin Wyssusek</b>	<b>Cienwen Town, Dr Michelle Roets, Prof Andre Van Zundert</b>	Pre-existing Iron Deficient Anaemia and patient Blood Management practices at RBWH
<b>Assoc. Prof Kerstin Wyssusek</b>	<b>Cienwen Town, Dr Michelle Roets, Prof Andre Van Zundert</b>	Pre-existing Iron Deficient Anaemia and patient Blood Management practices at RBWH in accordance with NSQHS standards Guide: Standard
<b>Assoc. Prof Kerstin Wyssusek</b>	<b>Dr Matthew Wagner, Dr Julie Lee, Dr Michelle Roets, Prof Andre Van Zundert</b>	Ten Year Review of Transfusion Practises During Rapid Transfer in Urgent Trauma Cases (RUPTURE)
Lizanne Dalgleish	<b>Prof Fiona Coyer, Jill Campbell, Kathleen Finlayson, Prof Andre Van Zundert</b>	Microcirculatory dysfunction and Skin Failure in Critically ill patients. An exploratory study
<b>Dr Louis Guy</b>	<b>Dr Rebecca Christensen, Assoc. Prof Victoria Eley, Dr Ben Dodd, Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert</b>	Transnasal humidified Rapid-insufflation ventilator exchange (THRIVE) in obese adults: a randomised controlled trial
<b>Laura McDermott</b>	<b>Dr Amy Krepska, Dr Susie De Jersey, Assoc. Prof Victoria Eley</b>	Oral intake during labour – a survey of post-partum women
<b>Dr Michelle Roets</b>	<b>Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert, Dr Melinda Dean, Dr John-Paul Tung, Prof Robert Flower</b>	Does transfusion-related immune modulation occur following intraoperative cell salvage? A pilot study (TRIMICS)
<b>Dr Michelle Roets</b>	<b>Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert, Dr David Sturgess, Assoc. Prof Louisa Gordon</b>	COSTOMICS (The Cost of Missed Intraoperative Cell Salvage)
<b>Dr Rebecca Christensen</b>	<b>Assoc. Prof Victoria Eley, Prof Leonie Callaway, Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert, Dr Ben Dodd, Dr Michael Stowasser</b>	Validation of Clearsite finger-cuff in patients with problematic non-invasive blood pressure measurement undergoing elective bariatric surgery
<b>Dr Sandra Concha Blamey</b>	<b>Assoc. Prof Kerstin Wyssusek, Dr Kate Taylor</b>	A prospective audit of Patient Blood Management knowledge in a subgroup of junior doctors at the Royal Brisbane and Women's Hospital
<b>Assoc. Prof Victoria Eley</b>	<b>Dr Peter Ceglowski, Katie Lehane, Christopher Chow, Anita Pelecanos, Dr Angela Tognolini</b>	Arm dimensions of patients with obesity and their experiences with blood pressure measurement: an observational study
<b>Assoc. Prof Victoria Eley</b>	<b>Dr Rebecca Christensen, Dr Helen Barrett, Prof Andre Van Zundert, Dr Mathew Smith, Prof Michael Stowasser</b>	Validation of blood pressure readings from the Clearsite finger-cuff compared with invasive blood pressure readings in pregnant women undergoing elective Caesarean section, who have arms which don't suit regular arm cuffs
<b>Assoc. Prof Victoria Eley</b>	<b>Christopher Chow, Dr Peter Ceglowski, Katie Lehane</b>	Blood pressure measurement in patients presenting for bariatric surgery – the patient experience
<b>Assoc. Prof Victoria Eley</b>	<b>Christopher Chow, Dr Peter Ceglowski, Katie Lehane, Anita Pelecanos, Dr Kellie Wren</b>	Arm and finger measurements in adults presenting for elective surgery
<b>Assoc. Prof Victoria Eley</b>	<b>Dr Sarah Emily Douville, Prof Leonie Callaway, Dr Akwasi Amoako, Prof Jason Roberts</b>	Post-caesarean section infection
<b>Dr Angela Tognolini</b>	<b>Dr Dwane Jackson, Assoc. Prof Victoria Eley, Prof Jason Roberts, Prof Jeffery Lipman, Assoc. Prof Kerstin Wyssusek, Prof Andre Van Zundert</b>	Intraoperative Lignocaine Infusions: Development of an optimised infusion dosing regimen for obese patients

## Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Prof Andre van Zundert</b>	<b>Assoc. Prof Kerstin Wyssusek, Benjamin Keir, Dr Maria Moon,</b> Anita Pelecanos	Patient risks associated with blue and green ambient light in modern interventional suits and incorrect drug identification by anaesthetic staff
<b>Dr Angela Tognolini</b>	<b>Robert Smith, Dr Dwane Jackson, Assoc. Prof Victoria Eley, Prof Jason Roberts</b>	Determining optimised dosing of prophylactic piperacillin and tazobactam in elective pelvic exenteration surgery
<b>Dr Andrew Souness</b>	<b>Dr Angela Tognolini, Dr Dwane Jackson</b>	Utility of non-invasive and continuous total haemoglobin (SpHb) monitoring in pelvic exenteration surgery
<b>Dr Gillian Wright</b>	<b>Dr Susan Petrie, Dr Carl Lisek, Assoc. Prof Kerstin Wyssusek,</b> Assoc. Prof Alison Mudge, Dr Antony Ji, Sharon Neilson	ASA: A prospective clinical audit looking at perioperative outcomes of high-risk surgical patients admitted to the acute surgical unit at the Royal Brisbane and Women's Hospital during a three-month period
<b>Prof André van Zundert</b>	<b>Assoc. Prof Kerstin Wyssusek, Dr Nathan Peters,</b> K. Pun, Anita Pelecanos, P. Barach, <b>Assoc. Prof Victoria Eley</b>	Comparative study of the neck anatomy in non-obese vs morbidly obese patients using ultrasound of internal jugular vein and common carotid artery
<b>Assoc. Prof Kerstin Wyssusek</b>	<b>Dr Paul Gray, Sandra Concha Blamey, Prof André van Zundert</b>	A cross-sectional study of the relationship between iron deficiency anaemia and chronic pain in patients presenting to a multidisciplinary pain centre in a tertiary referral hospital

## Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Prof Tomás Corcoran <i>(UWA) Australia</i>	<b>Dr Julie Lee, Dr Gareth Collins, Assoc. Prof Victoria Eley</b>	The Perioperative Administration of Dexamethasone and Infection
Dr Judy Munday <i>(QUT)</i>	<b>Assoc. Prof Kerstin Wyssusek, Prof Andre van Zundert,</b> Dr Samantha Keogh, <b>Dr Niall Higgins</b>	Non-invasive zero-heat-flux thermometry with invasive oesophageal measurements for consistent perioperative temperature monitoring: A pilot study
Prof Tomas Corcoran <i>(ANZCACTN)</i>	<b>Dr Julie Lee, Dr Michael Edwards, Dr Gareth Collins, Assoc. Prof Victoria Eley</b>	The Perioperative Administration of Dexamethasone and Infection trial
Prof Michael Pender <i>(Atara Biotherapeutics)</i>	<b>Assoc. Prof Kerstin Wyssusek</b>	Follow-up of patients with progressive multiple sclerosis treated with autologous Epstein-Barr specific T cell therapy
Prof Michael Pender <i>(Atara Biotherapeutics)</i>	<b>Assoc. Prof Kerstin Wyssusek</b>	A double-blind, randomized, placebo-controlled phase 2 study with a crossover treatment period to evaluate ATA190 in subjects with progressive multiple sclerosis
Dr David Liu <i>(UQCCR)</i>	Michael Reade, <b>Dr Jason Pincus,</b> Dr Elizabeth Hallt, Amelia Livermore, Kymberley Herbst, Alain Humblet	Clonidine at Low dosage postoperatively to Nocturnally Enhance Sleep (CLONES)
Assoc. Prof Bronwyn Laycock <i>(UQ)</i>	<b>Assoc. Prof Kerstin Wyssusek</b>	The volume of polyethylene terephthalate plastic accumulated in the operating theatres at RBWH
Dr Nicole Marsh <i>(AVATAR Group)</i>	<b>Dr Emily Larsen,</b> Julie Flynn, Prof Claire Rickard, <b>Barbara Hewer, Peter Groom, Kaylene Woollett, Catherine O'Brien, Katrina Southam,</b> Evan Alexandrou	Managing Intravenous Devices among patients with Limited vascular access or prolonged therapy: Investigating the Efficacy of midline catheters – the MIDLINE study

## Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
<b>Dr Gunjan Chawla, Charles Cheung, Dr Geoff Messer, Dr Nathan Peters, Assoc. Prof Kerstin Wyssusek</b>	Winner 2019 Fostering Innovation for Minimising hypothermia after surgery	QUARRIES Day of Excellence Awards
<b>Prof André van Zundert</b>	Placed in the top 0.1% of scholars writing about Intratracheal Intubation worldwide over the past 10 years. The ranking is based on 11,552 articles published worldwide since 2009	2019 Top Ten World Experts in Airway Management

## Research Awards and Achievements *(cont)*

Recipient <i>(RBWH staff in bold)</i>	Award	Event
<b>Dr Andrew Souness</b>	Winner ANZCA Trainee ePoster Prize	ANZCA Moderated ePoster Prize Session at the ASM in Kuala Lumpur (May 2019)
<b>Assoc. Prof Kersi Taraporewalla</b>	Steuart Henderson Award	Presented at the ANZCA ASM 2019 Conference, for his excellence and outstanding contribution, scholarship, and mentorship to medical education in the field of anaesthesia
<b>Dr Yasmin Whately</b>	Steuart Henderson Award Citation	2019 ANZCA ASM
<b>Dr Angela Tognolini</b>	Emerging Leader Conference Delegate	2019 ANZCA ASM
<b>Dr Maggie Keys, Assoc. Prof Kerstin Wyssusek, Prof André van Zundert</b>	Professor William Egerton Award for Medical Research for The volume of recyclable polyethylene terephthalate plastic accumulated during surgical operations at RBWH	2019 Herston State of the Art Symposium
<b>Dr Julie Lee</b>	ASA Prize Winner	Australian Society of Anaesthetists NSC Sydney 21/9/19
<b>Dr Julie Lee, Assoc. Prof Victoria Eley, Assoc. Prof Kerstin Wyssusek, Dr Rebecca Kimble, M Way, J Cohen, Prof André van Zundert</b>	The Gilbert Troup Prize Session presentation. Project: ROTEM® assessment of the combined effect of term pregnancy and obesity on coagulation in healthy women with uncomplicated pregnancies in Australia: A prospective observational study	Australian Society of Anaesthetists NSC Sydney 21/9/19
<b>Dr Julie Lee</b>	HOW Fellowship	Haematology in Obstetrics and Women's Health Collaboration + Haematology Society of Australia and New Zealand, Perth, October 2019
<b>Assoc. Prof Kerstin Wyssusek</b>	1 <sup>st</sup> place in Delivering Healthcare and 2 <sup>nd</sup> place in Individual for Outstanding Achievement	Queensland Health Awards for Excellence 2019
<b>Assoc. Prof Victoria Eley</b>	Integrated Health Free Papers Prize 2019 for Arm circumference and conicity in obese patients – what is the best predictor of arm conicity?	Australian and New Zealand Metabolic and Obesity Surgery Society
<b>Dr Michelle Roets</b>	Intraoperative cell salvage as an alternative to allogeneic (donated) blood transfusion: An evaluation of immune related adverse outcomes	PhD confirmation: 16 August 2019
<b>Dr Louis Guy</b>	Oxygen delivery in obese patients undergoing bariatric surgery	PhD confirmation: 1 October 2019
<b>Dr Angela Tognolini</b>	Intraoperative lignocaine infusions – Development of an optimised infusion dosing regimen of obese patients	PhD confirmation: 8 October 2019

## 2019 Research Publications

### Journal Articles

- Van Zundert AAJ, Wyssusek KH, Pelecanos A, Roets M, Kumar CM.** A prospective randomized comparison of airway seal using the novel vision-guided insertion of LMA-Supreme® and LMA-Protector®. *J Clin Monit Comput.* 2019 Apr 5
- Epstein CR, Forbes JM, **Futter CL, Hosegood IM, Brown RG, Van Zundert AA.** Frequency and clinical spectrum of in-flight medical incidents during domestic and international flights. *Anaesth Intensive Care.* 2019 Jan;47(1):16-22
- Charlesworth M, **van Zundert A.** Medical device regulation: the need for clinical vigilance and oversight. *Anaesthesia* 2019 Feb 21
- Lee J, Eley VA, Wyssusek KH, Coonan E, Way M, Cohen J, Rowell J, van Zundert AA.** Baseline parameters for rotational thromboelastometry (ROTEM®) in healthy women undergoing elective caesarean delivery: a prospective observational study in Australia. *Int J Obstet Anesth.* 2019 May; 38: 10-18
- Van Zundert AAJ, Klein AA.** How to avoid predatory and hijacking publishers? *Eur J Anaesth* 2019; 36 (11): 807-809
- Bos M, **van Zundert AA.** Giant internal jugular vein. *Indian J Anaesth* 2019(6):329-30
- Barach P, **van Zundert A.** The crucial role of human factor engineering in the future of safe perioperative care and resilient providers. *European Society of Anaesthesiology* 2019;(76):1-5
- Bos M, **van Zundert AAJ.** Internal jugular vein location and sono-anatomy. *Acta Anaesthesiol Belg* 2019; (70):49-50
- Town CJ, Johnson J, Van Zundert A, Strand H.** Exploring the Role of Regional Anesthesia in the Treatment of the Burn Injured Patient: A Narrative Review of Current Literature. *Clin J Pain.* 2019;35(4):368-374
- He J Chen J, Huang G, Zhang Z, Zheng H, Zhang P, Zarei R, Sansoto F, Wang R, Ji Y, Xie Z, Wang X, Guo M, Chi C-H, De Souza PA, Zhang J, Lo Y, Chen X, Shi Y, Green D, **Taraporewalla K, van Zundert A.** A polynomial-time algorithm for simple undirected graph isomorphism. *Concurr Comput Pract Exp* 2019: e5484
- Van Zundert AAJ, Hendrickx JFA, Soetens F, Van Gorp J, De Wolf AM.** Contributions to Belgian anaesthesia: Dr. Leo Vaes. *Acta Anaesthesiol Belg* 2019;(70):13-21
- Hade AD, Beckmann LA, Basappa BK.** A checklist to improve the quality of central venous catheter tip positioning – *Anaesthesia.* 2019 Jul;74(7):896-903

## Journal Articles (cont)

13. **Lee, J, Reynolds, H, Pelecanos, AM, Van Zundert AA.** Bi-national survey of intraoperative cuff pressure monitoring of endotracheal tubes and supraglottic airway devices in operating theatres. *Anaesthesia & Intensive Care* 2019; 47 (4): 378-384
14. **Bright M, Chawla G,** Callaway L, **Eley VA.** A five-year retrospective cohort study of maternal, neonatal outcomes and anesthetic management in women with extreme obesity at an Australian hospital. *Acta Anaesthesiologica Belgica.* 2019; 70: 77-83
15. **Van Zundert A,** Klein A. How to avoid predatory and hijacking publishers? *Eur J Anaesthesiol* 2019; 36:1-4
16. Charlesworth M, **van Zundert AAJ.** Digital dystopias: will the electronic health record ever fulfil its potential? *Anaesthesia.* 2019; 74(11): 1361-1364
17. **Eley VA, Chin A,** Sekar R, **Donovan T, Krepska A,** Lawrence M, Bell S, Ralfe K, McGrath S, Webb L, **Robinson A, van Zundert AAJ,** Marquart L. Increasing body mass index and abdominal subcutaneous fat thickness are associated with increased skin-to-epidural space distance in pregnant women. *Int J Obstet Anesth* 2019; 38:59-65
18. **Wyssusek KH,** Keys MT, **van Zundert AAJ.** Operating Room Greening Initiatives – the old, the new, and the way forward: A Narrative Review. *Waste Management Research* 2019; 37:3-19
19. Epstein CR, Forbes JM, **Futter CL,** Hosegood IM, Brown RG, **Van Zundert AAJ.** Frequency and clinical spectrum of in-flight medical incidents during domestic and international flights. *Anaesth Intensive Care.* 2019 Jan;47(1):16-22
20. Charlesworth M, **Van Zundert AAJ.** Medical device regulation: the need for clinical vigilance and oversight. *Anaesthesia* 2019; 74:693-695
21. Douville S, Callaway L, Amoako A, Roberts J, **Eley VA.** Reducing post-caesarean delivery surgical site infections: a narrative review. *International Journal of Obstetric Anesthesia* 2019; 5 Sep. in press
22. **Lee J, Wyssusek K, Reynolds H,** Khatun M, **van Zundert A.** Intraoperative cuff pressure measurements of supraglottic airway devices in the operating theatre: a prospective audit. *Acta Anaesth Belg (Accepted 20/9/2019)*
23. **Lee J, Reynolds H,** Pelecanos AM, **van Zundert AA.** Bi-national survey of intraoperative cuff pressure monitoring of endotracheal tubes and supraglottic airway devices in operating theatres. *Anaesth Intensive Care.* 2019; 47:378-384. doi: 10.1177/0310057X19850581
24. **Slykerman G, Wiemers MJ, Wyssusek K.** Peer support in anaesthesia: Development and implementation of a peer-support programme within the Royal Brisbane and Women’s Hospital Department of Anaesthesia and Perioperative Medicine. *Anaesth. Intensive Care.* 2019; 47(6): 497-502
25. **Lee J, Wyssusek K,** Kimble R, Way R, **van Zundert A,** Cohen J, Coonan E, Rowell J, **Eley V.** Baseline parameters for rotational thromboelastometry (ROTEM®) in healthy pregnant women: A comparison of labouring women and non-labouring women in Australia. *Int J Obstet Anesth* 2019 Feb; 41: 7-13
26. **Lee J, Eley V, Wyssusek K,** Kimble R, Way M, Coonan E, Cohen J, Rowell J, **van Zundert A.** Baseline parameters for rotational thromboelastometry in healthy labouring women: a prospective observational study. *BJOG* 2020 Jan; 1-8
27. Ceglowski P, Lehane K, Chow C, Pelecanos A, **Tognolini A, Eley VA.** Arm dimensions of patients with obesity and their experiences with blood pressure measurement: an observational study. *Obesity* 2020 (In Press)
28. Ray-Barruel G, **Woods C,** Marsh N, Larsen E, Ullman A, Rickards C. Nurses’ perceptions and decision making about intravenous administration set replacement: a qualitative study. *Journal of Clinical Nursing,* 2019; 28 (21-22): 3786-3795.

## Book Chapters / Letters

1. **Roets M,** et al. (2019). Anaesthesia and Immune Modulation. In: *Australasian Anaesthesia 2019.* R. Riley. Melbourne, Australia, Australian and New Zealand College of Anaesthetists. pp. 265-275
2. **Van Zundert A.** (2019). Spinal Anesthesia. In: *Hadzic’s Textbook of Regional Anesthesia and Acute Pain Management.* McGraw Hill, New York, pp. 99-102.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers

1. **Roets M.** Intraoperative Cell Salvage and Virtual reality. 3<sup>rd</sup> Perioperative Patient Blood Management Symposium ‘Perioperative Anaemia – From Basic to Complex, February 2019
2. **Eley V.** Blood pressure measurement in obese pregnant women. *Indoanesthesia International Conference,* Jakarta, February 2019
3. **Eley V.** Research in Obstetric Anaesthesia. *Art of Anaesthesia Meeting* Canberra, October 2019
4. **Eley V.** Thesis Support Grant 2014 – presentation of thesis-related research. *Australian Society of Anaesthetists National Scientific Congress,* Sydney 2019
5. **Eley V.** Gender Issues in Anaesthesia. *Australian Society of Anaesthetists National Scientific Congress,* Sydney 2019
6. Endlich, Y. **Culwick, M. Lee, J.** Airway Incidents: WebAIRS. *ANZCA ASM (Kuala Lumpur, Malaysia).* May 2019
7. **Lee, J.** Anaesthesia for Non-Obstetric Surgery and Management of Major Obstetric Haemorrhage. *Midwifery Challenges CPD (Ausmed Education),* Brisbane 27<sup>th</sup> May 2019
8. **Messer G.** Minimising Hypothermia after surgery. 2019 Royal Brisbane and Women’s Hospital QUARRIES Day of Excellence Awards. Winner – Fostering Innovation 2019
9. **Roets M.** Intraoperative cell salvage in modern anaesthesia. *Redcliffe Hospital Grand Rounds Program,* Redcliffe, QLD. Intraoperative cell salvage in modern anaesthesia
10. **Wyssusek, K.** Case study – Hospital PVC recycling. *Challenging plastics: The PVC challenge.* The University of Queensland, Environmental Science, March 2019 Brisbane



## Invited Speakers (cont)

11. **Wyssusek, K.** IMPACT – Perioperative Patient Blood Management. QuARRIE awards presentations. Royal Brisbane & Women’s Hospital
12. **Wyssusek, K.** Local Anaesthetic conversion. Maximising benefits of care. Queensland Clinical Senate Meeting, Brisbane
13. **Wyssusek, K.** Improving Anaemia Management Collaborative. 3<sup>rd</sup> Perioperative Patient Blood Management Symposium, Brisbane
14. **Van Zundert AAJ.** Anaphylaxis and anaesthesia. ACPAN – Fiona Stanley Hospital Perth
15. **Van Zundert AAJ.** LAST – Local anaesthesia systemic toxicity. ACPAN – Fiona Stanley Hospital Perth
16. **Van Zundert AAJ.** Modern Airway Management Techniques. 2<sup>nd</sup> Penang Advanced Airway Workshop Conference, Penang Malaysia, February 2019
17. **Van Zundert AAJ.** Modern Airway Management Techniques. University of Malaya, Kuala Lumpur, Malaysia, February 2019
18. **Van Zundert AAJ.** Lecture: Flexible-Tip Bronchoscopy. University of Malaya, Kuala Lumpur, Malaysia
19. **Van Zundert AAJ.** Lecture + workshops: Modern Airway Management Techniques. University of Malaya, Kuala Lumpur, Malaysia
20. **Van Zundert AAJ.** Obesity – the Big Issue in Anaesthesia. University of Udayana Sanglah Hospital, Indonesia, February 2019
21. **Van Zundert AAJ.** How to improve our airway management skills? University of Udayana Sanglah Hospital, Indonesia, February 2019
22. **Van Zundert AAJ.** Optical Stylet Intubation Bronchoscopy. 16<sup>th</sup> Indo Anaesthesia Congress Indonesian Medical Association, Jakarta Indonesia, February 2019
23. **Van Zundert AAJ.** Obesity – the Big Issue in Anaesthesia. 16<sup>th</sup> Indo Anaesthesia Congress Indonesian Medical Association, Jakarta Indonesia, February 2019
24. **Van Zundert AAJ.** Anaphylaxis in anaesthesia. Australian College of Peri-anaesthesia Nurses, Melbourne, October 2019
25. **Van Zundert AAJ.** How to prevent and treat Local Anaesthetic Toxicity? Australian College of Peri-anaesthesia Nurses, Melbourne, October 2019
26. **Van Zundert AAJ.** Video-laryngoscopy: a master piece in airway management. Myanmar Society of Anaesthesiology Meeting, Yangon, October 2019
27. **Van Zundert AAJ.** Central venous catheterisation – How to get the best results and the least complications. Myanmar Society of Anaesthesiology Meeting, Yangon, October 2019
28. **Lee J, Eley V, Wyssusek K, Kimble R, Way M, Cohen J, Van Zundert A.** ROTEM® assessment of the combined effect of term pregnancy and obesity on coagulation in healthy women with uncomplicated pregnancies in Australia: A prospective observational study
29. **Lee, J.** ASA Prize Winner Session, Australian Society of Anaesthetists NSC Sydney 21/9/19. ROTEM® in Obstetrics
30. **Zacher, R.** Maternal Wellbeing and Pregnancy Outcomes in Anaesthetic Trainees. ASA National Scientific Congress Committee – September 2019
31. **Roets, M.** Intraoperative cell salvage ameliorates transfusion-related suppression of monocyte and dendritic cell inflammatory responses. 14<sup>th</sup> World Congress of inflammation, 15-19 September 2019, Sydney Australia. Poster presentation
32. **Van Zundert AAJ.** Panel Discussion: The Essential Ingredients: “Follow your gut instincts”. 9<sup>th</sup> National Conference Academy of Regional Anaesthesia of India, Coimbatore India
33. **Van Zundert AAJ.** Lecture: Organisational aspects of regional anaesthesia blocks in the operating theatre complex. 9<sup>th</sup> National Conference Academy of Regional Anaesthesia of India, Coimbatore India
34. **Van Zundert AAJ.** Lecture: Local anaesthetic toxicity – LAST – an update. 9<sup>th</sup> National Conference Academy of Regional Anaesthesia of India, Coimbatore India
35. **Van Zundert AAJ.** Panel Discussion: The Obese parturient – a big problem in anaesthesia. 9<sup>th</sup> National Conference Academy of Regional Anaesthesia of India, Coimbatore India
36. **Van Zundert AAJ.** Lecture: Managing acute pain role of non-pharmacological, oral, parenteral and regional anaesthesia. 9<sup>th</sup> National Conference Academy of Regional Anaesthesia of India, Coimbatore India
37. **Van Zundert AAJ.** Workshops: Peripheral nerve blocks (upper/lower extremities); PEC 1+2; serratus anterior block, TAP block; musculus rector spinae block. Ganga Hospital, Coimbatore India
38. **Lee J, Eley V, Wyssusek K, Kimble R, Way M, Cohen J, van Zundert A.** UQ Faculty of Medicine HDR Symposium, Brisbane, 21/11/19: The influence of obesity on coagulation in healthy term pregnancy as assessed by rotational thromboelastometry (ROTEM®)
39. **Lee J, Eley V, Wyssusek K, Way M, Coonan E, Rowell J, Kimble R, van Zundert A.** UQ Faculty of Medicine HDR Symposium 21/11/19, Brisbane 21/11/19: Rotational thromboelastometry (ROTEM®) in obstetrics: baseline parameters in labouring women with uncomplicated pregnancies. A prospective observational study.

## Oral Presentations

1. **Souness, A.** Clinical audit of intravenous lignocaine infusions in non-obstetric patients undergoing intra-abdominal surgery at the RBWH. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
2. **Reynolds H, Gowardman J.** A procedure for insertion and maintenance care of intra-arterial catheters using bundled interventions. Australian Vascular Access Society (AVAS) ASM, Sydney 2019
3. **Lehane K, Ceglowski P, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement in obese patients – arm dimensions and patient experiences. Australian Society of Anaesthetists National Scientific Congress, Gilbert Troup Prize Session, Sydney 2019
4. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – implications for blood pressure measurement. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019

## Oral Presentations (cont)

5. **Reynolds H.** Consideration of contributing factors to unanticipated cardiac arrest in the cardiac catheter laboratory. International Conference for Perianaesthesia Nurses (ICPAN), Cancun, Mexico 2019
6. ANZMOSS/ANZGOSA (Australian and New Zealand Metabolic and Obesity Surgery Society/Australian and New Zealand Gastric and Oesophageal Surgery Association) Joint Annual Scientific Meeting, Brisbane, October 2019. **Lehane K, Ceglowski P, Chow C, Pelecanos A, Tognolini A, Eley VA.** Arm circumference and conicity in obese patients – what is the best predictor of arm conicity?
7. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019. **Lehane K, Ceglowski P, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement in obese patients – arm dimensions and patient experiences
8. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019. **Bright M, Eley VA.** Arm size and shape in obese pregnant women – recommended cuff size and mode of delivery. Presented in Best Poster Prize Session
9. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – implications for blood pressure measurement.

## Poster Presentations

1. **Chan, K., Clarris, M, Town, C,** Der Avedissian, A., **Wyssusek, K.** Anaemia and blood management practice in the setting of an emergency department within a major Australian tertiary hospital. NATA 2019, Berlin
2. **Roets M, An T, Wyssusek K.** Assessing Iron Deficiency Anaemia Before Surgery: Can We Do Better? 20<sup>th</sup> Annual NATA Symposium on Patient Blood Management, Haemostasis and Thrombosis, Berlin, Germany, April 2019
3. **Ryan, R, Jackson D, Hopkins G, Eley VA, Christensen R, van Zundert A, Lipman J, Roberts J. A.** Pharmacokinetic model for optimal prophylactic cefazolin dosing in elective bariatric surgery patients. Gilbert Brown Prize Session, oral presentation by Dr Ryan. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
4. **Bright M, Christensen R,** Klopogge S, **Chawla G, Sekar R, Eley VA.** An audit of surgical site infections following caesarean section. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
5. **Bright M, Chawla G,** Callaway L, **Eley VA.** Anaesthetic and peripartum care and outcomes in women with extreme obesity. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
6. **Chawla G, McLellan E, Harrocks A, Casey P, Eley VA.** A survey of anaesthetists' experience and perspectives of perioperative anaphylaxis. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
7. **Chawla G, Peters N, Messer G, Eley VA.** Perioperative temperature management in major vascular surgery: A prospective audit. Australian and New Zealand College of Anaesthetists Annual Scientific Meeting Kuala Lumpur, May 2019
8. **Reynolds H,** Gowardman J. A procedure for insertion and maintenance care of intra-arterial catheters using bundled interventions. Australian Vascular Access Society (AVAS) ASM, Sydney 2019
9. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – implications for blood pressure measurement. Australian Society of Anaesthetists National Scientific Congress, Sydney 2019
10. **Bright M, Eley VA.** Arm size and shape in obese pregnant women – recommended cuff size and mode of delivery, Australian Society of Anaesthetists National Scientific Congress, Best Poster Prize Session, Sydney 2019
11. Asia Pacific Congress of Hypertension, Brisbane, November 2019, Australia. **Ceglowski P, Lehane K, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement – cuff size and experiences of obese patients
12. Asia Pacific Congress of Hypertension, Brisbane, November 2019, Australia. **Chow C, Lehane K, Ceglowski P, Pelecanos A, Wren K, Eley VA.** Arm size and conicity in adults presenting for elective surgery – Implications for blood pressure measurement
13. Asia Pacific Congress of Hypertension, Brisbane, November 2019. **Bright M, Eley VA.** Arm size and shape in obese pregnant women – recommended cuff size and mode of delivery
14. ANZMOSS/ANZGOSA (Australian and New Zealand Metabolic and Obesity Surgery Society/Australian and New Zealand Gastric and Oesophageal Surgery Association) Joint Annual Scientific Meeting, Brisbane, October 2019. **Ceglowski P, Lehane K, Chow C, Pelecanos A, Tognolini A, Eley VA.** Non-invasive blood pressure measurement – cuff size and experiences of obese patients.

## Other communications and outputs

### Workshop Facilitator

**Lee J.** Facilitator of UQ Anatomy and Sonoanatomy Cadaver Workshop – upper limb peripheral nerve blockade. Australasian Symposium on Ultrasound and Regional Anaesthesia (ASURA), February 2019.

**Lee J.** Facilitator of workshop for ROTEM-TEG, rapid interventions, big results. The 3<sup>rd</sup> Perioperative Patient Blood Management Symposium, February 2019.

**Lee J.** Facilitator of workshop for Major haemorrhage simulation with real blood sample testing on ROTEM® and TEG. The 3<sup>rd</sup> Perioperative Patient Blood Management Symposium, February 2019.

**Eley V.** Session Chair: Gut Microbiome and Hypertension. Asia Pacific Congress of Hypertension, Brisbane, 2019.

**Eley V.** Session Chair: Obstetric Anaesthesia Special Interest Group Concurrent Session: Australian Society of Anaesthetists National Scientific Congress, Sydney 2019.

**Eley V.** Metro North Research Interactive Workshops Facilitator July 2019.

**Eley V.** Metro North Research Workshop Speaker: October 2019.

# DEPARTMENT OF GENERAL SURGERY

For the Department of General Surgery, 2019 has proven to be a transformative year for research. General Surgery now boasts seven co-appointed University of Queensland academics: Unit 1, Prof Owen Ung and Dr Kowski Murugappan; Unit 2, Assoc. Prof David Cavallucci and Assoc. Prof Nick O'Rourke; Unit 3, Assoc. Prof David Clark and Assoc. Prof Andrew Stevenson; and Unit 5, Dr Carl Lisec. These academic appointments will increase our research capabilities by building strong links with the university sector.

A dedicated funding effort, led by Dr Jason Brown, was successful in securing a Metro North HHS grant to appoint a Research Coordinator. Dr Danielle Herbert brings a strong research ethos and experience and will be a great asset to General Surgery.

## Selected highlights from within the Department:

### UNIT 1 BREAST/ENDOCRINE

New research collaborations with the Herston Biofabrication Institute aim to improve cosmetic outcomes for women undergoing complex breast surgery. The ability to 3D-print component tissues for reconstruction is truly exciting.

### UNIT 2 HEPATO-PANCREATIC-BILIARY (HPB)

The 2019 publications have focussed on technical aspects of liver and pancreatic surgery. These technical descriptions with a focus on improving patient outcomes have been widely disseminated at multiple international meetings. The focus now moves to increasing participation in several upcoming international multicentre trials in liver and gallbladder surgery for 2020.

### UNIT 3 COLORECTAL

During 2019, the Colorectal Research Unit (CRU) continues to strengthen with high quality research output and the expansion of research interests attracting international and national collaborations. As a result, the CRU has succeeded in receiving research funding for collaborative projects identifying pre-diagnostic signature for colorectal cancer and exploring the role of the microbiome in surgical complications. Importantly, the units share in the achievement of obtaining research support to appoint an additional Research Coordinator to further facilitate the research interests of the unit.

Colorectal surgical unit has continued to support higher degrees in the field of Theranostics of malignant colorectal cancer and attracting the interests of new higher degree scholars. In addition, the unit has provided and supported multiple research opportunities, for junior clinicians interested in retrospective and prospective research in the field of colorectal surgery. The CRU looks forward to building on key research outcomes and strengthening multi-disciplinary collaborations.

## 2019 QUEENSLAND HEALTH AWARD FOR EXCELLENCE – BARIATRIC SURGERY INITIATIVE

This award recognised the efforts of Unit 2 Hepato-Pancreatic-Biliary (HPB) and Unit 4 Upper Gastrointestinal/Bariatric. The Bariatric Surgery Initiative – offering highly-effective bariatric (weight loss) surgery to eligible patients – is an Australian-first in its approach. This initiative ensures an equitable approach to accessing this service statewide irrespective of geography or economic status, to improve the outcomes of Queenslanders with type 2 diabetes.

## UNIT 1 BREAST/ENDOCRINE

**RBWH Research Staff with research roles, positions or appointments:** e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Prof Owen Ung</b>	Professor	0.1	External (UQ)	Surgery	University of Queensland
<b>Dr Kowski Murugappan</b>	Senior Lecturer	0.1	External (UQ)	Medicine	University of Queensland

### Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Ben Green</b>	<b>Prof Owen Ung</b>	Outcomes and time to adjuvant therapy in patients undergoing immediate implant based breast reconstruction surgery
<b>Dr Kowski Murugappan</b>	<b>Dr Ben Green, Prof Owen Ung</b>	PETAL: Evaluation of the accuracy of <sup>18</sup> F-FDG PET-MRI scan in detecting regional lymph node disease in breast cancer: a pilot study
<b>Dr Kowski Murugappan</b>	<b>Dr Ben Green, Prof Owen Ung</b>	Trans Tasman breast cancer survival differences population study
<b>Dr Kowski Murugappan</b>	<b>Dr Ben Green, Prof Owen Ung</b>	Mastectomy or Breast Conservation Surgery in Early Breast Cancer? Factors Affecting Patient Choice
<b>Dr Kowski Murugappan</b>	<b>Dr Ben Green, Prof Owen Ung</b>	Importance of axillary dissection: 8-year retrospective analysis of tertiary Breast surgical unit
<b>Dr Clem Wong</b>	<b>Dr Ben Green, Prof Owen Ung</b>	3D printing of nipple for breast reconstruction

### Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Prof Sunil Lakhani</b> (Pathology)	<b>Dr Ben Green, Prof Owen Ung</b>	BoNSAI: Improving treatments for Brain metastases through Advanced Imaging
<b>Prof Sunil Lakhani</b> (Pathology)	<b>Dr Ben Green, Prof Owen Ung</b>	BROCADE: BREast Origin Cancer tissue donated After DEath
<b>Prof Sunil Lakhani</b> (Pathology)	<b>Dr Ben Green, Prof Owen Ung</b>	Brisbane Breast Tissue Bank: Molecular Pathology and genetic sub-classification of precancerous and cancerous breast lesions
<b>Kirsty Quince</b>	<b>Dr Ben Green, Prof Owen Ung</b>	Incidence of lymphoedema following lymph node removal in the surgical treatment of breast cancer: a retrospective audit

## 2019 Research Publications

### Journal Articles

1. Yip CH, Evans DG, Agarwal G, Buccimazza I, Kwong A, Morant R, Prakash I, Song CY, Taib NA, Tausch C, **Owen U**, Meterissian S. Global disparities in breast cancer genetics testing, counselling and management. World Journal of Surgery. 2019; 43 5: 1264-1270
2. Khoo D, **Owen U**, Blomberger D, Hutmacher DW. Nipple reconstruction: a regenerative medicine approach using 3D-printed tissue scaffolds. Tissue Engineering Part B Reviews. 2019; 25(2): 126-134
3. Edge J, Parker M, Maliepaard M, **Owen U**. Lymph node harvest in breast cancer patients with and without preoperative scintigraphy. South African Journal of Surgery. 2019; 57 (1): 7-10.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers

1. **Ung O**. Academic pathways within surgical departments. 2019 RACS Combined Queensland State Conference and Surgical Directors Leadership Forum, 12-14 Jul 2019. Gold Coast.

## UNIT 2 HEPATO-PANCREATIC-BILIARY<sup>(HPB)</sup>

**RBWH Research Staff with research roles, positions or appointments:** e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Assoc. Prof David Cavallucci</b>	Associate Professor	0.2	External (UQ)	Surgery	University of Queensland
<b>Assoc. Prof Nicholas O'Rourke</b>	Associate Professor	N/A	Honorary	Surgery	University of Queensland

### Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Joel Lewin</b>	<b>Dr Peadar Waters, Assoc. Prof Nicholas O'Rourke</b>	Surgical management and long term outcomes in pancreatic acinar cell carcinoma
<b>Dr Laurence Webber</b>	<b>Dr Jimmy Tee, Assoc. Prof David Cavallucci, Assoc. Prof Nicholas O'Rourke</b>	Time to commencement of neoadjuvant chemotherapy in resectable pancreatic cancer
<b>Dr Krishna Pattabathula</b>	<b>Dr Jason Hwang, Assoc. Prof Nicholas O'Rourke</b>	Type 2 auto-immune pancreatitis: an Australian retrospective analysis of biopsy-proven disease and review of ICDC criteria
<b>Dr Peadar Waters</b>	<b>Assoc. Prof Nicholas O'Rourke</b>	Long term outcomes in patients undergoing TC CBD exploration
<b>Dr Richard Bryant</b>	<b>Assoc. Prof Nicholas O'Rourke</b>	The Dorsal approach to laparoscopic major hepatectomy
<b>Dr Will McGahan</b>	<b>Assoc. Prof David Cavallucci, Dr Peadar Waters</b>	Retrospective baseline audit of pancreatic cancer outcomes, and prospective analysis of neoadjuvant outcomes
<b>Dr Andrew Maurice</b>	Prof Mark Smithers (UQ, PAH)	Non-operative management of appendicitis: a trainee-led RCT
<b>Dr Thomas Crawley-Smith</b>	<b>Assoc. Prof Nicholas O'Rourke</b>	Retrospective audit of National Emergency Laparotomy Audit (NELA) score at the RBWH
<b>Dr Will McGahan</b>	<b>Assoc. Prof David Cavallucci, Dr Peadar Waters</b>	The use of CA19-9 to predict the presence of imaging-occult unresectable features in patients with pancreatic cancer, and implications for staging laparoscopy: a population-based retrospective analysis
<b>Assoc. Prof David Cavallucci</b>	<b>Assoc. Prof Nicholas O'Rourke</b>	Implementation of prospective database for pancreatic surgery

### Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Jane Palmer (QIMR), Dr William Glasson	<b>Assoc. Prof Nicholas O'Rourke, Assoc. Prof David Cavallucci</b>	Genomic profiling of choroidal / ocular melanoma
Jochen Mueller (UQ)	<b>Assoc. Prof Nicholas O'Rourke, Assoc. Prof David Cavallucci</b>	Do environmental toxins contribute to fatty liver disease? Polyfluoroalkyl and perfluoroalkyl substances (PFAS). The PLAB study (PFAS, liver and blood)

## UNIT 2 HEPATO-PANCREATIC-BILIARY (HPB) (cont)

### Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
<b>Dr Andrew Maurice</b>	RBWH General Surgery Consultants' Research Award 2019	Laparoscopic appendicectomy versus antibiotics for uncomplicated imaging confirmed appendicitis: a trainee-led collaborative prospective randomised controlled trial (TRAIN trial)
<b>Bariatric Surgery Initiative</b>	Queensland Health 2019 Award for Excellence	The Bariatric Surgery Initiative – offering highly-effective bariatric (weight loss) surgery to eligible patients – is an Australian-first in its approach. This initiative ensures an equitable approach to accessing this service statewide irrespective of geography or economic status, to improve the outcomes of Queenslanders with type 2 diabetes

### 2019 Research Publications

#### Journal Articles

1. Brough D, Quinn S, Bartley PB, **Cavallucci D, O'Rourke N**. Primary aortoenteric fistula: a case of delayed diagnosis. ANZ J Surg. 2019; May 8. Doi: 10.1111/ans.15159.

### 2019 Conference Presentations – Invited Speaker, Oral and Poster

#### Invited Speakers

1. **O'Rourke N**. Symposium chairperson: Optimize surgical techniques with advanced instruments for better outcomes of patients. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
2. **O'Rourke N**. The evolution of right hepatectomy. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
3. **O'Rourke N**. Evidence base for laparoscopic resection for HCC. HBP Surgery Week 2019 & 50<sup>th</sup> Annual Congress of the Korean Association of HBP Surgery, 5-6 Apr 2019. Seoul, South Korea
4. **Cavallucci D**. Robotic pancreaticjejunostomy – how I do it. ANZHPBA Annual Conference, 24-25 Oct 2019. Canberra
5. **Cavallucci D**. Open or minimally invasive hepatectomy. RACS ASC, Bangkok, 2019
6. **Cavallucci D**. Symposium Chair. Minimally invasive liver surgery – videos. Asia-Pacific HPB, Seoul, Korea, 2019.

#### Oral Presentations

1. McKay B, **Bryant R, Cavallucci D, O'Rourke N**. Laparoscopic resection is safe for large (>10cm) and ruptured hepatocellular adenoma. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
2. Lewin J, **Bryant R**, Leslie N, Ian M, **Cavallucci D**. Laparoscopic vs open liver resection for large colorectal liver metastases: outcomes and long-term survival using propensity score analysis. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan
3. **Bryant R, O'Rourke N, Cavallucci D**. The dorsal approach to laparoscopic major hepatectomy. Second World Congress of the International Laparoscopic Liver Society (ILLS), 9-11 May 2019. Tokyo, Japan.

## UNIT 3 COLORECTAL

### Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Tahleesa Cuda	PhD, UQ (2018-current)	Targeted radio-nucleotide therapy for metastatic lower gastrointestinal tumours	<b>Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark, Assoc. Prof Paul Thomas, Dr Damian Petersen</b> , Andrew Riddell, John Hooper, Simon Puttick
<b>Dr Andrew Maurice</b>	PhD, UQ (2019-current)	Laparoscopic appendectomy versus antibiotic for radiologically confirmed acute uncomplicated appendicitis	Prof Mark Smithers, <b>Dr Jason Brown, Assoc. Prof David Clark</b> , Donald Cameron
Nicholas Lyons	PhD, UQ (2019-current)	The search for new theranostic targets for colorectal cancer	John Hooper, Andrew Riddell, Simon Puttick, <b>Assoc. Prof David Clark</b>

### RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Assoc. Prof David Clark</b>	Associate Professor	N/A	Honorary	Surgery	University of Queensland
<b>Assoc. Prof Andrew Stevenson</b>	Associate Professor	N/A	Honorary	Surgery	University of Queensland
<b>Dr Aleksandra Edmundson</b>	Research Project Officer	0.8	External	Brisbane Colorectal Research Unit (CRU)	University of Queensland

### Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Colorectal Research Unit (CRU) / <b>Assoc. Prof David Clark, Assoc. Prof Andrew Stevenson, Dr Damien Petersen</b>	Andrea Warwick ( <i>Redcliffe</i> ), John Lumley ( <i>Wesley</i> )	Total colectomy for constipation
(CRU) / <b>Assoc. Prof David Clark</b>	Tahleesa Cuda ( <i>UQ</i> ), Ken Lam ( <i>Mater</i> )	Length of bowel resection in surgical management of Crohn's disease
(CRU) / <b>Assoc. Prof David Clark, Dr Craig Harris, Dr Damien Petersen, Dr Carina Chow</b>	John Lumley ( <i>Wesley</i> ), Bree Stephenson ( <i>SCUH</i> ), Nicholas Lutton ( <i>PAH</i> )	Drain fluid amylase as a sensitive biomarker of anastomotic leak in ileal pouch surgery
(CRU) / <b>Assoc. Prof David Clark</b>	NA	Measurement of amylase and lipase in the stool and drain fluid following a low pelvic anastomosis, as an indicator of anastomotic leak
(CRU) / <b>Assoc. Prof David Clark</b>	Andrew Riddell ( <i>Riddell</i> ), Ehsan Panahi Sydney, Julie Moore ( <i>QCCAT</i> ), Shoni Philpot ( <i>QCCAT</i> ), Andrew Zammit ( <i>Bundaberg</i> )	Management of polyps in Queensland
(CRU) / <b>Assoc. Prof David Clark, Assoc. Prof Andrew Stevenson, Dr Craig Harris, Dr Damien Petersen</b>	Tony McGiffin ( <i>UQ</i> ), John Lumley ( <i>Wesley</i> )	Long term functional consequences of anastomotic leak after laparoscopic restorative surgery with low pelvic anastomosis
(CRU) / <b>Assoc. Prof David Clark</b>	Tom Snow ( <i>St Vincent's Private</i> ), Edward Yeoh ( <i>PAH</i> ), Jit Pratap ( <i>PAH</i> ), John Coucher ( <i>PAH</i> ), Michael Solomon ( <i>RPA</i> )	Validation of Gastrografin measurements in ex-vivo surgical fluid and stool
(CRU) / <b>Assoc. Prof David Clark, Dr Craig Harris, Assoc. Prof Andrew Stevenson</b>	Tom Snow ( <i>St Vincent's Private</i> ), Edward Yeoh ( <i>PAH</i> ), Jit Pra`tap ( <i>PAH</i> ), John Coucher ( <i>PAH</i> ), Michael Solomon ( <i>RPA</i> )	Phase 1 feasibility study: The validation of Gastrografin measurement in postsurgical samples following low anterior resection where the rectal tube is flushed with Gastrografin
(CRU) / <b>Assoc. Prof David Clark, Dr Joanna Yu, Dr David Sidhom</b>	NA	Long term functional outcomes of anastomotic leak after restorative proctectomy and ileal pouch surgery in patients not covered with loop ileostomy

## UNIT 3 COLORECTAL *(cont)*

### Current RBWH Research Group / Department Led Research Activity *(cont)*

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<i>(CRU)</i> / <b>Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark, Dr Craig Harris, Dr Carina Chow, Dr Damien Petersen, Dr David Taylor</b>	<b>Dr Matthew Burge, Assoc. Prof Paul Thomas</b>	A pilot study of CXCR-PET scanning in operable rectal cancer
<i>(CRU)</i> / <b>Assoc. Prof David Clark</b>	<b>Dr Graham Radford-Smith,</b> Anton Lord <i>(QIMR)</i> , Lisa Simms <i>(QIMR)</i>	Precision medicine for colorectal cancer: defining a pre diagnostic signature
<i>(CRU)</i> / <b>Assoc. Prof David Clark, Dr James Nicholson</b>	Ruoshi Cui <i>(UQ)</i> , Jessica Lim <i>(UQ)</i>	Exploring the relationship between risk taking propensity and surgeon and patient preferences for temporary covering ileostomy
<i>(CRU)</i> / <b>Dr Andrew Maurice, Assoc. Prof David Clark</b>	<b>Dr Jason Brown,</b> Mark Smithers <i>(UQ)</i> , Donald Cameron	Multicentre pilot study: Laparoscopic appendectomy versus antibiotics for radiologically confirmed acute uncomplicated appendicitis
<i>(CRU)</i> / <b>Assoc. Prof Andrew Stevenson</b>	Cora Ianiro <i>(UQ)</i>	Defining "successful surgery" in colonic resection: Patients using patient-reported outcome measures
<i>(CRU)</i> / <b>Assoc. Prof David Clark</b>	<b>Dr Graham Radford-Smith,</b> Lisa Simms <i>(QIMR)</i>	Ileal pouch microbiome: defining a pre-operative microbiological signature that predisposes to anastomotic leak
<i>(CRU)</i> / <b>Assoc. Prof David Clark</b>	Bree Stephensen <i>(SCUH)</i>	Transanal tubes, pelvic drains and defunctioning ileostomies: A surgeons' preference survey
<i>(CRU)</i> / <b>Assoc. Prof David Clark</b>	John Panizza <i>(UQ)</i>	Hospital readmission for dehydration following creation of a diverting loop ileostomy after colorectal surgery

### Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Frank Frizelle <i>(NZ)</i> , Andrew McCombie <i>(NZ)</i>	<b>Dr Craig Harris, Dr David Taylor, Assoc. Prof David Clark</b> <i>(CRU)</i>	10-Ten Study: Quality of life after surgery for recurrent rectal cancer
Tahleesa Cuda <i>(UQ)</i> , Andrew Riddell <i>(Redcliffe)</i> , Simon Puttick <i>(CSIRO)</i> , John Hooper <i>(UQ)</i>	<b>Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark</b> <i>(CRU)</i>	Targeted radio-nucleotide therapy for metastatic lower gastrointestinal tumours
Cherry Koh, Michael Solomon <i>(RPA)</i>	<b>Dr Craig Harris, Dr David Taylor, Assoc. Prof David Clark</b> <i>(CRU)</i>	Localised recurrent rectal cancer QoL study (Phase-III)
H. Bonjer, A Lacy, B Hanna, T Koedam, J Tuynman <i>(Netherlands)</i>	<b>Assoc. Prof Andrew Stevenson, Assoc. Prof David Clark, Dr Craig Harris, Dr Carina Chow, Dr Damien Petersen, Dr David Taylor</b> <i>(CRU)</i>	Color III: A multicentre randomised clinical trial comparing transanal TME versus laparoscopic TME for mid and low rectal cancer
Dec Winter, Alexandra Zabrowski <i>(Ireland)</i>	<b>Assoc. Prof David Clark</b> <i>(CRU)</i>	Clinicopathological features and oncological outcomes of patients with early age onset of colorectal cancer (REACT)
Craig Lynch <i>(Melbourne)</i> , Stephen Pillinger <i>(Sydney)</i> , John Simes <i>(CTC)</i> , Kate Wilson <i>(CTC)</i> , Claudia Rutherford <i>(Uni Sydney)</i> , Rachel Morton <i>(CTC)</i> , Darren Tonkin <i>(Adelaide)</i> , Stephen Bell <i>(Melbourne)</i>	<b>Assoc. Prof Andrew Stevenson</b> <i>(CRU)</i>	Robotic versus Laparoscopic Colon: a Randomised trial (RoLaCaRT)



## UNIT3 COLORECTAL (cont)

### Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
<b>Assoc. Prof David Clark, Dr Graham Radford-Smith,</b> Anton Lord ( <i>QIMR</i> ), <i>Ilisa Simms (QIMR)</i>	Colorectal Research Unit / Gut Research Laboratory ( <i>QIMR</i> )	Precision medicine for colorectal cancer: defining a pre diagnostic signature	RBWH Foundation	\$20,000	\$20,000	2019
<b>Assoc. Prof Andrew Stevenson,</b> John Hooper ( <i>UQ</i> ), Tahleesa Cuda ( <i>UQ</i> ), Simon Puttick ( <i>CSIRO</i> )	TRI / UQ	Development of Theranostics for metastatic colorectal cancer using high affinity engineered antibody fragments	RBWH Foundation CSSANZ Foundation	\$40,000 \$20,000	\$40,000 \$20,000	2019 2019
<b>Dr Jason Brown, Assoc. Prof David Clark, Assoc. Prof Andrew Stevenson, Professor Owen Ung, Assoc. Prof David Cavallucci, Dr Ben Green, Dr Ben Dodd, Mr Michael Handy</b>	General Surgery, Trauma and Burns	Research Coordinator for General Surgery, Burns, Trauma Research Hub	MNHHS	\$260,000	\$130,000	2019-2021

### 2019 Research Publications

#### Journal Articles

1. **Byrnes A, Clark DA, Mudge A.** Implementation science approaches to enhance uptake of complex interventions in surgical settings. *Australian Health Review* (2019) Apr 15. <https://doi.org/10.1071/AH18193>
2. **Stevenson ARL,** Solomon M, Brown C, et al Disease-free survival and local recurrence after laparoscopic assisted resection or open resection for rectal cancer. *Ann Surg* (2019) 269: 596-602
3. **Clark DA,** Cuda T, Riddell A, **Radford-Smith G,** Solomon M, Drain fluid amylase as a sensitive biomarker for the early detection of anastomotic leakage in ileal pouch surgery. *Colorectal Disease* (2019) 21(4): 460-464
4. **Stevenson ARL.** What does the future hold for ventral rectopexy? Functional outcome after laparoscopic posterior sutured rectopexy versus ventral mesh rectopexy for rectal prolapse: six-year follow-up of a double-blind, randomised single-centre study. *EClinical Medicine* (2019) 16: 2-3
5. Roodbeen SX, de Lacy FB, van Dieren S, Penna M, Ris F, Moran B, Tekkis P, Bemelman WA, Hompes R, on behalf of the International TaTME Registry Collaborative (inc. **Clark DA, Stevenson ARL**). Predictive factors and risk model for positive circumferential resection margin rate after Transanal Total Mesorectal Excision in 2653 patients with rectal cancer. *Ann Surg* (2019) 270(5): 884-891
6. Hamilton AER, Chatfield MD, Johnson CS, **Stevenson ARL.** Totally robotic right hemicolectomy: a multicentre case-matched technical and peri-operative comparison of port placements and da Vinci models. *J Robot Surg* (2019) Aug 29
7. Bell SW, Heriot AG, Warriar SK, Farmer CK, **Stevenson ARL,** Bissett I, Kong JC, Solomon M. Surgical techniques in the management of rectal cancer: a modified Delphi method by colorectal surgeons in Australia and New Zealand. *Tech Coloproctol* (2019) Aug. 23(8):743-749
8. Waters PS, Cheung FP, Peacock O, Heriot AG, Warriar SK, O'Riordain DS, Pillinger S, Lynch AC, **Stevenson ARL.** Successful patient-oriented surgical outcomes in robotic vs laparoscopic right hemicolectomy for cancer - a systematic review. *Colorectal Dis* (2019) Aug 10. doi: 10.1111/codi.14822
9. Curtis NJ, Dennison G, Brown CSB, Hewett PJ, Hanna GB, **Stevenson ARL,** Francis NK. Clinical evaluation of intraoperative near misses in laparoscopic rectal cancer surgery. *Ann Surg* (2019) Jul 3
10. Dickson EA, Penna M, Cunningham C, Ratcliffe FM, Chantler J, Crabtree NA, Tuynman JB, Albert MR, Monson JRT, Hompes R, on behalf of the International TaTME Registry Collaborative (inc. **Stevenson ARL, Clark DA**). Carbon dioxide embolism associated with Transanal Total Mesorectal Excision surgery: a report from the International Registries. *Dis Colon Rectum* (2019) 62(7): 794-801
11. **Stevenson ARL,** Solomon MJ, Brown CSB, Lumley JW, Hewett P, Clouston AD, Gebiski VJ, Wilson K. Disease-free survival and local recurrence after laparoscopic-assisted resection or open resection for rectal cancer: the Australasian laparoscopic cancer of the rectum randomized clinical trial. *Ann Surg* (2019) Apr. 269(4):596-602
12. Penna M, Hompes R, Arnold S, Wynn G, Austin R, Warusavitarne J, Moran B, Hanna GB, Mortensen NJ, Tekkis PP, on behalf of the International TaTME Registry Collaborative (inc. **Stevenson ARL**). Incidence and risk factors for anastomotic failure in 1594 patients treated by Transanal Total Mesorectal Excision: results from the International TaTME Registry. *Annals of Surgery* (2019) April. 269 (4): 700-711
13. Patel B, Watt T, **Petersen D.** Torsion of low-grade appendiceal mucinous neoplasm. *ANZ J Surg* (2019) 89(9): E402-E403
14. **Stevenson ARL.** A perspective on surgical randomised controlled trials. *ANZ J Surg* (2019): in press.

## UNIT 3 COLORECTAL *(cont)*

### Book Chapter

1. **Stevenson ARL.** Zen and the art of the purse-string. In – Transanal minimally invasive surgery (TAMIS) & Transanal Total Mesorectal Excision (TaTME). Editor: Atallah S. Springer International Publishing. 2019.

### 2019 Conference Presentations – Invited Speaker, Oral and Poster

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#### Invited Speakers

1. **Clark DA.** Ileal pouch problems: surgical and mechanical. Australian Gastro Week (AGW), 2019. Adelaide
2. **Clark DA.** Management of strictures in Crohn's Disease. CSSANZ Spring Meeting, 2019. Hobart
3. **Clark DA.** Drain fluid analysis as a biomarker of anastomotic leak. CSSANZ Spring Meeting, 2019. Hobart
4. **Stevenson ARL.** Colorectal surgery. International Colorectal Surgery Fluorescence Consensus Meeting, 2019. Fuzhou, China
5. **Stevenson ARL.** Pelvic floor disorders cadaveric workshop. SingHealth Duke – NUS Surgical & Anaesthesia Congress, 2019. Singapore
6. **Stevenson ARL.** Advanced methods for the management of rectal prolapse. American Society of Colon and Rectal Surgeons Symposium, 2019. Cleveland, USA
7. **Stevenson ARL.** Convenor for TaTME cadaver workshop, Academy for Silant mentor. 17<sup>th</sup> Congress of Asia Pacific Federation of Coloproctology, 2019. Kuala Lumpur, Malaysia
8. **Stevenson ARL.** TaTME – step-by-step demonstration, identifying the correct planes. 17<sup>th</sup> Congress of Asia Pacific Federation of Coloproctology, 2019. Kuala Lumpur, Malaysia
9. **Stevenson ARL.** Rectopexy: to mesh or not to mesh. 17<sup>th</sup> Congress of Asia Pacific Federation of Coloproctology, 2019. Kuala Lumpur, Malaysia
10. **Stevenson ARL.** Debate: there is never a place for synthetic mesh in ventral rectoplexy. Brisbane Functional Conference, 2019. Brisbane.

#### Poster Presentations

1. Cuda T, Riddell A, **Stevenson ARL, Clark DA,** Hooper J, Rose S, Puttick S, **Thomas P.** 68Galium-PSMA-617 as a novel PET-CT marker for risk stratifying metastatic colorectal cancer: a prospective pilot study. Australia and New Zealand Society of Nuclear Medicine Annual Scientific Meeting, 2019. Adelaide
2. **Wheatley L, Clark DA,** Yeoh E, **Edmundson A,** Pratap J, Snow T, Solomon M, Coucher J. Detection of gastrografin in ex vivo specimens by dual energy CT scanning. Herston Healthcare Symposium, 2019. Brisbane
3. **Keogh C, Edmundson A, Clark DA.** Drain fluid amylase as an early biomarker of anastomotic leak in colorectal anastomoses. Herston Healthcare Symposium, 2019. Brisbane
4. **Clark DA,** Cuda T, Pretorius C, **Edmundson A,** Solomon M, Riddell AD. Amylase quantitation in the terminal ileum by assessing ileal effluent following formation of an ileostomy. Herston Healthcare Symposium, 2019. Brisbane
5. **Yu J, Sidhom D, Clark DA.** Long-term functional outcomes of anastomotic leakage after restorative proctectomy and ileal pouch-anal anastomosis. Herston Healthcare Symposium, 2019. Brisbane.

## UNIT 4 UPPER GASTROINTESTINAL/BARIATRIC

### Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Ryo Mizumoto	Masters Surgery (MCh) Edinburgh, Scotland (2019)	Operative versus non-operative management of perforated duodenal ulcer: a systematic review and meta-analysis	<b>Dr Barry O'Loughlin</b>
<b>Dr David Mitchell</b>	PhD Notre Dame (2019-2022)	Investigation of laryngopharyngoreflux and correlation with clinical outcomes	Prof Greg Falk (Syd), Prof Hans Van Der Wall (ND)

### Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr David Mitchell</b>	<b>Dr George Hopkins, Dr Robert Finch</b>	Outcomes of weight-loss in patients with OSA
<b>Dr Pat Walsh</b>	<b>Dr George Hopkins, Dr David Mitchell</b>	Endoscopic RAP procedure for reflux post gastric sleeve
<b>Dr David Mitchell</b>	<b>Dr George Hopkins, Dr Robert Finch</b>	Outcomes in RYGB with varying limb lengths
<b>Dr Ben Dodd</b>	<b>Dr Marilla Dickfos, Dr Jennifer Gillespie</b>	CT prediction of linitus plastic gastric cancer RO resection status
<b>Dr Ben Dodd</b>	<b>Dr Kevin Lah</b>	Laparoscopic management of oesophageal perforations
<b>Dr Ben Dodd</b>	<b>Dr Andrew Maurice, Dr J Punnasseril, Dr S King</b>	Bariatric telehealth patient and clinician satisfaction
<b>Dr Ben Dodd</b>	<b>Dr D Nguyen, Dr Robert Finch, Dr Barry O'Loughlin</b>	Incidence, risk factors and management of chyle leak after Oesophagectomy
<b>Dr Ben Dodd</b>	<b>Dr Robert Finch, Dr David Mitchell</b>	Oesophagectomy and double tract reconstruction for OGI adenocarcinoma
<b>Dr Ben Dodd</b>	<b>Dr George Hopkins</b>	Reflux after revisional single anastomosis gastric bypass
<b>Dr David Mitchell</b>	Prof Greg Falk, Prof Hans van der Wall	Investigation of laryngopharyngoreflux and correlation with clinical outcomes
<b>Dr Yao Huang</b>	<b>Dr George Hopkins</b>	Causes, complications and continued management of revisional sleeve gastrectomy to Roux-en-Y gastric bypass – 30 day operative morbidity, is it worth the risk?

### Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Guy Sheahan</b>	Dr Richard Reznick, Dr Leslie Flynn, Dr Don Klinger, Dr Boris Zevin	Comparison of faculty versus structured peer feedback: implications of technical skills training. Queen's University, Canada – College Fellowship Surgical Education

### Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
<b>Bariatric Surgery Initiative</b>	Queensland Health 2019 Award for Excellence	The Bariatric Surgery Initiative – offering highly-effective bariatric (weight loss) surgery to eligible patients – is an Australian-first in its approach. This initiative ensures an equitable approach to accessing this service statewide irrespective of geography or economic status, to improve the outcomes of Queenslanders with type 2 diabetes

### 2019 Research Publications

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#### Journal Articles

1. Lemke M, Lia H, Gabinet-Equihua A, **Sheahan G**, Winthrop A, Mann S, Fichtinger G, Zevin B. Optimizing resource utilization during proficiency-based training of suturing skills in medical students: a randomized controlled trial of faculty-led, peer tutor-led, and holography-augmented methods of teaching. *Surgical Endoscopy* (2019) Jul 8. doi: 10.1007/s00464-019-06944-2
2. **Mitchell D**. Systematic review of lymph node status in early oesophageal adenocarcinoma. (2019) in press
3. **Nguyen D, Finch R, O'Loughlin B, Dodd BR**. Chyle leak following oesophagectomy for cancer – incidence, risk factors and management at a Queensland tertiary centre. *Annals of Esophagus* (2019) in press.

### 2019 Conference Presentations – Invited Speaker, Oral and Poster

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#### Invited Speakers

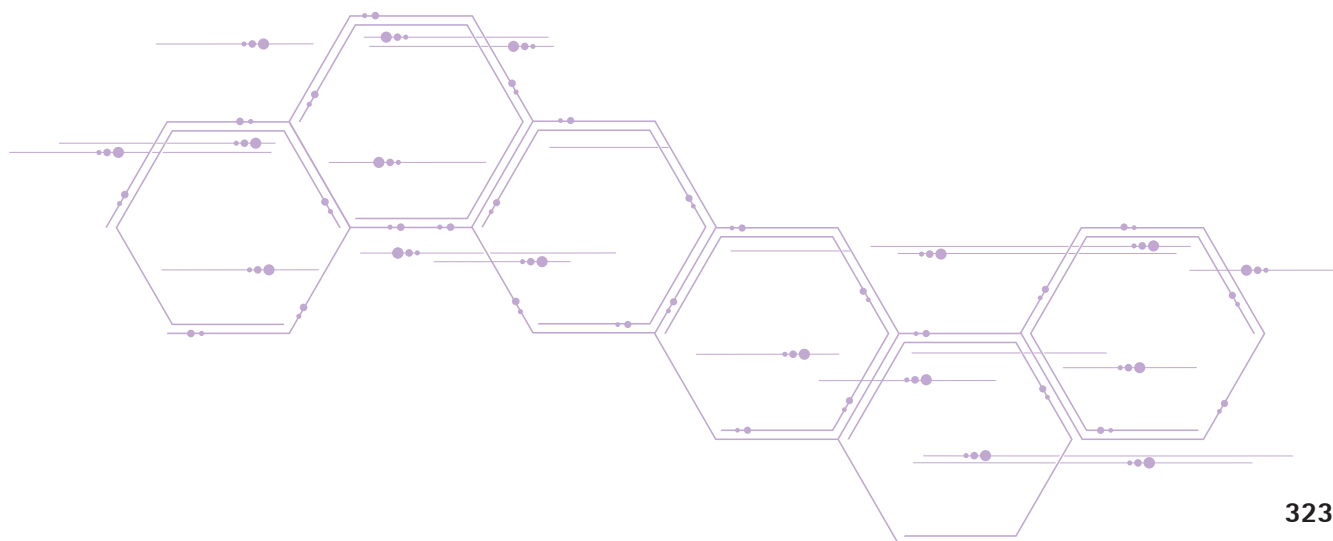
1. **O'Loughlin B**. David Thiele Lecture. 2019 RACS Combined Queensland State Conference and Surgical Directors Leadership Forum, 12-14 Jul 2019. Gold Coast
2. **Hopkins G**. Panel discussion: Surgical management of major GI complications. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane.

#### Oral Presentations

1. **Dodd BR**. Reflux after revisional single anastomosis gastric bypass. RACS Surgery 2019: Back to the Suture! Conference, 15-16 Aug 2019. Auckland, New Zealand
2. **Dodd BR**. Revisional bariatric surgery to single-anastomosis bypass: feasible, effective and safe. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
3. **Hopkins G**. MBS in patients below BMI 35. Pros and approach, its not about weight. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane.

#### Poster Presentations

1. **Dodd BR**. Laparoscopic distal oesophagectomy and double tract reconstruction – a novel surgical option for OGJ adenocarcinoma. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
2. **Nguyen D, Finch R, O'Loughlin B, Dodd BR**. Chyle leak following oesophagectomy for cancer – incidence, risk factors and management at a Queensland tertiary centre. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
3. **Dickfos M, Sommerville J, Barbour A, Gotley D, Smithers BM, Dodd BR**. Predictability of R0 Resections of linitis plastica using computed tomography. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
4. **Lah K, Nguyen DC, Armstrong L, Mitchell D, Chan K, Thomson IT, Smithers BM, Dodd BR**. Laparoscopic management of distal oesophageal perforations – outcomes and lessons. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
5. **Maurice AP, Punnasseril J, King S, Dodd BR**. Telehealth in a state-wide public bariatric service is feasible and with high patient satisfaction. ANZGOSA ANZMOSS Joint Annual Scientific Meeting, 2-4 Oct 2019. Brisbane
6. **Maurice AP, Malik H, Pearson T, Dodd BR**. Consequences of mucosal perforation during laparoscopic Heller myotomy: a systematic review. International Society for Diseases of the Esophagus (ISDE) Conference, 16-19 Sep 2018. Vienna, Austria.



## UNIT 5 ACUTE SURGICAL UNIT (ASU)

**RBWH Research Staff with research roles, positions or appointments:** e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Dr Carl Lisec</b>	Conjoint Academic Coordinator	0.3	External (UQ)	<i>RBWH Clinical Unit for Year 3 MBBS / MD</i>	University of Queensland

### 2019 Conference Presentations – Invited Speaker, Oral and Poster

#### Poster Presentations

1. Sivasuthan G, **Lisec C**. Epidemiology of penetrating thoracoabdominal trauma. Annual Scientific Congress, Royal Australasian College of Surgeons (RACS), 6-10 May 2019. Bangkok, Thailand
2. Sivasuthan G, **Lisec C**. Imaging in the diagnosis of thoracoabdominal penetrating injuries. Annual Scientific Congress, Royal Australasian College of Surgeons (RACS), 6-10 May 2019. Bangkok, Thailand.



RBWH Department of General Surgery with Professor Wendy Brown (Melbourne) for the Visiting Professor Programme, 26-27 November 2019



Unit 3 Colorectal with Professor Wendy Brown



Unit 4 Upper GI with Professor Wendy Brown

# DEPARTMENT OF OPHTHALMOLOGY

**RBWH Research Staff with research roles, positions or appointments:** e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Prof Tim Sullivan</b>	Professor	N/A	Operational	Ophthalmology, Faculty of Medicine	University of Queensland
<b>Assoc. Prof Lawrence Lee</b>	Associate Professor	N/A	Operational	Ophthalmology, Faculty of Medicine	University of Queensland
<b>Dr Kailing Yong</b>	Honorary Fellow	N/A	Operational	Ophthalmology, Faculty of Medicine	University of Queensland
<b>Dr Alison Fraenkel</b>	Honorary Fellow	N/A	Operational	Ophthalmology	University of Queensland
<b>Dr Matt Cranstoun</b>	Honorary Fellow; Associate Lecturer	1.0	External	Oculoplastics, lacrimal and orbital Disease	University of Queensland

## 2019 Research Publications

### Journal Articles

1. **Fraenkel A, Lee LR**, Lee GA. Managing corneal foreign bodies in office based general practice. Aust Fam Physician 2017 Mar; 46(93): 89-93
2. Porter A, **Lee L**, Bradshaw C. Bispectral index monitoring in vitrectomy surgery under local anaesthetic block with sedation: a single surgeon, single anaesthetist review. Eye (Lond) 2017 Jul; 31(7):1115-1116
3. Rowland CJ, **Lee LR**. Ocular causes of visual distortions. Aust J Gen Pract 2019;48(8):525-30
4. Sharpless M, Mahady K, **Sullivan TJ**. Conservative management of spontaneous intraorbital arteriovenous fistulas. Clin Exp Ophthalmol 2020 Jan; 48 (1): 121-123
5. Lee A, **Sullivan TJ**. Orbital mycoses in a pediatric subtropical population: a case series. JAAPOS 2019 Oct; 23 (5): 270.e1-270.e7
6. Joos Z, **Sullivan TJ**. Congenital lacrimal fistula presenting in adulthood: a case series. Clin Exp Ophthalmol 2019 Sep; 47(7): 949-952
7. Lee A, Ellul D, Sommerville J, Earnshaw J, **Sullivan TJ**. Bony orbital changes in allergic fungal sinusitis are reversible after treatment. Orbit. 2020 Feb; 39(1): 45-47.

### Book Chapter

1. **Fraenkel A, Lee LR**. Chapter 34: Modified cow hitch suture fixation. In: Advanced IOL fixation techniques. SLACK Inc: Thorofare USA. 2019.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers

1. **Sullivan TJ**. Keynote Lecture. International Society of Ocular Oncology Biennial Meeting, Marina Del Rey, Los Angeles, USA, Mar 2019
2. **Sullivan TJ**. Biologics for thyroid eye disease, what's new and what works. 5<sup>th</sup> International Thyroid Eye Disease Society Meeting, Singapore, Feb 2019
3. **Sullivan TJ**. Is this thyroid eye disease or not? An interactive Quiz. 5<sup>th</sup> International Thyroid Eye Disease Society Meeting, Singapore, Feb 2019
4. **Sullivan TJ**. Medial wall and orbital floor decompression. Cadavaric Dissection Course, 5<sup>th</sup> International Thyroid Eye Disease Society Meeting, Singapore, Feb 2019
5. **Sullivan TJ**. Paediatric orbital disease. Subspeciality Day, 121<sup>st</sup> Meeting of the Korean Ophthalmological Society, Busan, Korea, Apr 2019
6. **Sullivan TJ**. Keynote lecture. An overview of orbital tumours. 121<sup>st</sup> Meeting of the Korean Ophthalmological Society, Busan, Korea, Apr 2019
7. **Sullivan TJ**. Structural, infectious and inflammatory orbital disease in childhood. International Communications at the Society Española de Cirugía Plástica Ocular y Orbitaria Meeting, Barcelona, España, 6-8<sup>th</sup> Jun 2019

## Invited Speakers (cont)

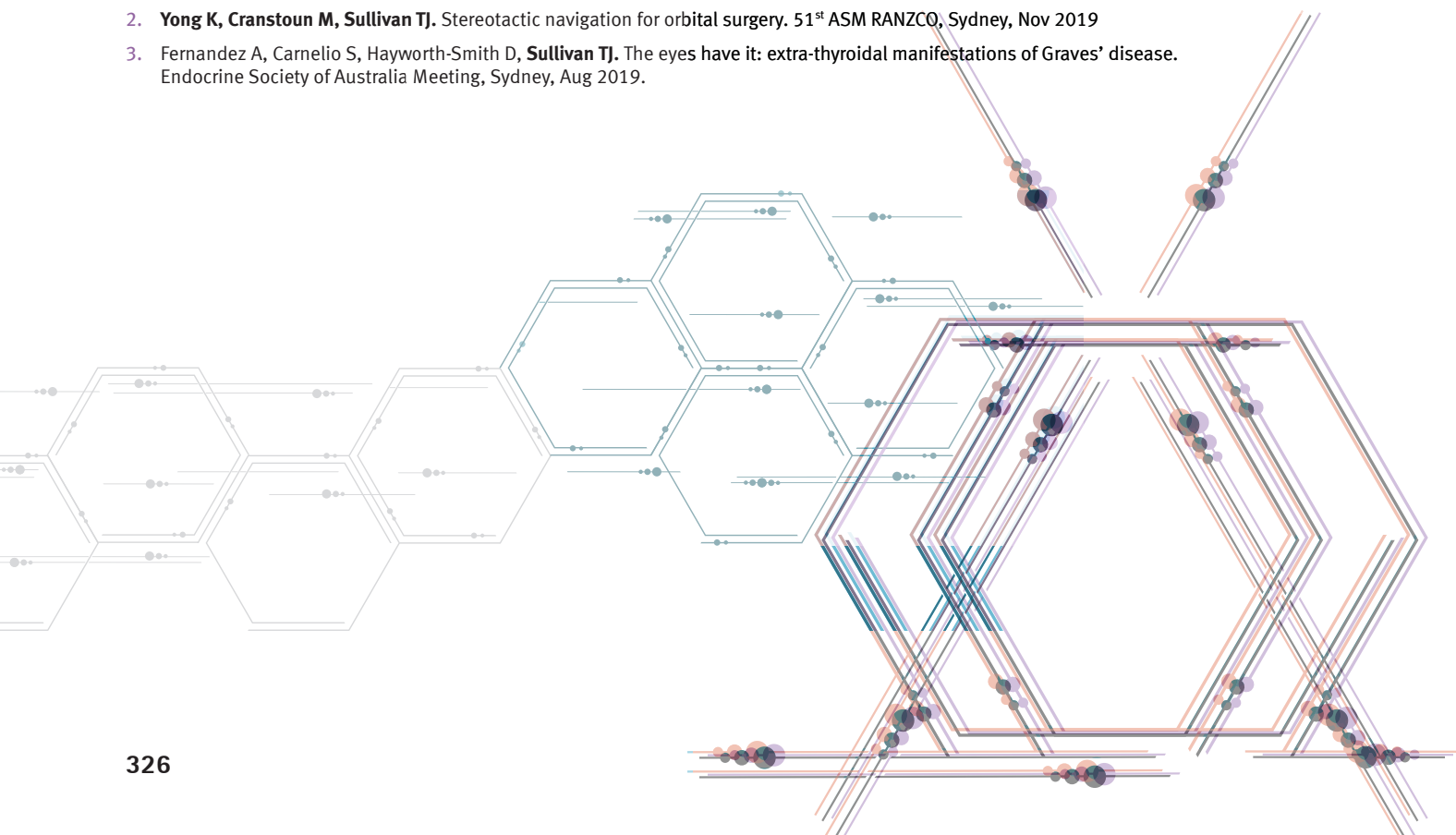
8. **Sullivan TJ.** Keynote lecture: Comprehensive management of paediatric ptosis. Society Española de Cirugía Plástica Ocular y Orbitaria Meeting, Barcelona, España, 6-8<sup>th</sup> June 2019
9. **Sullivan TJ.** Thyroid eye disease: advances in pathogenesis, medical and surgical management. Combined RANZCO Tasmanian Branch and Australian and New Zealand Society of Ophthalmic Plastic Surgeon's Joint meeting, Hobart, Jun 2019
10. **Sullivan TJ.** An approach to orbital disease for the general ophthalmologist. Combined RANZCO Tasmanian Branch and Australian and New Zealand Society of Ophthalmic Plastic Surgeon's Joint meeting, Hobart, June 2019.

## Oral Presentations

1. **Sullivan TJ, Muir J, Kennedy D.** Skin Cancer in the beautiful triangle. RACRRM Nationwide Educational Online Interactive Webinar, Mar 2019
2. **Sullivan TJ.** Peri-levator triamcinolone for upper eyelid retraction in thyroid eye disease. 44<sup>th</sup> Orbital Society Meeting, Mallorca, Spain, Jun 019
3. **Sullivan TJ.** Stereotactic navigation in orbital surgery. 44<sup>th</sup> Orbital Society Meeting, Mallorca, Spain, Jun 2019
4. Lee A, **Sullivan TJ.** Mucoceles involving the orbit: a retrospective review. 51<sup>st</sup> ASM RANZCO, Sydney, Nov 2019
5. Goldberg RA, Justin, Ugradeer Shoaib H, Manta, A, **Sullivan TJ.** Impromptu Grand Rounds: **Case 1**) 55yo female orbital abscess with sinus disease, to drain or not to drain; **Case 2**) 12 yo boy orbital floor fracture with full EOMs, for conservative management; **Case 3**) 60 yo white actor, immunocompetent in good health, unilateral blindness, restricted EOM's and cavernous sinus thrombosis, a case of Mucormycosis. Visiting Professor, Jules Stein Eye Institute, UCLA, Los Angeles, USA, 26 Mar 2019
6. **Sullivan TJ.** Orbital margin zone lymphoma with neural invasion presenting as a painful mass. Orbital Tumour Course American Academy of Ophthalmology, San Francisco, Oct 2019
7. **Sullivan TJ.** Epithelial myoepithelial carcinoma ex pleomorphic adenoma. Orbital Tumour Course American Academy of Ophthalmology, San Francisco, Oct 2019
8. **Sullivan TJ.** Specific orbital inflammation of the orbit. Orbital Disorders Instruction Course, American Academy of Ophthalmology, San Francisco, USA, Oct 2019
9. **Yong K, Sullivan TJ.** Unrecognised perineural spread from SCC presenting as a fourth nerve palsy. 25<sup>th</sup> ANZSOPS Meeting, Sydney, Nov 2019
10. **Sullivan TJ.** Orbital arterio-venous malformation: imaging features and surgical management. 25<sup>th</sup> ANZSOPS meeting, Sydney. Nov 2019.
11. **Sullivan TJ.** Biology and management of periocular malignancy. Orbital Disorders Instruction Course, American Academy of Ophthalmology, San Francisco, USA, Oct 2019
12. **Chan S, Park J.** Management of proliferative retinopathy secondary to acute myeloid leukaemia. 13<sup>th</sup> APVRS Congress, Shanghai, China, 22-24 Nov 2019.

## Poster Presentations

1. Lee A, **Sullivan TJ.** Traumatic orbital haemorrhage: a 15 year review at a tertiary trauma centre. 51<sup>st</sup> ASM RANZCO, Sydney, Nov 2019
2. **Yong K, Cranstoun M, Sullivan TJ.** Stereotactic navigation for orbital surgery. 51<sup>st</sup> ASM RANZCO, Sydney, Nov 2019
3. Fernandez A, Carnelio S, Hayworth-Smith D, **Sullivan TJ.** The eyes have it: extra-thyroidal manifestations of Graves' disease. Endocrine Society of Australia Meeting, Sydney, Aug 2019.



# DEPARTMENT OF ORAL & MAXILLOFACIAL SURGERY

The year saw a consistent output of research articles and presentations for the department. Ongoing randomised controlled trials continue to recruit patients steadily. The department formed important collaborations with external organisations to expand our research activities particularly in the area of head and neck oncology and reconstructive surgery.

The department continued operating a virtual surgical planning and 3D printing facility, producing various projects in this exciting surgical planning arena.

## Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Michael Hurrell	PhD UQ (2014-2019)	Treatment delay in facial trauma	<b>Assoc. Prof Martin Batstone</b>
Mr Timothy Liu	PhD UQ (2018-current)	Treatment decisions in Oral Cavity Cancer	<b>Assoc. Prof Martin Batstone</b>
Dr Benjamin Fu	MPhil UQ	Odontogenic infection at the RBWH	<b>Assoc. Prof Martin Batstone</b>
Dr Darius Khadembashi	MPhil UQ	Osseointegrated implant survival in head and neck cancer	<b>Assoc. Prof Martin Batstone</b>
<b>Dr Joshua Russell</b>	MPhil UQ	Donor site morbidity in composite free flaps	<b>Assoc. Prof Martin Batstone</b>

## Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
Prof Frank Monsour	Honorary Consultant	In kind	RBWH Honorary Position	University of Queensland
Adj. Prof Caroline Acton	Honorary Consultant	In kind	RBWH Honorary Position	University of Queensland

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Assoc. Prof Martin Batstone</b>	<b>Prof Mark Smyth</b> , QIMR Immuno-oncology group	Immune infiltrate of head and neck cancer

## Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
<b>Dr Andrew Higgins, Assoc. Prof Martin Batstone</b>	Oral and Maxillofacial	Intraoperative CT in facial trauma	ANZAOMS	\$3210.44	\$3210.44	2019



## 2019 Research Publications

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### Journal Articles

1. Armstrong LTD, **Subramaniam SS, Borgna S**. Adenoid cystic carcinoma of the palate with isolated cutaneous metastasis: a unique case and review of current and future treatment modalities of metastatic disease. *International Journal of Oral and Maxillofacial Surgery*. 2019;in press doi:10.1016/j.ijom.2019.11.012
2. Briery GI, Ren J, Baldwin J, Saifzadeh S, Theodoropoulos C, Tsurkan MV, Lynham A, **Hsu E**, Nikolarakos D, Werner C, Woodruff MA, Hutmacher DW, Bray LJ. Investigation of Sustained BMP Delivery in the Prevention of Medication-Related Osteonecrosis of the Jaw (MRONJ) in a Rat Model. *Macromolecular Bioscience*. 2019;19(11):e1900226
3. **Fisher BM, Batstone MD**. Pregnancy and childbirth after an iliac crest free flap. *The British journal of oral & maxillofacial surgery*. 2019;57(10):1148-9
4. **Higgins A**, Hurrell M, **Harris R, Findlay G**, David M, **Batstone M**. A study protocol for a randomised controlled trial evaluating the effects of intraoperative computed tomography on the outcomes of zygomatic fractures. *Trials*. 2019;20(1):514
5. Hurrell MJL, David MC, **Batstone MD**. Patient compliance and mandible fractures: a prospective study. *International journal of oral and maxillofacial surgery*. 2019;48(6):759-68
6. Liu T, David M, Ellis O, Hubert Low TH, Palme CE, Clark J, **Batstone M**. Treatment for oral squamous cell carcinoma: Impact of surgeon volume on survival. *Oral Oncology*. 2019;96:60-5
7. Pateman KA, Weerakoon AT, **Batstone MD**, Ford PJ. A culture shock in dental hygiene: exploring the management of oral health after head and neck cancer. *International journal of dental hygiene*. 2019;17(2):183-91
8. Turner J, Yates P, Kenny L, Gordon LG, Burmeister B, Hughes BGM, McCarthy AL, Perry C, Chan RJ, Paviour A, Skerman H, **Batstone M**, Mackenzie L. The ENHANCES study: a randomised controlled trial of a nurse-led survivorship intervention for patients treated for head and neck cancer. *Supportive care in cancer: official journal of the Multinational Association of Supportive Care in Cancer*. 2019;27(12):4627-37
9. Webster JD, **Batstone M**, Farah CS. Missed opportunities for oral cancer screening in Australia. *Journal of oral pathology & medicine : official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology*. 2019;48(7):595-603
10. Willaert R, Nevens D, Laenen A, **Batstone M**, Politis C, Nuyts S. Does intensity-modulated radiation therapy lower the risk of osteoradionecrosis of the jaw? A long-term comparative analysis. *International journal of oral and maxillofacial surgery*. 2019;48(11):1387-93.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speakers

1. **Batstone M**. Oral cancer – From warts to immunotherapy. Townsville Study Day. 10.5.19. Townsville
2. **Batstone M**. Head and neck reconstruction. From mild to wild. Townsville Study Day. 10.5.19 Townsville
3. **Batstone M**. Oral and Maxillofacial Surgery. Incision Surgical interest Group. UQ. 16 July 2019
4. **Batstone M**. Intraoperative CT in facial fractures. Queenstown, NZOMS August 2019
5. **Batstone M**. Implants in head and neck cancer patients. Queenstown NZOMS August 2019
6. **Batstone M**. Antibiotic overuse in dentistry and Oral and Maxillofacial Surgery. National AMR Forum. Brisbane Nov 2019.

### Oral Presentations

1. **Batstone M**. High volume Surgery, like immunotherapy only better and cheaper. IA00 Rome. September 2019.

# DEPARTMENT OF ORTHOPAEDIC SURGERY

More than 100 publications have come directly from the RBWH Department of Orthopaedic Surgery in the past 5 years a testament to our sustained commitment and dedication to research and education of the highest calibre. We have a long tradition of internationally recognised academic activity, highlighting the innovation, clinical excellence, and high-quality research characteristic of our Department.

We continue to have a very active interest in 3D modelling and printing and have emerged over the past few years as a global leader in this field within orthopaedic surgery. We expect further development in this area with the highly anticipated opening of the Herston Biofabrication Institute in the coming year and are looking forward to working there together with our many academic and industry partners.

The key achievement for the year 2019 was that the preliminary results were published regarding our extensive investigations into the biology of the Masquelet induced membrane, used to reconstruct post-traumatic long bone defects. When presented at the Limb Lengthening and Reconstruction Society in Boston, this study was selected as the outstanding Basic Science Research Paper. In cooperation with our academic partners at the University of Texas Health Sciences Center in San Antonio, this will be by far the largest series of human specimens that has ever been compiled and evaluated using the most sophisticated techniques available, with several further publications expected to appear in the coming year. **Dr Richard Hanly, Dr Jerry van de Pol, Dr John Roe, Dr David Miller, Dr James Brown,** and **Dr Andrew Mayo** are all representative of the next generation of academically active surgeons affiliated with the Department, poised to lead our research and education initiatives into the coming decade. Together, they hope to fill the shoes of the many outstanding clinicians, surgeons, and scientists whose efforts in the past few decades have brought international attention within the global community of orthopaedic surgeons to our cohesive unit at the Royal Brisbane and Women's Hospital.

## Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Min Tri Phan	PhD QUT	Femoral morphology variations and relevant implant fit in relation to peritrochanteric and distal femur fractures	<b>Dr Kevin Tetsworth,</b> Dr Beat Schmutz <i>(QUT)</i>
Dr Antony Rapisarda	PhD UNSW	Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis	<b>Dr Kevin Tetsworth, Prof Jeffrey Lipman,</b> Dr Ross Crawford <i>(TPCH)</i>
Naomi Paxton	PhD QUT	The future of clinical biofabrication: Creating patient-specific melt-electrospun scaffolds for bone regeneration	<b>Dr Kevin Tetsworth,</b> Prof Mia Woodruff <i>(QUT)</i>
Dr Chris Conyard	PhD UQ	Knee pain after IM nailing of tibial shaft fractures: Randomised controlled trial of infra-patellar vs supra-patellar insertion techniques	<b>Dr Kevin Tetsworth,</b> Dr Ross Crawford <i>(TPCH)</i>

## RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Nick Green</b>	Orthopaedic 3D Medical Modeller	1.0	Operationally Funded	3D Modelling and Printing in Orthopaedic Surgery, Herston Biofabrication Institute	QUT
<b>Dr Kevin Tetsworth</b>	Clinical Lead Orthopaedic Stream	0.4	Operationally Funded	3D Modelling and Printing in Orthopaedic Surgery, Herston Biofabrication Institute	QUT

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Richard Hanly</b>	Dr Luca Daniele, James Powell	Prospective case-controlled series using ankle arthroscopy in trauma
<b>Dr Andrew Mayo</b>	Dr Luca Daniele	The effect of scaphoid reduction on carpal kinematics in scaphoid nonunion
<b>Dr Paul McEniery</b>	Dr Luca Daniele	Assessment of biomechanical stability and kinematics using a novel anatomic distal radio-ulnar joint reconstruction
<b>Dr Jerry van de Pol</b>	Dr John Kinyanjui, Macy Lu	Randomised controlled trial comparing short vs long tunnels for anterior cruciate ligament knee reconstructions: Clinical and radiographic characteristics
<b>Dr Jerry van de Pol, Dr Kevin Tetsworth</b>	Dr Luca Daniele, <b>Dr Gurpreeth Singh</b>	Tension band wiring vs cannulated screw augmented fixation for patella fractures
<b>Dr Kevin Tetsworth, Dr Jerry van de Pol</b>	Dr Steven Kent	Validation of a classification scheme for malunions and nonunions of the proximal tibia and tibial plateau
<b>Dr Kevin Tetsworth, Dr Jerry van de Pol</b>	Dr Tom Crookes	Clinical and radiographic outcomes after internal fixation of glenoid neck fractures through a modification of the modified Judet approach
<b>Dr Kevin Tetsworth, Dr Jerry van de Pol, Assoc. Prof Michael Doran (QUT)</b>	Dr John Anderson	A phase 1 study to evaluate the safety and feasibility of mesenchymal stromal cell therapy in participants with non-unions of tibia fractures
<b>Dr Kevin Tetsworth, Dr Jerry van de Pol</b>	Dr Timothy Wong, Dr Vaida Glatt <i>(Texas)</i> , Dr Anna Woloszyk <i>(Texas)</i>	Clinical outcomes in a clinical series of massive femoral bone defects using custom 3D printed titanium cages placed into a Masquelet induced membrane
<b>Dr Kevin Tetsworth</b>	Dr Vaida Glatt <i>(Texas)</i> , Dr Will O'Callaghan, Dr Henry Burnand, Dr Erik Hohmann <i>(Dubai UAE)</i>	Proposed classification scheme for post-traumatic skeletal defects, with a validation study in a clinical series of long bone fractures
<b>Dr Kevin Tetsworth</b>	<b>Nick Green</b> , Dr Steven Kent, Dr Vaida Glatt, Dr Joyce Antony, Dr George Banic	Statistical shape modelling from CT scans to assess the morphology and morphometry of adult human cadaveric tali: gender-specific differences
<b>Dr Kevin Tetsworth</b>	<b>Nick Green, Dr Luke Visscher</b>	Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human scapula: Design considerations for implants for surgical stabilisation
<b>Dr Kevin Tetsworth</b>	<b>Nick Green, Dr Luke Visscher</b>	Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human humerus
<b>Dr Kevin Tetsworth</b>	<b>Nick Green, Dr Luke Visscher</b> , Dr Erik Hohmann <i>(Dubai UAE)</i>	Statistical shape modelling from MRI scans to assess the morphology and morphometry of the adult human glenoid, to assess the contribution of the labrum and its influence on version and inclination: The relationship with shoulder instability
<b>Dr Kevin Tetsworth</b>	<b>Dr Luke Visscher</b>	The natural history of post-traumatic malalignment: radiographic correlation between varus/valgus and medial/lateral degenerative arthritis
<b>Dr Kevin Tetsworth</b>	<b>Nick Green, Dr Miran Stubican</b> , Dr Frode Vindenes, Gregory Barlow	Clinical and radiographic characteristics of combined pilon and talus/talar dome injuries
<b>Dr Kevin Tetsworth</b>	Dr Ibin Varughese	Clinical series using the Masquelet induced membrane technique for long bone reconstruction
<b>Dr Kevin Tetsworth</b>	Dr Luca Daniele, Qusai Abdel Rahman	Meta-synthesis of outcomes after anterior minimally invasive plating for stabilization of humeral shaft fractures – the first 1,000 cases published globally
<b>Dr Kevin Tetsworth</b>	<b>Dr Luke Visscher, Nick Green</b>	Design considerations for an implant specific for percutaneous anterior minimally invasive plating of humeral shaft fractures
<b>Dr Kevin Tetsworth</b>	<b>Dr Luke Visscher, Nick Green</b>	Design considerations for an implant specific for stabilisation of scapular fractures
<b>Dr Kevin Tetsworth</b>	Ishwar Bhattarai, Dr Elliott D'Costa <i>(Canberra)</i> , Alberto Blanco Sevilla <i>(Barcelona)</i> , Matias Vicente Goma-Camps <i>(Barcelona)</i> , Pablo Corona <i>(Barcelona)</i>	The burden of orthopaedic infection in Australia – audit of clinical activity and acute referrals to a general orthopaedic unit in a major metropolitan public hospital
<b>Dr Kevin Tetsworth</b>	<b>Dr Alexey Borshch</b>	Analysis of failure of surgical treatment for adult chronic osteomyelitis

## Current RBWH Research Group / Department Led Research Activity (cont)

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Kevin Tetsworth</b>	Dr Daryl Wall, Bilal Zahoor, Dr Josh Piercey	A cohort of pelvic fractures at a single Australian tertiary referral center 2010-2016: Epidemiology of pelvic fractures and bio-markers associated with mortality in extra-peritoneal pelvic packing for haemorrhagic pelvic fractures
<b>Dr Kevin Tetsworth</b>	<b>Prof Jeffrey Lipman</b> , Dr Antony Rapisarda, Dr Sara Martinez-Martos	Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis

## Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
<b>Dr Kevin Tetsworth</b> , Dr Anna Woloszyk (Texas), Dr Vaida Glatt (Texas)	Selected as 1 <sup>st</sup> prize for the outstanding basic science paper: Biology of the Masquelet induced membrane: temporal differences in gene expression comparing human tibial and femoral specimens	28 <sup>th</sup> Annual Scientific Meeting of North American Limb Lengthening and Reconstruction Society, Boston, MA, USA, 19-20 July 2019

## Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
Assoc. Prof Michael Doran (QUT/TRI), <b>Dr Kevin Tetsworth</b> , Dr Cameron Cooke, Kathryn Futegra, Dr Kate Campbell, Mark Young, Jodie Robinson	Department of Orthopaedic Surgery	Using placenta-derived mesenchymal stem/stromal cells (pMSC) to repair non-union bone fractures	2018-2019 Cord Blood Research Grant (Inner Wheel Australia Foundation Trust)	\$65,000	\$30,000	2018-2019

## 2019 Research Publications

### Journal Articles

- Hanly RJ**, Whitehouse SL, Lorimer M, de Steiger R, Timperley AJ, Crawford RW, van Bavel D. The outcome of cemented acetabular components in total hip replacement for osteoarthritis defines a proficiency threshold – results of 22,956 cases from the Australian Orthopaedic Association National Joint Replacement Registry. *J Arthroplasty*. 2019;34(8):1711-1717. <https://doi.org/10.1016/j.arth.2019.03.061>
- McAuliffe MJ, Garg G, Orschulok T, **Roe J**, Whitehouse SL and Crawford R. Coronal plane laxity of valgus osteoarthritic knee. *J of Orthopaedic Surg* 2019; 27(1): 1-8
- Hohmann E, Keough N, Glatt V, **Tetsworth K**, Putz R, Imhoff A. The mechanical properties of fresh versus fresh-frozen and preserved (Thiel and formalin) long head of biceps tendons: a cadaveric investigation. *Annals of Anatomy (Anatomischer Anzeiger)* 2019; <https://doi.org/10.1016/j.aanat.2018.05.002>
- Manjra MA, Naude J, Birkholtz F, Glatt V, **Tetsworth K**, Hohmann E. The relationship between gait and functional outcomes in patients treated with circular external fixation for malunited tibial fractures. *Gait and Posture* 2019. *Gait & Posture* 68: 569-574
- Tetsworth K**, Woloszyk A, Glatt V. 3D printed titanium cages combined with the Masquelet technique for the reconstruction of segmental femoral defects. Preliminary clinical results and molecular analysis of the biological activity of human induced membranes. *OTA International Journal* 2019; 2(1): e016; <http://dx.doi.org/10.1097/OI9.000000000000016>
- Hohmann E, Glatt V, **Tetsworth K**. Open versus arthroscopic acromioclavicular joint resection: a systematic review and meta-analysis. *Arch Orthop Trauma Surg* (2019). <https://doi.org/10.1007/s00402-019-03114-w>
- Hohmann E, **Tetsworth K**, Glatt V. The hamstring/quadriceps ratio is an indicator of function in ACL-deficient, but not in ACL-reconstructed knees. *Arch Orthop Trauma Surg* 2019; 139: 91-98. <https://doi.org/10.1007/s00402-018-3000-3>
- Tuckett P, Hope M, **Tetsworth K**, van de Pol J, McDougall C. Transarticular tibiototalcaneal nailing versus open reduction and internal fixation for treatment of the elderly ankle fracture: protocol for a multicentre, prospective, randomised controlled trial. *BMJ Open* 2019; 9: e026360. doi: 10.1136/bmjopen-2018-026360
- Thomson S, Thomson A, **Tetsworth K**, Lu W, Zreiqat H, Al Muderis M. Radiographic evaluation of bone remodeling around osseointegration implants among transfemoral amputees. *J Orthop Trauma*. 2019; 33: e303-e308. doi: 10.1097/BOT.00000000000001488
- Hohmann E, **Tetsworth K**, Glatt V. Operative treatment of Neer type II distal clavicle fractures. An overview of contemporary techniques. *JBJS Reviews* 2019; 7(5): e5; DOI: 10.2106/JBJS.RVW.18.00046

## Journal Articles (cont)

11. Thomson S, Lu W, Zreiqat H, Li JJ, **Tetsworth K**, Muderis AM. Proximal bone remodeling in lower limb amputees reconstructed with an osseointegrated prosthesis. *J Orthop Res* 2019; 2019 Aug 19. doi: 10.1002/jor.24445
12. **Tetsworth K**, Glatt V. Tipping the balance: Manipulating the mechanical environment by reverse dynamization can accelerate bone healing. *J Limb Lengthen Reconstr* 2019; 5:1-3
13. Van Zyl R, Van Schoor AN, Du Toit PJ, Suleman FE, Velleman MD, Glatt V, **Tetsworth K**, and Hohmann E. The association between anterior cruciate ligament length and femoral epicondylar width measured on preoperative magnetic resonance imaging or radiograph. *Arthroscopy Sports Medicine and Rehabilitation* 2019; published ahead of print 23 December 2019
14. Hohmann E, Angelo R, Arciero R, Bach BR, Cole B, Cote M, Farr J, Feller J, Gelbhart B, Gomoll A, Imhoff A, LaPrade R, **Tetsworth K**, Glatt V: "Truss implant with rounded corners"; US Patent Application 15/804,008 2019
15. Bhandari M, Einhorn TA, Guyatt G, Schemitsch EH, Zura RD, Sprague S, Frihagen F, Guerra-Farfan E, Kleinlugtenbelt YV, Poolman RW, Rangan A, Bzovsky S, Heels-Ansdell D, Thabane L, Walter SD, Devereaux PJ, for the HEALTH Investigators. Total Hip Arthroplasty or Hemiarthroplasty for Hip Fracture. *N Engl J Med*. 2019 Dec 5;381(23):2199-2208. doi: 10.1056/NEJMoa1906190. Epub 2019 Sep 26. PMID: 31557429. (**Tetsworth K**, Steering Committee).

## Book Chapters / Letters

1. Glatt V, Evans C, **Tetsworth K**. A concert between biology and biomechanics: The influence of the mechanical environment on bone healing, in Orsini G, Putignano A, Mitsiadis TA, eds. (2019), *Advances in Craniofacial and Dental Materials Through Nanotechnology and Tissue Engineering*. Lausanne: Frontiers Media. doi: 10.3389/978-2-88945-858-5
2. **O'Callaghan W**, Donnelly W: Prevention of total hip arthroplasty instability: leg length, offset, center of rotation in the age of robotic surgery, in Prof Catani Ed., *Robotic surgery for total hip and knee replacement*, Minerva Medical (Turin).

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speakers

1. **Roe J**. Graft options at the knee. Queensland branch meeting of the AOA. Noosa, QLD May 2019
2. **Roe J**. ACL surgery: before, during, and after. Queensland Academy of Sport. Brisbane, QLD August 2019
3. **O'Callaghan W**. Three-dimensional CT based leg length evaluation is highly dependent on anatomical landmark selection and pelvic symmetry. AOA Annual Scientific Meeting, Canberra, ACT, 10 October 2019
4. **Van der Pol J**. Semi-extended tibial nailing: suprapatellar and lateral extra-articular approaches. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
5. **Van der Pol J**. Biology and Biomechanics of Intramedullary Nailing, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
6. **Tetsworth K**, O'Carrigan T. Post-traumatic ankle deformities: When is a child an adult? Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
7. **Tetsworth K**. Gradual correction of knee flexion contractures. Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
8. **Tetsworth K**, Al Muderis M. Reconstructing amputated limbs: osseointegration update 2019. Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
9. Maine S, **Tetsworth K**. Rotational alignment of the knee extensor mechanism: the role of quadriceps torsion. Limb Lengthening and Reconstruction Society – Specialty Day, AAOS Meeting, Las Vegas Nevada, USA. 16 March 2019
10. **Tetsworth K**, Al Muderis M. Osseointegrated implants for lower limb amputees: evaluation of changes in bone mineral density over time. 1<sup>st</sup> Pan Arabic Meeting of Orthotics and Prosthetics, Amman, Jordan, 15-17 April 2019
11. **Tetsworth K**, Al Muderis M. Osseointegration with titanium press-fit implants in trans-tibial amputees. 1<sup>st</sup> Pan Arabic Meeting of Orthotics and Prosthetics, Amman, Jordan, 15-17 April 2019
12. **Tetsworth K**. Suppressive antibiotics for fracture related infections: who, when, why. Debugging the bug: Discussions regarding fracture related infections. 29<sup>th</sup> Mid-Year Meeting of the Philippines Orthopaedic Association. Vigan City, Ilocos Sur, Philippines, 24-26 April 2019
13. **Tetsworth K**. Options after implant removal: alternatives for the reconstruction of infected post-traumatic bone defects. Debugging the bug: Discussions regarding fracture related infections. 29<sup>th</sup> Mid-Year Meeting of the Philippines Orthopaedic Association. Vigan City, Ilocos Sur, Philippines, 24-26 April 2019
14. **Tetsworth K**. 2cd International consensus meeting Philadelphia 2019: open fracture recommendations. Debugging the bug: Discussions regarding fracture related infections. 29<sup>th</sup> Mid-Year Meeting of the Philippines Orthopaedic Association. Vigan City, Ilocos Sur, Philippines, 24-26 April 2019
15. **Tetsworth K**, Al Muderis M. Osseointegration for the reconstruction of devastating military and terrorist blast injuries. 4<sup>th</sup> World Orthopaedic Limb Reconstruction Congress: Combined Meeting of ASAMI and the ILLRS. Liverpool, UK, 27-30 August 2019
16. **Tetsworth K**. Pre-operative planning of lower extremity deformity: malalignment test, CORA method, and osteotomy rules. 5<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
17. **Tetsworth K**. Taylor Spatial Frame: how does it differ from Ilizarov? 5<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
18. **Tetsworth K**. Advantages of the Masquelet technique. 5<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019

## Invited Speakers (cont)

19. **Tetsworth K.** Combined techniques for the safe correction of very large tibial rotational deformities in adults. 5<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
20. **Tetsworth K.** Osseointegration: the ultimate post-traumatic limb reconstruction? 5<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
21. **Tetsworth K.** Peroneal nerve decompression. 5<sup>th</sup> Intercontinental Meeting of 3D Surgery (Defects/Deformities/Discrepancies), Munich, Germany, 19-21 September 2019
22. **Tetsworth K.** Talus Fracture Management. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
23. **Tetsworth K.** 3D modelling and printing in the management of segmental bone defects. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
24. **Tetsworth K.** Minimally invasive plate osteosynthesis for the stabilization of humeral shaft fractures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
25. **Tetsworth K.** Distal humerus fracture exposure. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
26. **Tetsworth K.** Tibial plateau fractures: postero-medial and antero-lateral exposures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
27. **Tetsworth K.** Peroneal nerve decompression. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
28. **Tetsworth K.** Neglected trauma: management of type 4 open tibia fractures. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019
29. **Tetsworth K.** Treatment options for segmental skeletal defects. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019
30. **Tetsworth K.** Extra-articular deformity and TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
31. **Tetsworth K.** Options to reconstruct the extensor mechanism after TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
32. **Tetsworth K.** The role of cemented femoral stems in revision THA. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
33. **Tetsworth K.** How do we reduce the dislocation risk in revision THR? Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
34. **Tetsworth K.** Current standards for the treatment of joint infection in 2019: the ANZ perspective. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
35. **Tetsworth K.** Core skills: IM nailing entry points. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
36. **Tetsworth K.** Difficult tibial nails: proximal, distal, and segmental fractures. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
37. **Tetsworth K.** Distal femur fractures: fracture reduction and blocking screws. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
38. **Tetsworth K.** Update: malunions and non-unions. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
39. **Tetsworth K.** Update: patient-specific 3D printed titanium cages to reconstruct massive femoral defects. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
40. **Tetsworth K** and O'Carrigan T. Ankle equinus deformity correction using external fixation. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
41. **Tetsworth K.** The history and evolution of limb lengthening and deformity correction. Australian Orthopaedic Trauma Society Annual Meeting, Cairns, Queensland, 20-23 June 2019
42. **Tetsworth K.** The biology of limb lengthening and bone regeneration. Australian Orthopaedic Trauma Society Annual Meeting, Cairns, Queensland, 20-23 June 2019
43. **Tetsworth K.** Core skills: IM nailing entry points. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 28 June 2019
44. **Tetsworth K.** Minimally invasive plate osteosynthesis for the stabilization of humeral shaft fractures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
45. **Tetsworth K.** Distal humerus fracture exposure. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
46. **Tetsworth K.** Tibial plateau fractures: postero-medial and antero-lateral exposures. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
47. **Tetsworth K.** Peroneal nerve decompression. International Advanced Trauma Update 2019, Chulalongkorn University, Bangkok, Thailand, December 12-13, 2019
48. **Tetsworth K.** Neglected trauma: management of type 4 open tibia fractures. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019

## Invited Speakers (cont)

49. **Tetsworth K.** Treatment options for segmental skeletal defects. Management of Orthopaedic and Trauma Infections: Current Concepts and Future Challenges. Brisbane, Queensland, 8-9 February 2019
50. **Tetsworth K.** Extra-articular deformity and TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
51. **Tetsworth K.** Options to reconstruct the extensor mechanism after TKA. Orthopaedics Down Under: Complex Revision Arthroplasty and Infection, Sydney, New South Wales, 1-2 March 2019
52. **Tetsworth K.** The role of cemented femoral stems in revision THA. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
53. **Tetsworth K.** How do we reduce the dislocation risk in revision THR? Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
54. **Tetsworth K.** Current standards for the treatment of joint infection in 2019: the ANZ perspective. Revision Arthroplasty Technology Forum, Sydney, New South Wales, 3-4 May 2019
55. **Tetsworth K.** Core skills: IM nailing entry points. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
56. **Tetsworth K.** Difficult tibial nails: proximal, distal, and segmental fractures. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
57. **Tetsworth K.** Distal femur fractures: fracture reduction and blocking screws. Intramedullary Nailing Techniques, Registrar Educational Course, Sydney, New South Wales, 11 May 2019
58. **Tetsworth K.** Update: malunions and non-unions. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
59. **Tetsworth K.** Update: patient-specific 3D printed titanium cages to reconstruct massive femoral defects. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
60. **Tetsworth K** and O'Carrigan T. Ankle equinus deformity correction using external fixation. Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, New South Wales, 24-26 May 2019
61. **Tetsworth K.** Semi-extended tibial nailing: suprapatellar and lateral extra-articular approaches. Intramedullary Nailing Techniques, Registrar Educational Course, Brisbane, Queensland, 28 June 2019
62. **Tetsworth K.** Difficult tibial nails: proximal, distal, and segmental fractures. Intramedullary Nailing Techniques, Registrar Educational Course, Brisbane, Queensland, 28 June 2019
63. **Tetsworth K.** Distal femur fractures: fracture reduction and blocking screws. Intramedullary Nailing Techniques, Registrar Educational Course, Brisbane, Queensland, 28 June 2019
64. **Tetsworth K.** Deformity assessment and management options. Taylor Spatial Frame Applications, Registrar Educational Course, Brisbane, Queensland, 29 June 2019
65. **Tetsworth K.** Correction of malunions and non-unions. Taylor Spatial Frame Applications, Registrar Educational Course, Brisbane, Queensland, 29 June 2019
66. **Tetsworth K.** Observational gait analysis. Australian Foot and Ankle Society Meeting, Gold Coast, QLD, 8 August 2019
67. **Tetsworth K.** Anterior intra-pelvic approach for acetabular fractures. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
68. **Tetsworth K.** Pitfalls in acetabular fracture surgery exposure. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
69. **Tetsworth K.** Posterior column screw insertion techniques. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
70. **Tetsworth K.** Plate bending techniques: posterior wall/posterior column. OTC Masters Hip and Pelvis Surgery Course, Macquarie University Hospital, Sydney, NSW, 24-25 August 2019
71. **Tetsworth K.** Osseointegration: innovations in trauma care. 22cd Meeting of the Australasian Trauma Society, Sydney, NSW, 5 October 2019
72. **Tetsworth K.** Tibial Shaft Fracture. Mini Masters Fracture Forum, Sydney, NSW, 7 November 2019
73. **Tetsworth K.** Proximal Tibia Fracture. Mini Masters Fracture Forum, Sydney, NSW, 7 November 2019
74. **Tetsworth K.** Biomechanics and a stable frame construct. Advanced Taylor Spatial Frame Applications, Registrar Educational Course, Auckland, New Zealand, 9 November 2019
75. **Tetsworth K.** Preoperative planning: complex fractures and post-traumatic deformity. Advanced Taylor Spatial Frame Applications, Registrar Educational Course, Auckland, New Zealand, 9 November 2019
76. **Tetsworth K.** Orthopaedic surgery in the 21<sup>st</sup> Century: integration of engineering and medicine. Macquarie University Medical/Engineering Research Collaboration Workshop, Macquarie Park, NSW, 7 June 2019
77. **Tetsworth K.** Introduction to osseointegration for the reconstruction of amputated limbs. University of Louisville Medical Center, Louisville, Kentucky, USA, 29 July 2019
78. **Tetsworth K.** Antibiotic spacers for staged management of prosthetic joint infection. Orthopaedic Grand Rounds, Multi-disciplinary Approach to Prosthetic Joint Infection, St George Private Hospital, Sydney, NSW, 22 August 2019

## Oral Presentations

1. **Van der Pol J.** Tunnel widening and graft incorporation in short vs long tunnel ACL reconstruction. French Sports Medicine Society, GRAAL ACL Symposium, Paris, France 23 November 2019
2. **Tetsworth K,** Woloszyk A, Glatt V. Biology of the Masquelet induced membrane: temporal differences in gene expression comparing human tibial and femoral specimens (selected 1<sup>st</sup> prize outstanding basic science paper). 28<sup>th</sup> Annual Scientific Meeting of North American Limb Lengthening and Reconstruction Society, Boston, MA, USA, 19-20 July 2019
3. **Tetsworth K,** Glatt V. Preliminary results using patient specific 3D printed titanium cages for the reconstruction of massive femoral bone loss. 4<sup>th</sup> World Orthopaedic Limb Reconstruction Congress: Combined Meeting of ASAMI and the ILLRS. Liverpool, UK, 27-30 August 2019
4. **Tetsworth K,** Woloszyk A, Glatt V. Masquelet induced membrane biology: temporal differences in gene expression comparing tibial and femoral samples (selected among the top 4 papers, Best of the Best session). 4<sup>th</sup> World Orthopaedic Limb Reconstruction Congress: Combined Meeting of ASAMI and the ILLRS. Liverpool, UK, 27-30 August 2019.

## Details of staff that completed their PhDs in 2019 within your department / research group

Name	Name of Project	Completed Date	Affiliated University/ies
<b>Dr Bilal Zahoor</b>	A cohort of pelvic fractures at a single Australian tertiary referral center 2010-2016: Epidemiology of pelvic fractures and bio-markers associated with mortality in extra-peritoneal pelvic packing for haemorrhagic pelvic fractures	December 2019	University of Queensland

## Other communications and outputs:

**Dr Dennis Hartig** Google Scholar Profile: <https://scholar.google.com.au/citations?user=VY5f5jAAAAAJ&hl=en>

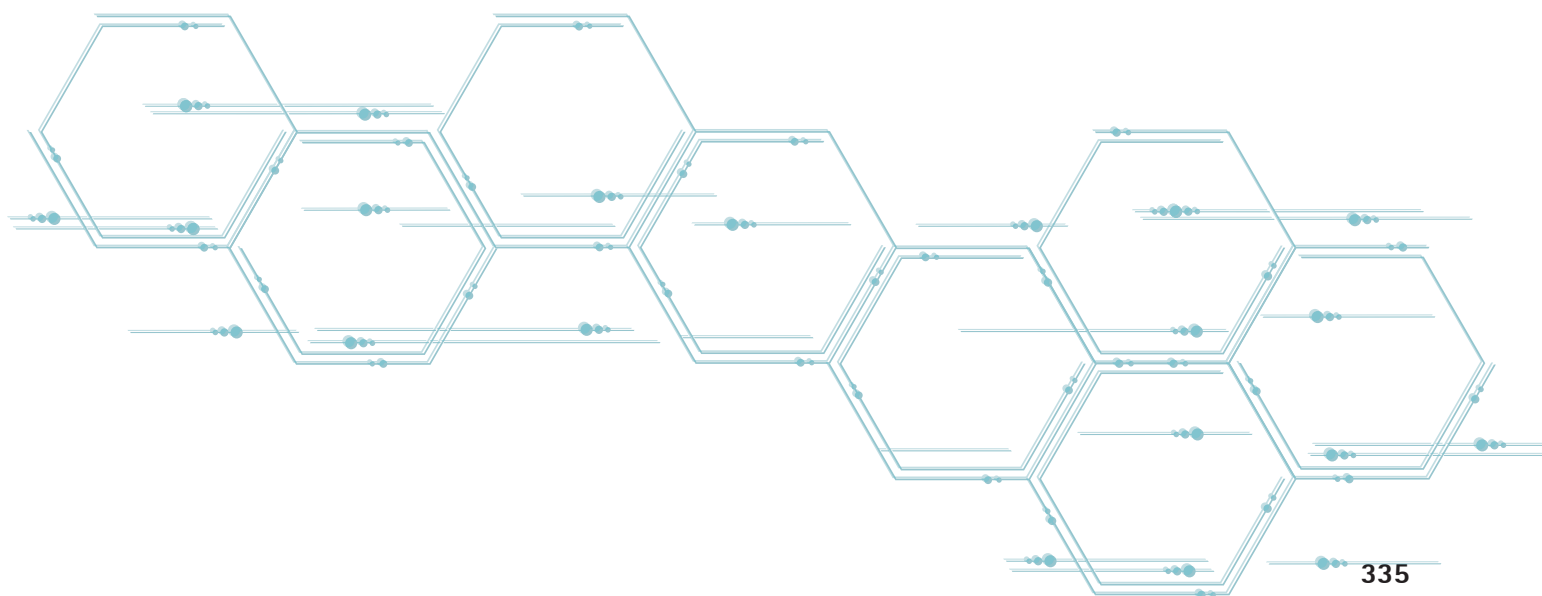
**Dr Jerry van de Pol** Google Scholar Profile: <https://scholar.google.com.au/citations?user=hp0pFGMAAAAJ&hl=en>

**Dr Kevin Tetsworth** on the AOA Research Networking Map: <https://www.aoa.org.au/research/researchmap>

**Dr Kevin Tetsworth** Google Scholar Profile: <https://scholar.google.com.au/citations?user=bx9ktUgAAAAAJ&hl=en>

**Dr Kevin Tetsworth** ResearchGate Profile: [https://www.researchgate.net/profile/Kevin\\_Tetsworth](https://www.researchgate.net/profile/Kevin_Tetsworth)

**Dr Kevin Tetsworth** PubMed/NCBI: <https://www.ncbi.nlm.nih.gov/sites/myncbi/1nUysixHnhkQe/bibliography/53341976/public/?sort=date&direction=ascending>





# DEPARTMENT OF OTOLARYNGOLOGY, HEAD & NECK SURGERY (EAR, NOSE & THROAT)

The trial on the Dupilumab (monoclonal IL-4 and IL-13 antibody) for chronic sinusitis with nasal polyps performed at the ENT Department of RBWH and other sites, has now been published in the Lancet. (Lancet 2019 Nov 2;394 1638-50).

Participating in developing new European Guidelines for the treatment of Chronic Rhinosinusitis (EPOS2020: development strategy and goals for the latest European Position Paper on Rhinosinusitis. Rhinology. 2019).

Member of the International Society of Otitis Media (ISOM) NIH supported Research panel on Microbiome of Otitis Media (OM)/ Microbial Shifts with use of antibiotics and/or broad licensure and use of vaccines. Hollywood, USA, June 2019.

## Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Dr Andrea Coleman	PhD UQ	The microbiome of otitis media and development of a probiotic to prevent otitis media in Australian Indigenous children	<b>Prof Anders Cervin</b> , Dr Seweryn Bialasiewicz, Dr Eva Grahn-Hakansson
Dr Anders Martensson	PhD <i>(Lund University, Sweden)</i>	Microbiome therapy of chronic rhinosinusitis	<b>Prof Anders Cervin</b> , Prof Lennart Greiff
Sinead Ahern	PhD UQ	Cytokines in chronic rhinosinusitis	<b>Prof Anders Cervin</b>
Dr Nathan Quigley	MPhil UQ	Systematic Evaluation of Laryngopharyngeal Investigations in LPR	<b>Dr Sarju Vasani</b> , <b>Prof Anders Cervin</b>
Dr Zhen Liu	MPhil UQ	HPV as a biomarker in monitoring OPSCC following treatment	<b>Dr Sarju Vasani</b> , Prof Chamindie Punyadeera, Prof Lizbeth Kenny
Dr Jennifer Chen	MPhil UQ	Narrowband Imaging and Low dose CT in screening Head and Neck Cancer patients for Upper and Lower airway second primary and recurrence	<b>Dr Sarju Vasani</b> , Prof David Fielding

## RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Kathryn Girling</b>	Research Nurse, Clinical Trials Coordinator	0.6	Externally Funded	Intranasal steroid depot for chronic sinusitis; Probiotic for chronic sinusitis; Clinical management of HHT	University of Queensland
Dr Diane Maresco-Penisi	Research Manager	0.6	Externally Funded	Probiotic treatment of otitis media and chronic sinusitis	University of Queensland
Dr Zhen Liu	Research Coordinator	0.4	Externally funded	Head and Neck and Skull Base Cancer research	University of Queensland

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Prof Anders Cervin</b>	Rhinology Fellow	iPro8, a nasal probiotic spray for purulent chronic rhinosinusitis
<b>Dr James Earnshaw, Prof Anders Cervin</b>	N/A	Avastin nasal spray in hereditary haemorrhagic teleangiectasia
<b>Dr James Earnshaw, Prof Anders Cervin</b>	<b>Dr Cameron Grigg</b> , Dr Chin Mun Soong ( <i>TPCH</i> )	Propranolol in hereditary haemorrhagic teleangiectasia
<b>Dr Ryan Sommerville</b>	<b>Dr Charles Lin, Dr Brett Hughes, Dr Ashvini Abeysekera, Dr Touraj Taheri, Dr Catherine Barnett</b> , Dr Michele Teng ( <i>QIMR</i> )	Investigation of CXCR4, PD-1 and CD-8 T cells in Perineural Spread
<b>Dr Ryan Sommerville</b>	<b>Dr Charles Lin, Dr Jennifer Gillespie, Dr Ashvini Abeysekera</b> , Dr Marcus Barth ( <i>UQ</i> ), Dr Aiman Al-Najjar ( <i>UQ</i> )	Use of high resolution 3T and ultra-high resolution 7T MRI in assessment of perineural spread
<b>Dr Ryan Sommerville</b>	<b>Dr Touraj Taheri, Dr Charles Lin</b> , Dr Ann-Marie Patch ( <i>QIMR</i> ), Dr Katia Nones ( <i>QIMR</i> )	Immunogenomics of Perineural Spread in Head and Neck Cutaneous Squamous Cell Carcinomas
<b>Dr Ryan Sommerville</b>	N/A	Collaborative research into head and neck cancer via Material Transfer Agreement with Jefferson University, Pennsylvania
<b>Dr Sarju Vasani</b>	<b>A/Prof Chamindie Punyadeera</b> ( <i>QUT</i> ), <b>Prof Laurie Walsh</b> , <b>Prof Lizbeth Kenny</b> , <b>A/Prof Brett Hughes</b> , <b>Dr Kai Tang</b>	HPV in OPSCC research group

## Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Christine Cong Guo ( <i>QUT</i> )	<b>Prof Anders Cervin</b>	Developing early biomarkers for Alzheimer's disease using olfactory mucosa
Dr Robyn Marsh ( <i>Menzies Darwin</i> ), Dr Rachel Lappan ( <i>Telethon, Perth</i> )	<b>Prof Anders Cervin</b>	The Australian Microbiota in Otitis Media Network
Prof Phil Hugenholtz ( <i>UQ</i> ) Dr Seweryn Bialasiewicz ( <i>UQ</i> )	<b>Prof Anders Cervin</b>	Microbiome in Otitis Media and Metagenomics of the upper airway microbiome
Prof Kirsten Spann ( <i>UQ</i> )	<b>Prof Anders Cervin</b>	Defects in antiviral defence in the upper airways of children susceptible to ear infections and/or lower respiratory tract infections
Dr Annika Antonsson ( <i>QIMR</i> )	<b>Prof Anders Cervin</b>	Natural history of oral HPV infection – what risk factors are associated with persistent oral HPV infections?
Dr Hon Trinh	<b>Dr Ryan Sommerville</b>	Genomic characterisation of Sinonasal Undifferentiated Carcinoma
Assoc. Prof Chamindie Punyadeera	<b>Dr Sarju Vasani</b>	HPV in OPSCC

## Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
<b>Dr Ryan Sommerville, Dr Charles Lin, Dr Brett Hughes, Dr Ashvini Abeysekera, Dr Touraj Taheri, Dr Catherine Barnett</b> , Dr Michele Teng ( <i>QIMR</i> )	ENT	Investigation of CXCR4, PD-1 and CD-8 T cells in Perineural Spread	RBWH Diamond Care Grant	\$33,695	\$10,000	2018-2020
<b>Dr Ryan Sommerville, Dr Charles Lin, Dr Jennifer Gillespie, Dr Ashvini Abeysekera</b> , Dr Marcus Barth ( <i>UQ</i> ), Dr Aiman Al-Najjar ( <i>UQ</i> )	ENT	Use of high resolution 3T and ultra-high resolution 7T MRI in assessment of perineural spread	RBWH Diamond Care Grant	\$31,200	\$10,000	2018-2020

## 2019 Research Publications

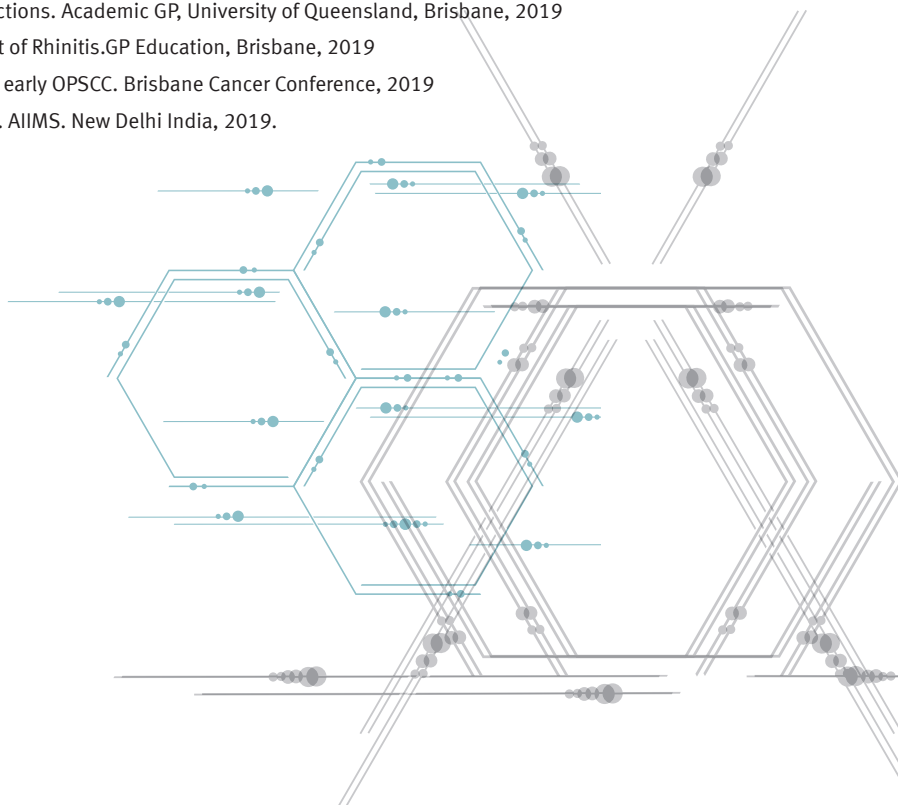
### Journal Articles

1. Marsh RL, Aho C, Beissbarth J, Bialasiewicz S, Binks M, **Cervin A**, Kirkham LS, Lemon KP, Slack MPE, Smith-Vaughan HC. Recent advances in understanding the natural history of the otitis media microbiome and its response to environmental pressures. *Int J Pediatr Otorhinolaryngol*. 2019 Dec 18;109836. doi: 10.1016/j.ijporl.2019.109836
2. Bachert C, Han JK, Desrosiers M, Hellings PW, Amin N, Lee SE, Mullol J, Greos LS, Bosso JV, Laidlaw TM, **Cervin A**, Maspero JF, Hopkins C, Olze H, Canonica GW, Paggiaro P, Cho SH, Fokkens WJ, Fujieda S, Zhang M, Lu X, Fan C, Draikiwicz S, Kamat SA, Khan A, Pirozzi G, Patel N, Graham NMH, Ruddy M, Staudinger H, Weinreich D, Stahl N, Yancopoulos GD, Mannent LP. Efficacy and safety of dupilumab in patients with severe chronic rhinosinusitis with nasal polyps (LIBERTY NP SINUS-24 and LIBERTY NP SINUS-52): results from two multicentre, randomised, double-blind, placebo-controlled, parallel-group phase 3 trials. *Lancet*. 2019 Nov 2;394(10209):1638-1650. doi: 10.1016/S0140-6736(19)31881-1
3. Balch G, Heal C, **Cervin A**, Gunnarsson R. Oral corticosteroids for painful acute otitis externa (swimmer's ear): A triple-blind randomised controlled trial. *Aust J Gen Pract*. 2019 Aug;48(8):565-572. doi: 10.31128/AJGP-12-18-4795
4. Fokkens W, Desrosiers M, Harvey R, Hopkins C, Mullol J, Philpott C, Alobid I, Anselmo-Lima WT, Bachert C, Baroody F, Bernal-Sprekelsen M, von Buchwald C, **Cervin A**, Cohen N, Constantinidis J, De Gabory L, Douglas R, Gevaert P, Hafner A, Hellings P, Joos G, Kalogjera L, Kern R, Knill A, Kocks J, Landis BN, Limpens J, Lebeer S, Lourenco O, Matricardi PM, Meco C, O Mahony L, Reitsma S, Ryan D, Schlosser R, Senior B, Smith T, Teeling T, Tomazic PV, Toppila-Salmi S, Wang DY, Wang D, Zhang L, Lund V. EPOS2020: development strategy and goals for the latest European Position Paper on Rhinosinusitis. *Rhinology*. 2019 Jun 1;57(3):162-168. doi: 10.4193/Rhin17.253
5. Douglas RG, Psaltis AJ, Rimmer J, Kuruvilla T, **Cervin A**, Kuang Y. Phase 1 clinical study to assess the safety of a novel drug delivery system providing long-term topical steroid therapy for chronic rhinosinusitis. *Int Forum Allergy Rhinol*. 2019 Apr;9(4):378-387. doi: 10.1002/alr.22288
6. Coleman A, **Cervin A**. Probiotics in the treatment of otitis media. The past, the present and the future. *Int J Pediatr Otorhinolaryngol*. 2019 Jan; 116:135-140. doi: 10.1016/j.ijporl.2018.10.023
7. Bell-Allen N, **Cervin A**, **Vasani S**. Trends in the quality & quantity of otorhinolaryngology research in Australia: 1989-2018. *Australian Journal of Otolaryngology*. 2019 Nov 4;2.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Presentations

1. **Cervin A**. In Office Turbinoplasty – the Royal Brisbane & Women's Hospital Experience. ASOHNS, Melbourne, 2019
2. **Cervin A**. Probiotic therapy in upper airway disease – what is the evidence? ASOHNS, Melbourne, 2019
3. **Cervin A**. Adult chronic rhinosinusitis update on medical management (Panel). Rhinoworld, Chicago, USA, 2019
4. **Cervin A**. Surgical failures, how to predict (Panel). Rhinoworld, Chicago, USA, 2019
5. **Cervin A**. Doxycycline and macrolides for chronic rhinosinusitis (Presentation and Panel). Rhinoworld, Chicago, USA, 2019
6. **Cervin A**. Sinonasal microbiome transplant for chronic rhinosinusitis without nasal polyps. Patient reported outcomes and effect on nasal cytokines. Australia and New Zealand Rhinologic Society, Melbourne, 2019
7. **Cervin A**. Post-operative management following sinus surgery (Panel). Australia and New Zealand Rhinologic Society, Melbourne, 2019
8. **Cervin A**. Probiotics and respiratory tract infections. Academic GP, University of Queensland, Brisbane, 2019
9. **Cervin A**. Modern diagnosis and management of Rhinitis. GP Education, Brisbane, 2019
10. **Vasani S**. Salivary HPV as a screening tool for early OPSCC. Brisbane Cancer Conference, 2019
11. **Vasani S**. Laryngectomy functional technique. AIIMS. New Delhi India, 2019.



# DEPARTMENT OF PLASTIC & RECONSTRUCTIVE SURGERY

The ongoing project on Lip SCC Metastasis has now become a multi-centre study with data collected from the Princess Alexandra Hospital. With the data from the Royal Brisbane and Women's Hospital this is the largest study of its kind in the world with an expected publication in 2020.

Effective work has been carried out on developing new reconstructive options that require coverage of large skin defects and concomitant bone defects.

There have been strong collaborations within the Department and between the departments of Radiation Oncology and Medical Oncology. These collaborations have enabled a combination of novel immunotherapy treatments and surgery (both pre and post).

## RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Dr Matthew Peters</b>	Senior Lecturer	N/A	External (UQ)	Plastic and reconstructive surgery	University of Queensland
<b>Dr Cameron Mackay</b>	Senior Lecturer	N/A	External (UQ)	Hand and reconstructive surgery	University of Queensland
<b>Dr Eddie Cheng</b>	Clinical Lecturer	N/A	External (UQ)	Plastic and reconstructive surgery	University of Queensland; Bond University
<b>Dr Drew Cronin</b>	Clinical Lecturer	N/A	External (UQ)	Plastic and reconstructive surgery	University of Queensland

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Darryl Dunn</b>	<b>Dr Michael Wagels (PAH)</b>	A multicentre trial of lymph node metastatic disease in lip squamous cell carcinoma

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Oral Presentations

- O'Hare C, Calvisi R, Wagels M, **Dunn D**. Squamous cell carcinoma of the lip lymph node metastasis. Australian New Zealand Head and Neck Cancer Society Meeting, Adelaide, Sept 2019
- Jansen Van Rensburg A, Dunn D**. Anterolateral thigh osteomyocutaneous (ALTO) flap in mandibular reconstruction for head and neck cancer. Australian New Zealand Head and Neck Cancer Society Meeting, Adelaide, Sept 2019
- Bilbao RT, Kyle S, Inglis P, Rughani MG**. Surgery after adjuvant treatment in melanoma: a novel technique for excising metastases
- Combining nuclear medicine and surgery for melanoma metastases: a novel technique in Queensland. The Multidisciplinary Melanoma Service, Royal Brisbane & Women's Hospital, Brisbane, 2019.

# DEPARTMENT OF UROLOGY

2019 was another strong year for research within the RBWH Department of Urology with a total of 45 research papers published. The large amount of data generated from results of PSMA PET scanning has led to several papers defining the utility and indications for the scan in staging prostate cancer, as well as its relatively novel use in high risk/advanced clear cell renal cancer.

We published robust clinical outcomes of our protocol whereby men with an elevated PSA are triaged to an MRI scan before their first outpatient visit where clinicians can make an informed decision whether to recommend a biopsy. Given that 1 in 5 men are diagnosed with prostate cancer in their lifetime, initiatives such as this are important to reduce the diagnosis of clinically insignificant cancer and reduce the burden on the public purse.

**Dr John Yaxley** and **Prof RA “Frank” Gardiner** and their team have been successful in gaining a \$500,000 research grant from RBWH Foundation to further refine the diagnostic approach to prostate cancer through imaging and biomarkers.

Additionally, **Dr Matthew Roberts**, who will be joining our team in 2020, was awarded a Metro North Clinical Research Fellowship (four years clinical backfill) to establish the Metro North Urological Research Centre, a world class Urological research unit based at the RBWH with close collaboration throughout MNHHS Urology (TPCH, Redcliffe) and other medical units (radiation and medical oncology, medical imaging and nuclear medicine, infectious diseases, renal medicine, clinical pharmacology) as well as with allied health and laboratory-based colleagues. This will specifically focus on developing, improving and using methodologies to improve diagnosis, guide prognosis and optimise cancer treatments.

## RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	Research Program	Affiliated University/ies
<b>Prof Frank Gardiner</b>	Professor	Urology, Faculty of Medicine	University of Queensland
<b>Assoc. Prof John Yaxley</b>	Associate Professor	Urology, Faculty of Medicine	University of Queensland
<b>Dr Matthew Roberts</b>	Senior Lecturer	Beyond the scalpel: surgeon-led multidisciplinary urological care with innovative precision diagnostics and therapeutics (Clinician Research Fellowship)	University of Queensland

## Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
<b>Dr Andrew Morton</b>	2019 Queensland RACS Papers Prize Competition	RACS Queensland State Conference

## Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
<b>Dr Geoff Coughlin, Assoc. Prof Matthew Roberts, et al</b>	Urology	A prospective randomized controlled trial of Partial nephrectomy using Open, Laparoscopic or Robotic surgical approach (POLAR)	Royal Brisbane and Women’s Hospital Foundation	\$40,000	\$40,000	2019

## 2019 Research Publications

### Journal Articles

1. Ali S, Ahn T, Papa N, Perera M, **Teloken P, Coughlin G**, Wood ST, **Roberts MJ**. Changing trends in surgical management of renal tumours from 2000 to 2016: a nationwide study of Medicare claims data. *ANZ J Surg* 2019; Sep 2
2. **Coughlin GD**, Youl PH, Philpot S, Wright MJ, Honore M, Theile DE. Outcomes following radical cystectomy: a population-based study from Queensland Australia. *ANZ J Surg*, 2019. 89(6): 752-757
3. **Donato P, Morton A, Yaxley J, Ranasinghe S, Teloken**, Kyle S, **Coughlin G, Esler R, Dungleison N, Gardiner RA, Roberts MJ**. (68) Ga-PSMA PET/CT better characterises localised prostate cancer after MRI and transperineal prostate biopsy: Is (68) Ga-PSMA PET/CT guided biopsy the future? *Eur J Nucl Med Mol Imaging* 2020; 7 Jan
4. **Donato P, Morton A, Yaxley J, Teloken PE, Coughlin G, Esler R, Dungleison N, Gardiner RA, Roberts MJ**. Improved detection and reduced biopsies: the effect of a multiparametric magnetic resonance imaging-based triage prostate cancer pathway in a public teaching hospital. *World J Urol*, 2020; 38(2): 371-379
5. Hodges P, Stafford R, **Coughlin GD**, Kasza J, Ashton-Miller J, Cameron AP, Connelly L, Hall LM. Efficacy of a personalised pelvic floor muscle training programme on urinary incontinence after radical prostatectomy (MaTchUP): protocol for a randomised controlled trial. *BMJ Open* 2019; 9(5): e028288
6. **Honore M, Roberts MJ, Morton A, Teloken PE, Navaratnam A, Coughlin GD**. Outcomes and learning curve for robotic-assisted radical cystectomy: an Australian experience. *ANZ J Surg* 2019; 89(12): 1593-1598
7. Lieng H, Kneebone A, Hayden AJ, Christie DRH, Davis BJ, Eade TN, Emmett L, Holt T, Hruby G, Pryor D, Sidhom M, Skala M, **Yaxley J**, Shakespeare TP. Radiotherapy for node-positive prostate cancer: 2019 recommendations of the Australian and New Zealand Radiation Oncology Genito-Urinary group. *Radiother Oncol*, 2019; 140: 68-75
8. **Macdonald A, Roberts MJ**. Editorial Comment from Dr Macdonald and Dr Roberts to use of fosfomycin as targeted antibiotic prophylaxis before prostate biopsy: a prospective randomized study. *Int J Urol* 2019; 26(3): 397-398
9. **Navaratnam A**. Author reply. *Urology* 2019; 134: 133-134
10. **Navaratnam A**, Faraj K, Rose K, Abdul-Muhsin H, Singh V, Schwartz A, Beauchamp C, Castle EP. Robot assisted cystectomy with holmium laser debridement for osteomyelitis of the pubic symphysis with urinary fistula. *Urology* 2019; 134: 124-134
11. Newton RU, Galvao DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Wall BA, Bolam KA, Taaffe DR. Exercise mode specificity for preserving spine and hip bone mineral density in prostate cancer patients. *Med Sci Sports Exerc* 2019; 51(4): 607-614
12. Occhipinti S, Zajdlewicz L, **Coughlin GD, Yaxley JW, Dungleison N, Gardiner RA**, Chambers SK. A prospective study of psychological distress after prostate cancer surgery. *Psychooncology* 2019; 28(12): 2389-2395
13. **Raveenthiran S, Esler R, Yaxley J**, Kyle S. The use of (68) Ga-PET/CT PSMA in the staging of primary and suspected recurrent renal cell carcinoma. *Eur J Nucl Med Mol Imaging* 2019; 46(11): 2280-2288
14. **Raveenthiran S, Yaxley J**, Gianduzzo T, Kua B, McEwan L, Wong D, Tsang G, MacKean J. The use of (68) Ga-PET/CT PSMA to determine patterns of disease for biochemically recurrent prostate cancer following primary radiotherapy. *Prostate Cancer Prostatic Dis* 2019; 22(3): 385-390
15. **Roberts MJ**, Papa N, Perera M, Joshi A, Scott S, Bolton D, Lawrentschuk N, **Yaxley J**. Declining use of radical prostatectomy and pelvic lymphadenectomy despite more robotics: national population data over 15 years. *Asia Pac J Clin Oncol* 2019; May 6. doi: 10.1111/ajco.13158
16. **Roberts MJ**, Papa N, Perera M, Scott S, **Teloken PE**, Joshi A, Vela I, Pryor D, Martin J, Woo H. A contemporary, nationwide analysis of surgery and radiotherapy treatment for prostate cancer. *BJU Int* 2019; 124 (S1): 31-36
17. Samaratunga H, Delahunt B, Egevad L, Srigley JR, Billis A, Bostwick DG, Camparo P, Cheng L, Clouston D, Denham J, Furusato B, Hartmann A, Jufe L, Kench J, Kenwright JN, Kristiansen G, Leite KRM, MacLennan GT, Merrimen J, Moch H, Oxley J, Pan CC, Paner G, Ro J, Sesterhenn IAM, Shanks J, Thunders M, Tsuzuki T, Wheeler T, **Yaxley JW**, Varma M. Intraductal carcinoma of the prostate is an aggressive form of invasive carcinoma and should be graded. *Pathology* 2020; 52(2): 192-196
18. Srigley JR, Delahunt B, Samaratunga H, Billis A, Cheng L, Clouston D, Evans A, Furusato B, Kench J, Leite K, MacLennan G, Moch H, Pan CC, Rioux-Leclercq N, Ro J, Shanks J, Shen S, Tsuzuki T, Varma M, Wheeler T, **Yaxley J**, Egevad L. Controversial issues in Gleason and International Society of Urological Pathology (ISUP) prostate cancer grading: proposed recommendations for international implementation. *Pathology* 2019; 51(5): 463-473
19. Stafford RE, **Coughlin G**, Hodges PW. Comparison of dynamic features of pelvic floor muscle contraction between men with and without incontinence after prostatectomy and men with no history of prostate cancer. *NeuroUrol Urodyn* 2020; 39(1): 170-180
20. Taaffe DR, Galvao DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Hayne D, Cormie P, Shum DHK, Newton RU. Immediate versus delayed exercise in men initiating androgen deprivation: effects on bone density and soft tissue composition. *BJU Int* 2019; 123(2): 261-269
21. Tanaka K, Amoako AA, **Gray K**, Baartz D. Unilateral ureteric endometriosis at the pelvic brim resulting in complete loss of renal function. *Case Rep Obstet Gynecol* 2019 Oct 13; 2019: 9194615
22. **Teloken P**, Katz D. Medical management of Peyronie's disease: review of the clinical evidence. *Med Sci (Basel)* 2019 Sep 18; 7(9): E96
23. Truong V, Finch R, **Martin B**, Buzacott K, Singh M, Patel B. Littoral cell angioma of spleen. *ANZ J Surg* 2019; 89(4): E158-159
24. **Yaxley JW**. Will favourable functional results with salvage robot-assisted laparoscopic radical prostatectomy increase the uptake of primary focal therapy for localised prostate cancer? *Eur Urol* 2019; 76(1): 31-32
25. **Yaxley JW, Raveenthiran S**, Nouhaud FX, Samaratunga H, **Yaxley WJ, Coughlin G**, Yaxley AJ, Gianduzzo T, Kua B, McEwan L, Wong D. Risk of metastatic disease on (68) gallium-prostate-specific membrane antigen positron emission tomography/computed tomography scan for primary staging of 1253 men at the diagnosis of prostate cancer. *BJU Int* 2019; 124(3): 401-407

## Journal Articles (cont)

26. **Yaxley JW, Raveenthiran S, Nouhaud FX**, Samartunga H, Yaxley AJ, **Coughlin G**, Delahunt B, Egevad L, McEwan L, Wong D. Outcomes of primary lymph node staging of intermediate and high risk prostate cancer with (68)Ga-PSMA positron emission tomography/computerized tomography compared to histological correlation of pelvic lymph node pathology. *J Urol* 2019; 201(4): 815-820
27. Yoneyama T, Tobisawa Y, Kaneko T, Kaya T, Hatakeyama S, Mori K, Sutoh Yoneyama M, Okubo T, Mitsuzuka K, Duivenvoorden W, Pinthus JH, Hashimoto Y, Ito A, Koie T, Suda Y, **Gardiner RA**, Ohyama C. Clinical significance of the LacdiNAc-glycosylated prostate-specific antigen assay for prostate cancer detection. *Cancer Sci* 2019; 110(8): 2573-2589
28. Franklin A, Gianduzzo A, **Yaxley J**, Kua B, Coughlin G, Samaratunga H, Gianduzzo T. The use of a trizonal schema to assess targeting accuracy of fusion prostate biopsy. *BJU International Suppl* 2019; 0992.R1
29. Occhipinti S, Zajdlewicz L, Coughlin G, **Yaxley J**, **Dunglison N**, Gardiner RA, Chambers S. A prospective study of psychological distress after prostate cancer surgery. *Psycho-Oncology* 2019; 28(12): 2389-2395
30. Pereira R, Joshi A, Roberts M, **Yaxley J**, Vela I. Open retropubic radical prostatectomy *Transl Androl Urol* 2019 doi.org/10.21037/tau.2019.09.15
31. Delahunt B, Dagher J, Egevad L, **Yaxley J**, Varma M, Samaratunga H. Is the uicc/ajcc pt2 staging category for clear cell renal cell carcinoma meaningful? *Am J Surg Pathol*. 2019 Jun 18. doi: 10.1097/PAS.0000000000001308
32. Leing H, Kneebone A, Hayden A, Christie D, Davis B, Eade T, Emmett L, Holt T, Hriby G, Pryor D, Sidhom M, Skala M, **Yaxley JW**, Shakesphere T. Radiotherapy for node positive prostate cancer: recommendations of the Australian and New Zealand Radiation Oncology Genitourinary Group. *Radiother Oncol*. 2019 Jun 6; 140:68-75. doi: 10.1016/j.radonc.2019.05.016
33. Lindh C, Kis L, Delahunt B, Samaratunga H, **Yaxley J**, Wiklund P, Clements M, Egevad L. PD-L1 Expression and deficient mismatch repair in ductal adenocarcinoma of the prostate *APMIS Journal of Pathology Microbiology and Immunology* 2019; 127: 554–560. doi: 10.1111/apm.12970
34. Pokorny M, **Yaxley J**. Three-dimensional elastic augmented reality for robot assisted laparoscopic prostatectomy: pushing the boundaries but cutting it fine. *Eur Urol*. 2019 Oct;76(4):515-516. doi: 10.1016/j.eururo.2019.04.025
35. McEwan L, McBean R, **Yaxley J**, Wong D. Unexpected significant findings non-related to prostate cancer identified using combined prostate-specific membrane antigen positron emission tomography/CT and diagnostic CT scan in primary staging for prostate cancer. *J Med Imaging Radiat Oncol*. 2019 Jun;63(3):318-323. doi: 10.1111/1754-9485.12864
36. Delahunt B, Eble J, Egevad L, **Yaxley J**, Thunders M, Samaratunga H. Emerging entities of renal cell neoplasia. *Surgical and Experimental Pathology* 2019; 2:10. doi.org/10.1186/s42047-019-0035-x
37. Egevad L, Delahunt B, **Yaxley J**, Samaratunga H. Evolution, controversies and the future of prostate cancer grading. *Pathol Int*. 2019 Feb;69(2):55-66. doi: 10.1111/pin.12761
38. Pokorny M, **Esler R**, **Yaxley J**, Kua B, Samaratunga H, **Dunglison N**, Gianduzzo T, Coughlin G, Holt R, Laing B, Ault D, Brown N, Parkinson R, Thompson L. MRI guided In-Bore biopsy for prostate cancer - what does the evidence say? A case series of 554 patients and a review of the current literature. *World J Urol*. 2019 Jul;37(7):1263-1279. doi: 10.1007/s00345-018-2497-y
39. Newton RU, Galvão DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Wall BA, Bolam KA, Taafe DR. Exercise Mode Specificity for Preserving Spine and Hip Bone Mineral Density in Prostate Cancer Patients. *Med Sci Sports Exerc* 2019 Apr; 51(4):607-614
40. Taafe DR, Galvão DA, Spry N, Joseph D, Chambers SK, **Gardiner RA**, Hayne D, Cormie P, Shum DHK, Newton RU. Immediate versus delayed exercise in men initiating androgen deprivation: effects on bone density and soft tissue composition. *BJU Int*. 2019 Feb;123(2):261-269
41. Faraj KS, Abdul-Muhsin HM, Rose KM, **Navaratnam AK**, Patton MW, Eversman S, Singh R, Eversman WG, Cheney SM, Tyson MD, Castle EP. Robot assisted radical cystectomy vs open radical cystectomy: over 10 years of the Mayo Clinic experience. *Urologic Oncology* 2019; 37(12): 862-869.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Oral Presentations

1. **Donato P, Morton A, Coughlin G, Esler R, Dunglison N, Gardiner RA, Yaxley J, Roberts M**. Could 68Ga-PSMA PET/CT play a role in primary prostate cancer localization? A single institution comparative analysis of 68Ga-PSMA PET/CT, multiparametric MRI and prostate biopsy. EAU ASC, Barcelona, 2019
2. **Morton A, Donato P, Roberts M, Yaxley J**. Increased primary tumour maximal standardized uptake value on 68Ga-PSMA PET/CT correlates with histologically aggressive prostate cancer. SIU ASC, Athens, 2019.

### Poster Presentations

1. **Pearce AK**, Reid A, Huddart R, Mayer EK, Nicol DL. Comparison of outcomes of pc-rplnd with national registry data. USANZ ASM, Brisbane, 2019
2. **Pearce AK**, Walker S, Whibley J, Mayer EK, Nicol DL. Identifying factors which affect length of stay in post-chemotherapy retroperitoneal lymph node dissection. EAU ASC, Barcelona, 2019 and AUA ASC, Chicago, 2019
3. **Morton A, Donato P, Roberts M, Yaxley J**. Cognitive-registration biopsy targeting for prostate cancer has a steep learning curve: experience from a large public tertiary teaching hospital. SIU ASC, Athens, 2019
4. **Morton A, Donato P, Roberts M, Coughlin G, Esler R, Dunglison N, Gardiner RA, Yaxley J**. The introduction of a multiparametric magnetic resonance imaging-based triage pathway in a public teaching hospital improved prostate cancer detection and reduced biopsies. SIU ASC, Athens, 2019.

# DEPARTMENT OF VASCULAR SURGERY

During 2019, the Vascular Surgery Department has actively participated in various research activities including recruitment for four new trials, technology to engage with consumers and the continued study of devices to treat abdominal aneurysms.

Vascular have significant collaborations with the James Cook University. **Dr Jason Jenkins** is the Principal Investigator alongside Dr Sophie Rowbotham of University of Queensland and Prof John Golledge of James Cook University, for a behavioural intervention trial and two new multicentre randomised placebo-controlled medication trials. The Metformin Aneurysm Trial (MAT) will assess the impact of metformin on the progression of abdominal aortic aneurysms over the next 4 years. Metformin is also the focus of the second collaborative trial and looks at the effect of the medication on the pathological causes of peripheral arterial disease. In addition to looking at medical therapy, recruitment for a behavioural intervention to increase physical activity in those with PAD is also underway.

Within the RBWH, an aspirin resistance trial has been commenced by **Dr Thomas Cavaye** and **Dr Stacie Hodge**, under the supervision of Dr Jenkins. The role of aspirin resistance in complications following vascular procedures will be explored and undertaken over the next two years.

Dr Hodge and **Dr Krishna Pattabathula**, in conjunction with students of Queensland University of Technology and under supervision of Dr Jenkins and **Dr Nigel Pinto**, have developed an iOS/android application for roll-out in early 2020. The application is designed for patient access and aims to encourage patient autonomy in optimising their health pre-operatively and enhancing post-operative recovery.

Through funding provided by the Herston Biofabrication Institute, 3D modelling and printing continues to be explored by Dr Jenkins and Dr Pinto. This research will allow anatomical replicas to be constructed for patient and department education, surgical training and planning of complex cases. It will also lay the foundation for plans to develop endovascular implants, thus personalising devices to unique anatomy.

Finally, a clinical research nurse has joined the Vascular Research Team in 2019 collecting retrospective data on numerous surgical interventions and natural progression of disease. Funding for 2020 sees the continuation of the clinical research nurse with expansion of the research team with a Senior Research Fellow and Principal House Officer.

## RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/ external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Dr Jason Jenkins</b>	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
<b>Dr Simon Quinn</b>	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
<b>Dr Danella Favot</b>	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
<b>Dr Nigel Pinto</b>	Senior lecturer	N/A	Honorary	Faculty of Medicine	University of Queensland
<b>Michelle McGrath</b>	Clinical Research Nurse	0.4	Funded in-kind	Vascular	University of Queensland
Matthew Dally-Watkins	Associate Investigator	Casual	Externally funded	Behavioural intervention for peripheral arterial disease	University of Queensland
Matthew Dally-Watkins	Associate Investigator/Site Co-ordinator	Casual	Externally funded	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	University of Queensland



## Honorary Positions: e.g. Non-RBWH staff with research appointments at RBWH

Name	Position	FTE	Research Program	Affiliated University/ies
<b>Dr Sophie Rowbotham</b>	Honorary	0.8	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	James Cook University
Matthew Dally-Watkins	Senior Research Technician	Casual	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	University of Queensland

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Jason Jenkins, Dr Nigel Pinto</b>	Prof Mia Woodruff ( <i>QUT</i> ), Mathilde Desselte ( <i>QUT</i> )	Advanced manufacturing and simulation of vascular anatomy, novel endovascular devices, medical applications of graphene
<b>Dr Stacie Hodge, Dr Thomas Cavaye, Dr Jason Jenkins, Dr Nigel Pinto</b>	<b>Ms Michelle McGrath</b>	Aspirin resistance in vascular surgical patients undergoing intervention

## Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Jason Jenkins, Prof Jon Golledge</b> ( <i>JCU</i> )	<b>Dr Sophie Rowbotham, Matthew Dally Watkins</b>	Behavioural intervention for peripheral arterial disease
<b>Dr Jason Jenkins, Prof Jon Golledge</b> ( <i>JCU</i> )	<b>Dr Sophie Rowbotham, Matthew Dally-Watkins</b>	Metformin for treating peripheral artery disease-related walking impairment (MERIT)
<b>Dr Jason Jenkins, Prof Jon Golledge</b> ( <i>JCU</i> )	<b>Dr Sophie Rowbotham, Matthew Dally-Watkins</b>	Metformin aneurysm trial (MAT): a randomised placebo-controlled trial of the effects of metformin on outcomes among people with small AAA

## Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
<b>Dr Jason Jenkins</b>	2019 Royal Alumni Research Encouragement Award	2019 RBWH and RBWH Foundation Grant Awards Ceremony

## Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
<b>Dr Jason Jenkins, Dr Nigel Pinto</b>	Vascular	Advanced manufacturing and simulation of vascular anatomy, novel endovascular devices, medical applications of graphene	The Herston Biofabrication Institute	\$1,600,000	\$40,000	2018-2024
Dr Nicola Burton, <b>Dr Jason Jenkins</b> , Prof Jon Golledge, Prof Paul Norman, Prof Maria Fiatarone Singh, Assoc. Prof Anthony Leicht, Assoc. Prof Zanfina Ademi.	Vascular	Assessment of the efficacy of a brief behaviour intervention designed to improve physical activity in patients with peripheral artery disease	NHMRC Project Grant administered by James Cook University	\$131,257.26	\$50,000	2014-2019
<b>Dr Jason Jenkins, Prof Jon Golledge</b>	Vascular	Metformin for treating peripheral artery disease-related walking impairment (MERIT)	RBWH Foundation	\$40,000	Nil	2019-2020

## 2019 Research Publications

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### Journal Articles

1. Golledge J, Morris DR, Pinchbeck J, **Rowbotham, SE, Jenkins J**, Bourke M, Bourke B, Norman PE, Jones R, Moxon JV. Editor's Choice – Metformin Prescription is Associated with a Reduction in the Combined Incidence of Surgical Repair and Rupture Related Mortality in Patients with Abdominal Aortic Aneurysm. *Eur J Vasc Endovasc Surg*. 2019; 57(1), 94–101. Doi: 10.1016/j.ejvs.2018.07.035
2. Manapurathe DT, Moxon JV, Krishna SM, **Rowbotham SE**, Quigley F, **Jenkins J**, Bourke M, Bourke B, Jones RE, Golledge J. Cohort Study Examining the Association Between Blood Pressure and Cardiovascular Events in Patients with Peripheral Artery Disease. *J Am Heart Assoc*. 2019 Mar 8; 8(6). doi: 10.1161/JAHA.118.010748
3. Brough D, **Quinn S**, Batley PB, Cavallucci D, O'Rourke N. Primary aortoenteric fistula: a case of delayed diagnosis. *ANZ J Surg*. 2019 May; doi: 10.1111/ans.15159 [Epub ahead of print]
4. **Robertson C**, Varcoe RL, Black S, Thomas SD. Histopathology of ilioacaval venous in-stent restenosis treated with directional atherectomy. *J Endovasc Ther*. 2019; 26(5), 742-746. Doi: 10.1177/1526602819857240
5. **Elliott J, Jenkins J**. Management of a large ruptured popliteal artery aneurysm involving combined deployment of a covered stent graft and evacuation of popliteal fossa haematoma. *J Vasc Surg Cases and Innovative Techniques*. 2019; Accepted for publication
6. **Deboghossian T, Cavaye T, Quinn S, Pinto N**. Symptomatic infrarenal aortic aneurysm sac expansion five years post endovascular repair without an identifiable endoleak. *Australas J Ultrasound Med*. 2019; Accepted for publication.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited speakers

1. **Jenkins J**. Driving clinical innovation through partnerships. Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia
2. **Jenkins J**. Vascular clinical program (panel discussion). Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia.

### Oral Presentations

1. **Deboghossian T**. Doppler angle correction in vascular sonography. VERVE Symposium 2019. Sydney
2. **Robertson C**. Deep venous in-stent restenosis: Pathological evidence as to its cellular origins. VERVE Symposium 2019. Sydney, Australia
3. **Cavaye T**. The novel endovascular plication of a thigh arteriovenous fistula using an EVAR limb to treat high-output cardiac failure. VERVE Symposium 2019. Sydney, Australia
4. **Cavaye T**. Aortic hygroma following endovascular repair of an abdominal aortic aneurysm. VERVE Symposium 2019. Sydney, Australia.

### Poster Presentations

1. **Cavaye T**. Cystic adventitial disease of the common femoral vein. VERVE Symposium 2019. Sydney
2. **Cavaye T**. Dysphagia lusoria from a Kommerell diverticulum treated with a carotid-subclavian bypass and Amplatzer plug. VERVE Symposium 2019. Sydney
3. **Cavaye T**. Endovascular reconstruction of a pseudoaneurysm of an open hepatic artery aneurysm repair. VERVE Symposium 2019. Sydney
4. **Elliott JE, Kruger A, Clouston J**. Endovascular management for inadvertent placement of a 14Fr vascath in the left common carotid artery. VERVE Symposium 2019. Sydney
5. **Elliott JE, Iyer A**. Acute limb ischemia following elective left upper lobectomy for early NSCLC: a rare but serious complication arising from the pulmonary vein stump. ANZSCTS Annual Scientific Meeting 2019. Hobart, Australia
6. **Elliott JE, Cole C**. Large iatrogenic pneumothorax secondary to narrow bore enteral feeding nasogastric tube: vulnerable patients, common procedures, life-threatening complications. ANZSCTS Annual Scientific Meeting 2019. Hobart, Australia
7. **Elliott JE, Lo W**. Excision of an extremely rare thymic basaloid carcinoma: first to be excised via redo sternotomy. ANZSCTS Annual Scientific Meeting 2019. Hobart, Australia.

## Other communications and outputs:

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### TECHNOLOGY

**Dr Stacie Hodge, Dr Jason Jenkins**. *Enhancing your recovery: a mobile application for patients undergoing intervention*.

### TEACHING

**Dr Nigel Pinto, McCarthy K, Miller D**. *Diabetic foot infection forum*. 2019 Nov; ASID trainees' weekend. Brisbane, Australia.

# KENNETH G JAMIESON

## DEPARTMENT OF NEUROSURGERY

**RBWH Research Staff with research roles, positions or appointments:** e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Programt	Affiliated University/ies
<b>Assoc. Prof Lindy Jeffree</b>	Associate Professor	N/A	External (UQ)	Neuro-oncology Surgery	University of Queensland
<b>Dr Craig Winter</b>	Senior Lecturer	N/A	External (UQ)	Neurosurgery	University of Queensland
<b>Dr Hamish Alexander</b>	Senior Lecturer	N/A	External (UQ)	Neurosurgery	University of Queensland
<b>Dr Jason McMillen</b>	Senior Lecturer	N/A	External (UQ)	Neurosurgery	University of Queensland

### Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Benjamin Chua</b>	<b>Jacqui Keller, Assoc. Prof Lindy Jeffree, Prof Chamindie Punyadeera (QUT), Assoc. Prof Zarnie Lwin</b>	The use of non-invasive biomarkers in glioblastoma: a pilot study
<b>Dr Benjamin Chua</b>	<b>Assoc. Prof Lindy Jeffree, Assoc. Prof Zarnie Lwin, Dr Po-Ling Inglis</b>	Using molecular-guided PET/MRI imaging to target hypoxia in glioblastoma: a pilot study to identify novel pathways and define molecular signatures associated with hypoxia and poor patient outcome

### Research Awards and Achievements

Recipient <i>(RBWH staff in bold)</i>	Award	Event
Browne E, Leonard R, Besser M, Nowak AK, Vajdic C, Churches T, Gan HK, Gedye C, Gottardo N, Fraser C, Zalcborg, Sachchithananthan M, <b>Assoc. Prof Lindy Jeffree</b>	Most Outstanding Poster Presentation	Cooperative Trials Group for Neuro-oncology (COGNO) Annual Scientific Meeting, Sydney, 27-29 Oct 2019

### Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
<b>Dr Craig Winter, M Allenby, Dr John Clouston, Dr Marita Prior</b>	Neurosurgery	A biofabricated surgical referral suite to predict intracranial aneurysmal rupture	RBWH Foundation	\$39,876	\$10,000	2019-2020
<b>Dr Craig Winter, Dr Fatima Nasrallah (UQ), Dr Maria Hennessy (TI)</b>	Neurosurgery	A magnetic resonance imaging approach to investigate blood brain barrier dysfunction in brain injury and subarachnoid haemorrhage patients as a predictor of patient outcome	Jamieson Trauma Institute	\$101,895	\$15,000	2019-2021
<b>Dr Melissa Eastgate, Assoc. Prof Lindy Jeffree</b>	Neurosurgery	Clinicopathological features predicting survival after brain metastasectomy in melanoma	RBWH Foundation, Phoebe Eales Melanoma Research Grant	\$39,350	\$39 350	2019

## Research Publications

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### Journal Articles

1. **Tingate C, Alexander H.** Primary intraventricular abscess of the third ventricle. *J Clin Neurosci.* 2019 Jul; 65:154-157
2. Lim YC, Ensbey KS, Offenhäuser C, D'Souza RCJ, Cullen JK, Stringer BW, Quek H, Bruce ZC, Kijas A, Cianfanelli V, Mahboubi B, Smith F, **Jeffree RL**, Wiesmüller L, Wiegmanns AP, Bain A, Lombard FJ, Roberts TL, Khanna KK, Lavin MF, Baek K, Hamerlik P, Johns TG, Coster MJ, Boyd AW, Day BW. Simultaneous targeting of DNA replication and homologous recombination in glioblastoma with a polyether ionophore. Targeting DNA replication and homologous recombination in radioresistant glioblastoma with a polyether ionophore. *Neuro Oncol* 2019 Aug 30: pii: noz159
3. Day BW, Lathia JD, Bruce ZC, D'Souza RCJ, Baumgartner U, Ensbey KS, Lim YC, Stringer BW, Akgül S, Offenhäuser C, Li Y, Jamieson PR, Smith FM, Jurd CLR, **Robertson T, Inglis PL, Lwin Z, Jeffree RL**, Johns TG, Bhat KPL, Rich JN, Campbell KP, Boyd AW. The dystroglycan receptor maintains glioma stem cells in the vascular niche. *Acta Neuropathol* 2019 Dec; 138(6): 1033-1052
4. **Shaw T, Jeffree RL, Thomas P, Goodman S, Debowski M, Lwin Z, Chua B.** Diagnostic performance of 18F-fluorodeoxyglucose positron emission tomography in the evaluation of glioma. *Journal of Medical Imaging and Radiation Oncology* 2019 Oct; 63(5): 650-656
5. Gedye C, Sachchithananthan M, Leonard R, **Jeffree RL**, Buckland ME, Ziegler DS, Graeber MB, Day BW, McDonald KL, Lasocki A, BCBA Consortium, Nowak AK. Driving innovation through collaboration: development of clinical annotation datasets for brain cancer biobanking. *Neuro-Oncology Practice* 2020; 7(1): 31-37
6. Brownsett SLE, Ramajoo K, Copland D, McMahon KL, Robinson G, Drummond K, **Jeffree RL**, Olson S, Ong B, De Zubicaray G. Language deficits following dominant hemisphere tumour resection are significantly underestimated by syndrome-based aphasia assessments. *Aphasiology* 2019; 33(10): 1163-1181
7. Akgül S, Patch A, D'Souza RCJ, Mukhopadhyay P, Nones K, Kempe S, Kazakoff SH, **Jeffree RL**, Stringer BW, Pearson JV, Waddell N, Day BW. Intratumoural heterogeneity underlies distinct therapy responses and treatment resistance in glioblastoma cancers. *Cancers (Basel)* 2019 Feb 6; 11(2): pii: E190
8. Stringer BW, Day B. W., D'Souza J, Jamieson PR, Ensbey KS, Bruce ZC, Lim YC, Goasdoué K, Offenhäuser C, Akgül S, **Allan S, Robertson T, Lucas P, Tolleson G, Campbell S, Winter C**, Do H, Dobrovic A, **Inglis P, Jeffree RL**, Johns TG, Boyd AW. A reference collection of cell line and xenograft models of proneural, classical and mesenchymal glioblastoma. *Scientific Reports* 2019 Mar 20; 9(1): 4902
9. **Dux C**, Lim S-C, **Jeffree RL, Heaydon S, De Jersey S.** Improving nutrition care for neurosurgery patients through a nurse-led transition feeding protocol. *Nutrition and Dietetics* 2019; 76: 158-65
10. Lim M, Puttick S, Houston ZH, Thurecht KJ, Kalita-de Croft P, Mahler S, Rose SE, **Jeffree RL**, Mazzieri R, Dolcetti R, **Lakhani SR**, Saunus JM. Innovative therapeutic strategies for effective treatment of brain metastases. *International Journal of Molecular Sciences* 2019 Mar 14; 20(6): E1280.

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

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### Invited Speakers

1. **Jeffree RL.** Lifting the lid on decompressive craniectomy. College of Intensive Care Medicine Annual Scientific Meeting, Cairns, June 2019
2. **Jeffree RL.** A surgical perspective on unmet needs in neuro-oncology. COGNO Ideas Generation Workshop, Sydney, May 2019.

### Oral Presentations

1. Nichols P, Campbell M, Miller S, **Bjorkman T**, Nasrallah F, **Winter C.** The quantification of blood-brain barrier disruption in traumatic brain injury using serum levels of matrix metalloproteinases (MMP-1, 2, and 9) and the volume transfer constant K<sub>Trans</sub> (DEC-MRI). Neurosurgical Society of Australasia Annual Scientific Meeting, Melbourne, 21-23 Aug 2019
2. **Papacostas J, Winter C.** Role of SEEG in lesional epilepsy. Neurosurgical Society of Australasia Annual Scientific Meeting, Melbourne, 21-23 Aug 2019
3. **Pearce P**, Thevathasan W, Perera T, Kim B, Milicevic M, Bulluss K, **Winter C.** Accuracy of electrode placement in the awake patient for deep brain stimulation in Parkinson's disease. Neurosurgical Society of Australasia Annual Scientific Meeting, Melbourne, 21-23 Aug 2019.

### Poster Presentations

1. Browne E, Leonard R, Besser M, Nowak AK, Vajdic C, Churches T, Gan HK, Gedye C, Gottardo N, Fraser C, Zalcborg, Sachchithananthan M, **Jeffree RL.** Developing a National Brain Cancer Registry: a clinical feasibility study. COGNO Annual Scientific Meeting, Sydney, 27-29 Oct 2019
2. **Jeffree RL.** An audit of outcomes following decompressive craniectomy at RBWH. NSA AGM, Melbourne, Aug 2019
3. Colditz M, Lee SF, Olson S, Pinkham M, **Eastgate M**, Elder S, Hamilton E, Brandis P, **Jeffree RL.** Gross total resection of cerebral melanoma metastasis is associated with improved survival. American Association of Neurological Surgeons Annual Scientific Meeting, San Diego, USA, April 2019.

# PROFESSOR STUART PEGG BURNS CENTRE

The Professor Stuart Pegg Burns Centre provides all adult burn care for the state of Queensland. The centre represents the largest burn unit in Australia and New Zealand treating up to 500 inpatient burns in 2019. The centre treats a large proportion of severe burns in Australia, providing an excellent opportunity to take research outcomes and translate them into clinical practice. It is co-located with the Queensland Skin Culture Centre and the Herston Biofabrication Institute and has collaborations with The Jamieson Trauma Institute.

The Herston Biofabrication Institute began construction in 2019 and will open in mid-2020. At the Institute, the burns program is one of five core clinical programs. Through the use of virtual reality, advanced imaging and tissue engineering techniques, the research performed in partnership with The Herston Biofabrication Institute will ensure that burn injured Queenslanders continue to receive world leading treatment.

## Supervised Post-Graduate Research Students

Name <i>(RBWH staff in bold)</i>	Current Studies <i>(e.g. PhD, Masters etc.)</i> University <i>(duration)</i>	Research Project Title	Supervisors <i>(RBWH staff in bold)</i>
Olivia McGifford	PhD QUT (2019-current)	Optimising the growth of skin for burn research and treatment	Assoc. Prof Leila Cuttle (QUT), Prof Damien Harkin (QUT), Prof Mia Woodruff (QUT), <b>Dr Jason Brown</b>

## RBWH Research Staff with research roles, positions or appointments: e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Program	Affiliated University/ies
<b>Dr Carl Lisec</b>	Conjoint Academic Coordinator	0.3	External (UQ)	RBWH Clinical Unit for Year 3 MBBS / MD	University of Queensland

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Jason Brown</b>	<b>Dr Jason Miller, Dr Carl Lisec</b>	A prospective, non-controlled evaluation of the synthetic NovoSorb™. Biodegradable Temporising Matrix (BTM) for dermal repair after deep burn injury
<b>Dr Jason Brown</b>	<b>Dr Peter Gillies</b>	Herston Biofabrication Institute Burns Clinical Program
<b>Dr Jason Brown</b>	<b>Michelle Donovan</b> , Dr Zephania Tyack (UQ), Prof Steven McPhail (QUT)	Feasibility, acceptability, costs and preliminary effect of an innovative ablative fractional CO2 laser service for people with burn scars
<b>Dr Jason Brown</b>	<b>Dr Peter Gillies, Rebecca Dawson</b> , Assoc. Prof Leila Cuttle (QUT), Prof Damien Harkin (QUT), Olivia McGifford (QUT)	In vitro analysis of keratinocyte cell culture conditions. Biofabrication for better burns treatment
<b>Dr Elizabeth Vujcich</b>	<b>Assoc. Prof Paul Gray, Mathilde Desselle</b>	Virtual reality for pain management in burn trauma care

## Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
Dr Zephania Tyack (UQ)	<b>Dr Jason Brown</b> , ME Carrière, LB Mokkink, MJ Westerman, PPM van Zuijlen, HCW de Vet (Netherlands)	POSAS 3.0: refinement of the patient scale using focus groups in Australia and the Netherlands (Australian study arm)
<b>Prof Jenny Strong</b>	<b>Sarah O'Reilly</b> , Dale Trevor, Jodie Copley, Tammy Aplin, <b>Joanna Mollison</b> , Nicole Coghlan, <b>Sue Laracy, Dr Jason Brown</b>	The lived experience of pressure garments: an exploration of the partnership between expert consumers and occupational therapists in a tertiary MDT burns centre
<b>Anita Plaza</b>	Dr Jennifer Paratz (UQ), <b>Michelle Cottrell, Dr Jason Brown</b>	Evaluating the effectiveness of a home based telerehabilitation model for the delivery of physiotherapy exercise programs following burn injury
Prof Cliff Pollard (JTI)	<b>Dr Elizabeth Vujcich</b> (Burns Led)	Remote virtual reality and augmented reality for burns trauma care
Dr Gillian Wright, <b>Assoc. Prof Kerstin Wyssusek</b>	<b>Dr Carl Lisec</b>	ASPECT
Australian and New Zealand Burn Association (ANZBA)	<b>Dr Carl Lisec</b>	ANZBA Research Committee

## Research Grants

Investigators <i>(RBWH staff in bold)</i>	RBWH Research Groups / Departments	Project Title	Granting Body	Total of funds awarded	Funds used in 2019	Years
<b>Dr Jason Brown, Dr Peter Gillies</b>	Herston Biofabrication Institute	Burns clinical program	Herston Biofabrication Institute	\$2,499,645	\$90,000	2018–2023
<b>Dr Jason Brown, Michelle Donovan</b> , Dr Zephania Tyack (UQ), Prof Steven McPhail (QUT)	Professor Stuart Pegg Burns Centre	Feasibility, acceptability, costs and preliminary effect of an innovative ablative fractional CO2 laser service for people with burn scars	Royal Brisbane and Women's Hospital Foundation	\$39,944	Nil	2019–2020
<b>Prof Jenny Strong, Sarah O'Reilly</b> , Dale Trevor, Jodie Copley (UQ), Tammy Aplin (UQ), <b>Joanna Mollison, Nicole Coghlan (QCH), Sue Laracy, Dr Jason Brown</b>	Occupational Therapy, Professor Stuart Pegg Burns Centre	The lived experience of pressure garments: An exploration of the partnership between expert consumers and occupational therapists in a tertiary MDT burns centre	Royal Brisbane and Women's Hospital Foundation	\$14,9645	\$7,482	2018–2019
<b>Sarah O'Reilly</b> , Prof Jenny Ziviani (UQ), <b>Prof Jenny Strong, Dr Jason Brown</b>	Occupational Therapy, Professor Stuart Pegg Burns Centre	Investigating the use of elastic based tapes for management of hypertrophic scar formation to the upper limb post burn injury	CAHRLI	\$5,000	\$2,500	2018–2019

## 2019 Research Publications

### Book Chapters

- Muller M.** Chapter 13: Burns. In: Boffard KD, editor. Manual of Definitive Surgical Trauma Care, Fifth edition. Florida, USA: CRC Press, Taylor & Francis Group. (2019) p233-248
- Muller M.** Burns. In: Primary Clinical Care Manual, 10<sup>th</sup> edition. Brisbane: Queensland Government. (2019) p217-226.

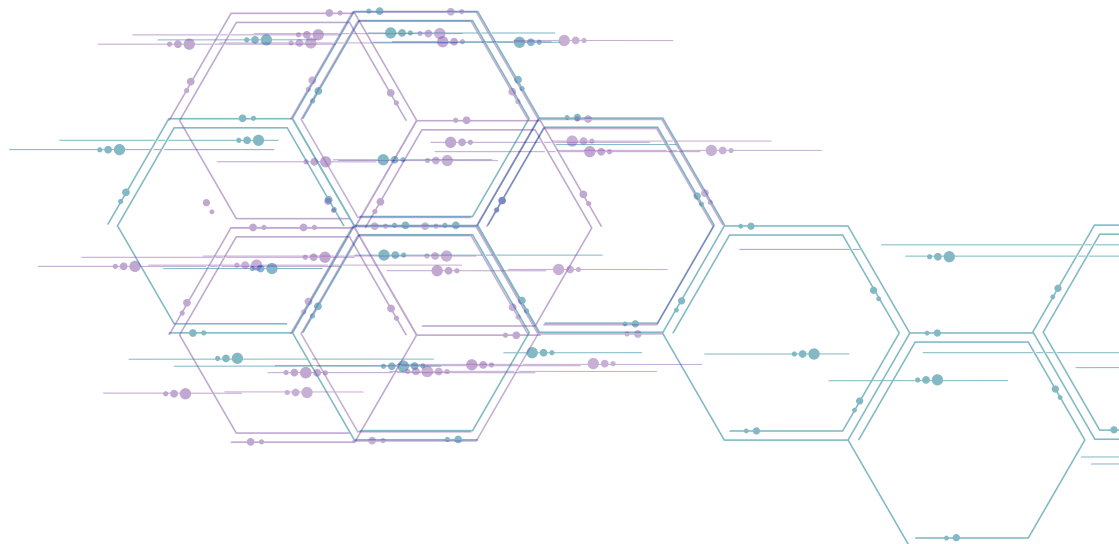
## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers

1. **Brown J.** Biofabrication in burns treatments. Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia
2. **Brown J.** Burns clinical program (panel discussion). Herston Biofabrication Institute Conference, 22 Mar 2019, Brisbane, Australia
3. **Brown J.** A unique approach to managing challenging wounds. Jamieson Trauma Institute Breakfast Seminar, 17 May 2019, Brisbane, Australia
4. **Brown J.** Mass casualties in burns: how to manage. Trauma 2019 Conference, Australasian Trauma Society, 3-6 Oct 2019, Sydney, Australia
5. **Vujcich E.** BTM the Brisbane experience. 43<sup>rd</sup> Annual Scientific Meeting of the Australian and New Zealand Burns Association (ANZBA), 15-18 Oct 2019, Hobart, Australia
6. **Brown J.** Chapter 7. Health and Biomedical Sciences. Evidence based clinical practice (podcast). Certified Health Informatician Australasia (CHIA) Graduates. Dec 2019, Brisbane, Australia
7. **Brown J.** Chapter 10 Health and Biomedical Science. Models of care delivery (podcast). Certified Health Informatician Australasia (CHIA) Graduates. Dec 2019, Brisbane, Australia
8. **Lisec C.** Trauma update: burns. 15<sup>th</sup> Annual Queensland Autumn Symposium, 23-24 May 2019, Brisbane, Australia
9. **Lisec C.** Management of minor burn injury (webinar). Australian College of Rural and Remote Medicine (ACRRM), 31 Jul 2019, Brisbane, Australia
10. **Lisec C.** Burns management. Independent Pathway Workshop, Australian College of Rural and Remote Medicine (ACRRM), Aug 2019, Brisbane, Australia
11. **Lisec C.** How deep is that burn? Practical tips on assessing burn depth and the initial management of minor burn injuries in adults. Rural Medicine Australia Conference, 24-26 Oct 2019, Gold Coast, Australia
12. **Lisec C.** Reader for Master's thesis and panel member for viva defence. 2019. Brisbane.

### Oral Presentations

1. Carrière ME, Mookink LB, Pijpe A, De Vet HCW, Van Zuijlen PPM, **Brown J**, Tyack Z. Development of the Patient and Observer Scar Assessment Scale 3.0. 18<sup>th</sup> European Burns Association Congress, 4-7 Sep 2019, Helsinki, Finland
2. Grigg M, **Brown J**, Town C. Donor site dressings: how much do they affect pain? 18<sup>th</sup> European Burns Association Congress, 4-7 Sep 2019, Helsinki, Finland
3. Newton JF, Gowardman J, **Miller J**. Heterogeneity in burns intensive care management. A retrospective review of patients admitted over two years to a quaternary burns intensive care unit. 18<sup>th</sup> European Burns Association Congress, 4-7 Sep 2019, Helsinki, Finland
4. **Black N.** Initial experience and cost implications with a novel Biodegradable Temporising Membrane (BTM) in major burns over 40% self-immolation: a 20 year experience of severe self-inflicted burns in a statewide tertiary Australian burns service. Burn and Wound Care Symposium, 3-7 February 2019, Maui, USA
5. **McKittrick A, Jones A, Brown J.** A retrospective review of the management and functional outcomes of patients who developed heterotopic ossification in one or bilateral upper limbs post severe burn injury at Royal Brisbane and Women's Hospital (RBWH) between 2006 and 2016. 43<sup>rd</sup> Annual Scientific Meeting of the Australian and New Zealand Burns Association (ANZBA), 15-18 Oct 2019, Hobart, Australia.



# TRAUMASERVICE

**RBWH Research Staff with research roles, positions or appointments:** e.g. Coordinators, Fellow, Adjunct and Honorary appointments

Name <i>(RBWH Staff in bold)</i>	Type of Position	FTE	Funding Source <i>(operational/external/in-kind)</i>	Research Programt	Affiliated University/ies
<b>Michael Handy</b>	Adjunct Associate Lecturer	N/A	In-kind	School of Nursing, Midwifery and Social Work	University of Queensland

## Current RBWH Research Group / Department Led Research Activity

RBWH Research Group / Department Led Researchers <i>(RBWH staff in bold)</i>	Collaborative Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Michael Rudd</b>	<b>Kerena Grant, Michael Handy, Jodie Ross, Sarah Pearce, Robyn Charles, Kristy Jackman, Olivia Zheng, Assoc. Prof David Douglas (JT), Jacelle Warren (JT), Dr Cate Cameron (JT), Dr Victoria McCreanor (JT)</b>	Impact of frailty in trauma patients admitted to RBWH Trauma Service
Sarah Weber (PAH)	Prof Julia Cilly (GU, GCUH), Prof Marion Mitchell (GU, PAH), Dr Jamie Ranse (GU, GCUH), Dr Nathan Watkins (GCUH), Ben Mackie (GU, SCH), Dr Paula Lister (SCUH), Prof Martin Wullschleger (GU, GCUH), Joe Sharpe (Townsville), <b>Michael Handy</b> , Matt Boyd (Oakey)	Reaction of Emergency Services uPON Disasters in Queensland – the RESPOND study

## Collaborative Research Activity involving RBWH Research Group / Department

Collaborative Led Researchers	RBWH Researchers and Others <i>(RBWH staff in bold)</i>	Research Project Title
<b>Dr Bhavik Patel</b>	<b>Dr Michael Rudd</b> , Assoc. Prof Cliff Pollard	Management of splenic injuries in Qld: retrospective trend analysis over five years and one-year prospective evaluation of clinical practice guideline implementation

## 2019 Conference Presentations – Invited Speaker, Oral and Poster

### Invited Speakers

- Patel B**, Pollard C, Wall D, Wullschleger M, **Rudd M**. Outcome of splenic injuries retrospective: 16-year experience and prospective 18-month multi institutional study on implementation of clinical practice guidelines. Surgical Research Society of Australasia Conference, Nov 2019. Melbourne
- Handy M**. Preparing your team and trauma room – tips and TRAPS. The TRAPS Lecture series, May 2019. Brisbane
- Handy M**. TRAPS skill laboratories. Medical Engineering Research Facility (MERF), Jun & Nov 2019. Brisbane
- Handy M**. Traumatic wounds. 11<sup>th</sup> Close Health Company, Gallipoli Barracks, Enoggera, Dec 2019. Brisbane.

### Oral Presentations

- Patel B**. Implementation of clinical practice guidelines for haemodynamically stable blunt splenic injury patients. Queensland Trauma Symposium, Feb 2019, Brisbane, Australia.

### Poster Presentations

- Devlin M, Williamson F, **Handy M**, et al. Performing the tertiary survey: a Comparison of medical officer and trauma nurse (007). Queensland Trauma Symposium, Feb 2019, Brisbane, Australia.