

2017

RBWH

RESEARCH REPORT

SURGICAL AND

PERIOPERATIVE SERVICES

RBWH

celebrating

150
years

1867-2017



Queensland
Government

SURGICAL AND PERIOPERATIVE SERVICES



DR BARRY O'LOUGHLIN
Executive Director
Surgical and Perioperative Services

*A major tertiary
referral centre for
Queensland with
strong clinical
research programs*

The Division provides a wide range of clinical services to the people of MNHHS and is a major tertiary referral centre for Queensland. These services are underpinned by strong clinical research programs in many Departments, often in collaboration with Universities and research institutes on the campus.

A number of important initiatives which will facilitate clinical research got underway in 2017, after years of planning. A state of the art teaching, training and research centre the Centre for Excellence and Innovation in Anaesthesia (CEIA) was officially opened on 6th June 2017. Dr Kerstin Wyssusek, Director of Anaesthesia and Perioperative Medicine also organised and delivered the inaugural Perioperative Blood Management Symposium at RBWH in February 2017. This scientific meeting brought national and international experts together to present on contemporary blood management and will be an annual event.

The Burns Unit Skin Culture Centre was officially opened by the Minister for Health in October 2017 after years of planning and preparation by the Director of Burns Surgery, Dr Michael Rudd. As well as improving the management of patients with major burn injury this facility will facilitate important research into cell culture and biofabrication.

Led by Associate Professors Kevin Tetsworth and Martin Batstone, the Department of Orthopaedic Surgery and Department of Oral and Maxillofacial Surgery are at the forefront of clinical applications of 3D modelling and printing. Together, some of their pioneering work in facial and long bone reconstruction was presented at the RBWH Symposium in September 2017.

In November 2017, Dr Amanda Dines Executive Director RBWH, announced the establishment of the Jamieson Trauma Institute in collaboration with the University of Queensland, Queensland University of Technology and other partners. The aim of this institute is to advance trauma prevention, research, systems and clinical management to deliver optimal care to people who suffer traumatic injury.

BURNS

Research Highlights for the Period 01/01/2017 – 31/12/2017

The Professor Stuart Pegg Adult Burn Centre has collaborated with several other burn units in trialling a synthetic dermal substitute for treating deep dermal and full thickness burn wounds. In this clinical trial, we have enrolled 3 patients to date and are helping to examine the product's safety profile.

The Burns Unit has also recently introduced a Carbon Dioxide Fractional Ablative laser to treat hypertrophic burn scars. We are implementing this and collecting data to examine the efficacy of the laser.

2017 CURRENT RBWH RESEARCH GROUP / DEPARTMENT LED RESEARCH ACTIVITY

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|--|
| Dr. Jason Brown | Dr. Carl Lisec, Dr. Michael Rudd, Dr. Jason Miller, Prof Michael Muller, Dr. Keith Towsey | Efficacy of CO2 Ablative Fractional Laser in the treatment of hypertrophic burn scars. |

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|--------------------------------|--|--|
| A/Prof John Greenwood | Dr. Jason Brown, Dr. Jason Miller, Dr. Carl Lisec, Dr. Michael Rudd, Prof Michael Muller, Dr. Keith Towsey | Biodegradable Temporising Matrix (BTM) in dermal replacement and wound temporisation prior to definitive split-skin grafting post-excision of full thickness burns affecting between 20% and 50% of the total body surface area (TBSA) to assess integration, delamination and ability to support subsequent graft take. |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|---|
| Journal Article | Kowk, M., Maurice, A., Carroll, J., Brown, J., Lisec, C., Francis, L. and Patel, B. (2017), Gastrointestinal mucormycosis in an immunocompromised host. ANZ Journal of Surgery. Doi:10.1111/ans.13955 |
| Journal Article | Ranasinghe, S., Cohen, B., Perera, S., Carroll, S., Walker, D., Lisec, C., and Brown, J. (2017). Retroperitoneal necrotising soft tissue infection: a case reiterating the need for caution for patients with delayed presentation. Accepted for publication in ANZ Journal of Surgery. ANS-2017-01160.R1 |
| Journal Article | Guy, S., Lisec, C., Billing, T. (2017). Emergency laparotomy outcomes before and after the introduction of an acute surgical unit. Accepted for publication in International Journal of Surgery Open. IJSO_2017_82 |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|---|
| Invited | 1. "Assessment and Management of Small Outpatient Burns". Wound Management Forum, Australian Society of Plastic Surgeons Annual Scientific Congress, Gold Coast, 2 June 2017 Dr. Carl Lisec |
| Invited | 1. "Recent Advances in Burn Care". Redcliffe Probus Society Meeting, 22 August 2017. Fundraising effort and awareness booster for Professor Stuart Pegg Adult Burn Centre Dr. Carl Lisec |
| Invited | Management of the burn wound. Dr. Jason Miller – ASPS ASC, Gold Coast 2 June 2017 |
| Invited | ANZCA ANNUAL SCIENTIFIC MEETING: Invited speaker: Threat Assessment and Disaster Response Rudd M.J., May 16 2017. Brisbane, Hospital Response to Mass Shootings Dr. Michael Rudd |
| Invited | RACS ANNUAL SCIENTIFIC MEETING: Invited speaker: Lessons Learned from the longest war: Rudd M.J., May 10 2017. Adelaide, Clinical Governance and RAAF deployable medical assets |

ENT - OTOLARYNGOLOGY, HEAD & NECK SURGERY

Aims

Our research aims to investigate the role of the normal bacterial flora in the airway and how it changes during infection and to explore treatment alternatives for recurrent and chronic infections. With a special interest in chronic sinusitis in the general population, and otitis media (middle ear infection) in the indigenous population. Using local probiotic nasal spray to displace colonisation of pathogenic bacteria from the upper respiratory tract in chronic rhinosinusitis (CRS) and recurrent otitis media.

Clinical Benefits

CRS is estimated to affect 10% of the population in western countries. The mainstay of treatment is still antibiotics, unfortunately it is estimated that 30% of CRS patients have uncontrolled symptoms in spite of repeated courses of antibiotics.

The Aboriginal and Torres Strait Island population have some of the highest rates of Otitis Media in the world, and experience it earlier, more frequently and in more severe forms than non-Indigenous Australians. Despite a large engagement from public health, including medical and surgical treatment options, the burden of disease remains substantial. In collaboration between the University of Queensland Centre for Clinical Research and the Deadly Ears group we have started a research program exploring the normal bacterial flora in the upper airway in the indigenous population and how it contributes to maintain health. The aim is to investigate the possibility of strengthening the defense against recurring acute otitis media by supplementing the airway with friendly bacteria.

Grants

No new grants

Research Collaborations

- UQCCR University of Queensland Centre for Clinical Research
- QPID Queensland Paediatric Infectious Diseases Laboratory
- CCHR Centre for Children's Health Research | Children's Health Queensland Hospital
- CHRC Child Health Research Centre | The University of Queensland
- Deadly Ears, Brisbane
- Department of Otolaryngology, Head & Neck Surgery, Lund University, Sweden.
- Gothenburg University, Sweden
- Umea University, Sweden

Clinical trials unit with the Department of Otolaryngology

During 2017 we have successfully attracted interest from the pharmaceutical company Sanofi and the Boston start-up company 480Biomedical. The department has recruited a clinical trials nurse, Kathryn Girling and are now running 2 clinical trials involving a new monoclonal antibody for the treatment of nasal polyps as well as a trial on a drug eluting stent for rhinitis. This will provide exposure to staff, including registrars to the requirements and rigour of clinical trials. A registered nurse as well as several registrars have now updated their skills and completed GCP training to be able to participate in managing the studies.

SUPERVISED POST-GRADUATE RESEARCH STUDENTS

| NAME (RBWH STAFF IN BOLD) | CURRENT STUDIES (E.G. PHD, MASTERS ETC.) UNIVERSITY (DURATION) | RESEARCH PROJECT TITLE | SUPERVISORS (RBWH STAFF IN BOLD) |
|---------------------------|--|---|---|
| Dr Andrea Coleman | PhD | The microbiome of otitis media and development of a probiotic to prevent otitis media in Australian Indigenous children | Prof Anders Cervin , Dr Seweryn Bialasiewicz, Dr Eva Grahn-Hakansson |

2017 RESEARCH POSITIONS: COORDINATORS, FELLOW, ADJUNCT AND HONORARY POSITIONS

| NAME | TYPE OF FELLOWSHIP | RESEARCH PROJECT | UNIVERSITY (YEARS) |
|--------------|--------------------|--------------------|--------------------|
| Sarju Vasani | Honorary Lecturer | School of Medicine | 2 |

2017 CURRENT RBWH RESEARCH GROUP / DEPARTMENT LED RESEARCH ACTIVITY

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|------------------------------|---|
| Prof Anders Cervin | Seweryn Bialasiewicz (LCCH) | Microbiota of the Human Sinuses. It's role in health and disease |
| Prof Anders Cervin | Hanna Sidjabat (UQCCR) | Probiotic Discovery and Development |
| Prof Anders Cervin | Dr Andrea Coleman | Prevention of otitis media with probiotics in indigenous children |
| Sarju Vasani | Nayan Kapadia, Touraj Taheri | CXCR4 expression in Head and Neck Cancers |

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|--|--------------------|---|
| Christine Cong Guo (QUT) | Prof Anders Cervin | Developing early biomarkers for Alzheimer's disease using olfactory mucosa |
| Kirsten Spann (UQ) | Prof Anders Cervin | Defects in antiviral defence in the upper airways of children susceptible to ear infections and/or lower respiratory tract infections |
| Claire Hopkins (Guys Hospital, London) | Prof Anders Cervin | Core Outcome Dataset in chronic rhinosinusitis |

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|--|--------------------|---|
| Dr Robyn Marsh Menzies Darwin Dr Rachel Lappan Telethon Inst. Perth | Prof Anders Cervin | The Australian Microbiota in Otitis Media Network |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal Article | Cervin A. An argument for a new CRS classification. Letter to the Editor of Rhinology. Rhinology Journal. 2017 Dec 16;;1–1. |
| Journal Article | Uvelius E, Castelo N, Kahlon B, Svensson C, Cervin A , Höglund P, et al. Quality of Life and Work Capacity Are Unrelated to Approach or Complications After Pituitary Surgery. World Neurosurgery. Elsevier Inc; 2017 Dec 1;108:24–32. |
| Journal Article | Mårtensson A, Abolhalaj M, Lindstedt M, Mårtensson A, Olofsson TC, Vásquez A, Greiff L, Cervin A. Clinical efficacy of a topical lactic acid bacterial microbiome in chronic rhinosinusitis: A randomized controlled trial. Laryngoscope Investigative Otolaryngology. 2017 Nov 8;3:1–7. |
| Journal Article | Zhang L-Y, Zhong L, David M, Cervin A. Tonsillectomy or tonsillotomy? A systematic review for paediatric sleep-disordered breathing. International Journal of Pediatric Otorhinolaryngology. Elsevier; 2017 Oct 12;103:41–50. |
| Journal Article | Hellings PW, Fokkens WJ, Bachert C, Akdis CA, Bieber T, Agache I, Cervin A et al. Positioning the principles of precision medicine in care pathways for allergic rhinitis and chronic rhinosinusitis - A EUFOREA-ARIA-EPOS-AIRWAYS ICP statement. Allergy. 2017 May 21;372(Suppl 86):793–9. |
| Journal Article | Thomas J, Lynham A, Scott Borgna, Jones L, Vasani S 2017 Climatic Effects on the Incidence of Interpersonal Maxillofacial Trauma. Int J Pub Health Safe 2:124. |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|---|
| Oral | At the department of Anaesthesiology RBWH, Systemic approach to oozing in sinus surgery. |
| Poster | Pharmabiotics Global, Paris, Probiotic discovery and development in the upper airway,reviving conventional microbiology approach |
| Invited Keynote speaker | 19th International symposium on recent advances in Otitis Media, Gold Coast, Probiotics in the treatment of otitis media, past present and the future |
| Invited speaker | Telethon Institute Perth. Probiotic treatment of the upper airway |
| Invited speaker | South Pacific ORL forum. Intra-nasal probiotic spray in Chronic Rhinosinusitis patients. Our experience |
| Invited Speaker | World Rhinology meeting, Hong Kong, How to predict outcomes in sinus surgery, Bacterial Therapy of Chronic sinusitis |
| Invited Speaker | Vasani S. ANZ HNS meeting – Laryngectomy: Techniques focussed on functional Outcomes. |

ACUTE SURGICAL - GENERAL SURGERY UNIT V

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal Article | Michael Kwok, Andrew Maurice, Jason Brown, Carl Lisec, James Carroll, Leo Francis, Bhavik Patel. Gastrointestinal Mucormycosis in an Immunocompromised Host. ANZ Journal of Surgery. ANS-2016-01052. Published May 2017 |
| Journal Article | Van Truong, Robert Finch, Benjamin Martin, Kate Buzacott, Mahendra Singh, Bhavik Patel Littoral Cell Angioma of the Spleen. ANZ Journal of Surgery .ANS-2017-00283 04/2017 Published October 2017 |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--|--|
| Poster European Congress of Obesity | James Carroll, Michael Kwok, Bhavik Patel and George Hopkins Revision gastric bypass after laparoscopic adjustable gastric band: a ten-year experience at a public teaching hospital |

HPB/ BARIATRIC - GENERAL SURGERY UNIT II

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|---|
| Journal Article | Bhavik Patel, Universe Leung, Jerry Lee, Richard Bryant, Nicholas O'Rourke and David J. Cavallucci. Laparoscopic Pancreaticoduodenectomy in Brisbane, Australia: An initial experience |
| Journal Article | James Carroll, Michael Kwok, Bhavik Patel and George Hopkins. Revision gastric bypass after laparoscopic adjustable gastric band: a ten-year experience at a public teaching hospital |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--|--|
| Poster European Congress of Obesity | James Carroll, Michael Kwok, Bhavik Patel and George Hopkins Revision gastric bypass after laparoscopic adjustable gastric band: a ten-year experience at a public teaching hospital |

BRISBANE COLORECTAL RESEARCH UNIT (CRU)

UNIT III

The colorectal unit is based on Level 9 of the Ned Hanlon Building in the Royal Brisbane and Women's Hospital, shared with the Inflammatory Bowel Disease (IBD) Unit. We have formed a close collegiate relationship with this unit over the years providing high standard of clinical care and innovative research and teaching.

Research in the colorectal unit is now coordinated through a dedicated unit, the Brisbane colorectal research unit (CRU), representing seven colorectal specialists. All members have busy practices and large caseloads available for clinical based research. In order to deliver the research goals of the CRU we have appointed a part-time Research Coordinator, whose role is to facilitate, support and guide the research in the CRU. The unit has established research collaborations at both national and international level with research interests spanning multi-disciplinary areas. With the commencement of over 20 research projects the unit has published a 2017 CRU Annual Report highlighting current projects and publications.

SUPERVISED POST-GRADUATE RESEARCH STUDENTS

| NAME (RBWH STAFF IN BOLD) | CURRENT STUDIES (E.G. PHD, MASTERS ETC.) UNIVERSITY (DURATION) | RESEARCH PROJECT TITLE | SUPERVISORS (RBWH STAFF IN BOLD) |
|---------------------------|--|---|--|
| Angela Byrnes | Ph.D, UQ (2015 – 2018) | Investigating the nutritional status and care of older (≥ 65 years) patients on two general surgical wards: A multiphase, action research study | David Clark, Adrienne Young, Alison Mudge, Merrilyn Banks, Judy Bauer |

2017 RESEARCH POSITIONS: COORDINATORS, FELLOW, ADJUNCT AND HONORARY POSITIONS

| NAME | TYPE OF FELLOWSHIP | RESEARCH PROJECT | UNIVERSITY (YEARS) |
|----------------------|--------------------|--------------------------|---|
| Aleksandra Edmundson | Honorary Fellow | Colorectal Research Unit | The University of Queensland – Dept. Surgery (2016 – current) |

2017 CURRENT RBWH RESEARCH GROUP / DEPARTMENT LED RESEARCH ACTIVITY

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|---|--|
| David Clark | David Clark, Michael Johnston, Graham Radford-Smith, Chu Woon, David Lam | Anastomotic techniques in Crohn's Disease (CD) |

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|---|--|
| David Clark | David Clark , Andrew Riddell | Measurement of amylase in the draining fluid post ileal-pouch anal anastomosis (IPAA) |
| David Clark | David Clark, Stephen Boyce , Hassan Malik | Long term outcomes of anastomotic leaks managed with laparoscopic lavage or ileostomy |
| David Clark | David Clark , David Sidhom | Long-term functional outcomes of anastomotic leak in IPAA |
| David Clark | David Clark, Graham Radford-Smith , Lisa Simms, Anton Lord | Pre-diagnostic signature for colorectal cancer: defining a pre-diagnostic biomarker signature |
| David Clark | David Clark , Andrew Riddell, Shoni Philpot, Julie Moore | Management of malignant polyps |
| Andrew Stevenson | Andrew Stevenson , Satish Warriar, Stephen Bell, Michael Solomon | ADIPOSE: Australasian Decrease in Intra-Pelvic Obesity for Surgery trial - Using VLED's to reduce weight and improve outcomes in obese patients undertaking laparoscopic rectal cancer surgery |
| Mathew Burge | Craig Harris, David Taylor | TargoVax explorative study of TGO2 treatment for recurrent oncogenic RAS Exon2 mutant rectal cancer |
| Tahleesa Cuda | David Clark, Tahleesa Cuda | Short bowel syndrome in Crohn's Disease (CD) |
| Carina Chow | Carina Chow , Katherine Zalewski | Rectal cancer in the obese population |
| Carina Chow | Carina Chow , Dean Adit | Rectal cancer in pregnancy |
| Craig Harris | Frank Frizelle, Craig Harris , David Taylor | 10-Ten Study: Quality of life after surgery for recurrent rectal cancer |

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|--|--|--|
| Andrea Warwick (Redcliffe Hospital) | David Clark | Total colectomy for constipation |
| Stephen Smith, Bree Stephenson, (John Hunter Hospital) | David Clark, David Westwood | A Prospective Observational Study to Validate the Utility of C-reactive Protein Trajectory as a Predictor of Anastomotic Leak in Patients with a Bowel Anastomosis |
| Andrew Riddell, John Hopper, Simon Puttick, | Tahleesa Cuda, Paul Thomas, Mathew Burge, Melissa Latter, Andrew Stevenson, David Clark, | Theranostics for metastatic colorectal cancer |

2017 RESEARCH GRANTS - AWARDED

| INVESTIGATORS (RBWH STAFF IN BOLD) | RBWH RESEARCH GROUPS / DEPARTMENTS | PROJECT TITLE | GRANTING BODY | AMOUNT IN 2017 | TOTAL AMOUNT (YEARS) |
|------------------------------------|------------------------------------|---------------|-------------------------------|----------------|----------------------|
| David Clark | Colorectal Research Unit (CRU) | Research Fund | Johnson & Johnson (Australia) | \$45 000 | |
| David Clark | Colorectal Research Unit (CRU) | Research Fund | Olympus (Australia) | \$30 000 | |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|---|
| Case study | Cuda TJ, Westwood DA, Hamilton AER, Stevenson ARL. Colorectal Dis. 2017 Sep 16. doi: 10.1111/codi.13891. [Epub ahead of print] |
| Journal article | Methylene blue sub mucosal infiltration may facilitate transanal submucosal dissection. Cuda TJ, Riddell AD, Westwood DA, Hamilton AER, Stevenson ARL. Colorectal Dis. 2017 Sep 2. doi: 10.1111/codi.13872. [Epub ahead of print] |
| Journal article | Measurement Bias of Polyp Size at Colonoscopy.Sakata S, Klein K, Stevenson ARL, Hewett DG. Dis Colon Rectum. 2017 Sep;60(9):987-991. doi: 10.1097/DCR.0000000000000859. |
| Journal article | Management of Low Colorectal Anastomotic Leakage in the Laparoscopic Era: More Than a Decade of Experience. Boyce SA, Harris C, Stevenson A, Lumley J, Clark D. Dis Colon Rectum. 2017 Aug;60(8):807-814. doi: 10.1097/DCR.0000000000000822. |
| Journal article | Optical diagnosis of diminutive colorectal polyps.Sakata S, Naidu S, Stevenson ARL, Hewett DG. ANZ J Surg. 2017 May;87(5):326-327. doi: 10.1111/ans.13531 |
| Journal article | Impact of simulated three-dimensional perception on precision of depth judgements, technical performance and perceived workload in laparoscopy.Sakata S, Grove PM, Hill A, Watson MO, Stevenson ARL. Br J Surg. 2017 Jul;104(8):1097-1106. doi: 10.1002/bjs.10528. Epub 2017 Apr 20. |
| Journal article | The Impact of Crosstalk on Three-Dimensional Laparoscopic Performance and Workload Sakata S, Grove PM, Watson MO, Stevenson AR Surg Endosc. 2017 Mar 9, doi: 10.1007/s00464-017-5449-5. [Epub ahead of print] |
| Journal article | The Future of Laparoscopic Rectal Cancer Surgery Stevenson AR Br J Surg. 2017 Feb 23. Doi: 10.1002/bjs.10503 [Epub ahead of print] |
| Journal article | Risk Factors for Recurrence After Laparoscopic Ventral Rectopexy Fu CW, Stevenson AR Dis Colon Rectum. 2017 Feb;60(2):178-186. Doi: 10.1097/DCR.0000000000000710 |
| Journal article | Techniques for Terminal Ileal Intubation at Colonoscopy when Standard Maneuvers Fail. Sakata S, Stevenson AR, Naidu S, Hewett DG Am J Gastroenterol. 2017 Jan; 112(1):11-12. Doi: 10.1038/ajg.2016.497 |
| Journal article | An assessment of an Australasian pathway for the introduction of transanal total mesorectal excision (taTME).Abbott SC, Stevenson ARL, Bell SW, Clark D, Merrie A, Hayes J, Ganesh S, Heriot AG, Warriar SK. Colorectal Dis. 2017 Nov 22. doi: 10.1111/codi.13964. [Epub ahead of print] |
| Video vignette | Indocyanine green fluorescence angiography (ICGFA) during laparoscopic and robotic colorectal surgery- a video vignette.Hamilton AER, Cuda TJ, Westwood DA, Stevenson ARL. Colorectal Dis. 2017 Dec 11. doi: 10.1111/codi.13986. [Epub ahead of print] |
| Video vignette | Identification of the ureter during robotic colorectal surgery using lighted stents - a video vignette. Hamilton AER, Westwood DA, Cuda TJ, Stevenson ARL |

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|---|
| Video vignette | Methylene blue-assisted submucosal dissection in transanal surgery - a video vignette. Cuda TJ, Westwood DA , Hamilton AER, Stevenson ARL . Colorectal Dis. 2017 Nov;19(11):1033. doi: 10.1111/codi.13891 |
| Journal Article | A case study of ileal metaplasia and neoplasia in a patient with an ileal-rectal anastomosis Beth Campbell , Andrew Reid, David Clark , James Harvey Accepted J Coloproctology Dec 2017 |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|--|
| Oral invited | David Clark . “Early surgery in Crohn’s Disease” IBD Meeting 2017, Melbourne Australia |
| Oral invited | David Clark . “Fistulating perianal disease following ileal pouch surgery”. IBD Meeting 2017, Melbourne Australia |
| Oral invited | David Clark . “Rescuing acute severe colitis” IBD Meeting 2017, Melbourne Australia |
| Oral Invited | David Clark . “The Role of stricturoplasty in Crohn’s Disease” Gastroenterological Society of Australia, AGW 2017, Gold Coast Australia |
| Oral invited | Andrew Stevenson . “Is there a future for laparoscopic rectal cancer surgery?” 6th Combined Australia & New Zealand Colorectal Meeting 2017, Sydney Australia |
| Oral invited | Andrew Stevenson . “Now and the future in rectal cancer overview” 2017, Rectal Cancer Symposium, Melbourne, Australia |
| Oral invited | Andrew Stevenson . “Laparoscopic versus open rectal surgery”, Rectal Cancer Symposium 2017, Melbourne, Australia |
| Oral invited | Andrew Stevenson . “Clinical trials in rectal cancer: What have we learned about laparoscopic rectal cancer surgery? The Z6051, the ALaCaRT, the COREA and the COLOR II trials”, Annual Scientific Meeting & Tripartite Meeting 2017, Seattle USA |
| Oral invited | Andrew Stevenson . “Rectal prolapse advanced methods – LVR Surgery Video: How I do it?”, Annual Scientific Meeting & Tripartite Meeting 2017, Seattle USA |
| Oral invited | Andrew Stevenson . “Hot topics in pelvic floor – ventral rectopexy for rectal prolapse” 86th RACS Annual Scientific Congress 2017, Adelaide Australia |
| Keynote lecture | Andrew Stevenson . “Innovations and advances in Colorectal Surgery - Tips on the safe and sustainable introductions of new techniques and technology” 86th RACS Annual Scientific Congress 2017, Adelaide Australia |
| Oral invited | Andrew Stevenson . “Using the TaTME approach in surgery”, 41st Australian Association of Stomal Therapy Nurses Conference 2017, Brisbane Australia |

NEUROSURGERY



LINDA JEFFREE
Kenneth G. Jamieson Department
of Neurosurgery

The primary research activity of the Kenneth G. Jamieson Department of Neurosurgery is collaboration with translational researchers at QIMR and UQCCR in the fields of primary and secondary brain tumours, language function and assessment, motor neuron disease and epilepsy. Individual surgeons have also carried out research into spinal surgery and trauma. Current and recently completed projects are presented and discussed at our regular research seminar on the second Tuesday of the month. 2017 saw the completion of an Honours research project in moderate to severe head injury by medical student Vignesh Ramen.

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|--|
| B. Day (QIMR-Berghofer) | R. L. Jeffree (Neurosurgery), P-L. Inglis (Oncology), RBWH neurosurgeons | Novel Therapies for Brain Cancer |
| S. Lakhani (Pathology) | S. Lakhani (Pathology), R. L. Jeffree, RBWH neurosurgeons | Establishment of the RBWH-UQ Tissue Bank and Associated Database for Cancer Research and Prospective Patient Follow-Up |
| A/Prof C. Vajdic (UNSW) AGOG Study Group. | R. L. Jeffree (Neurosurgery), P-L. Inglis & Zarnie Lwin (Oncology); | Australian Genomics and Clinical Outcomes of Glioma - AGOG Epidemiology |
| N. de Silva (Speech Pathology), D. Copeland (UQCCR) | R. L. Jeffree (Neurosurgery), T. Rajah (Radiology) | Language function following medical/surgical intervention in the neurosurgical population |
| G. de Zubicaray (University of Queensland), D. Copeland (UQCCR) | R. L. Jeffree (Neurosurgery) A. Coulthard (Radiology), | A prospective study of language function following surgical resection of left hemisphere primary brain tumours. |

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|--|---|---|
| L. Vadlamudi, D. Reutens, J. Pelekanos, A-A Sullivan, Cecilie Lander (Neurology) | R.L. Jeffree & N. Ma (Neurosurgery), J. Mc Gaughran (Genetic Health Queensland) | Genetic Networks in Epilepsy: A Tissue-Specific Approach |
| A. Coulthard (Radiology) | A. Coulthard (Radiology), D. Reutens (Neurology), R. L. Jeffree (Neurosurgery), T. Robertson (Neuropathology) | High Field MRI imaging of Hippocampal Sclerosis |
| P. Noakes (University of Queensland) | Pam McCoombe (Neurology), R. L. Jeffree (Neurosurgery), T. Robertson (Neuropathology) | Synaptic adhesion and neuromuscular signalling in patients with motor neuron disease. |
| L. Reid (CSIRO) | M. Prior (Radiology), R. L. Jeffree (Neurosurgery), A. Coulthard (Radiology) | Post-surgical Diffusion MRI in Epilepsy Patients for CONSULT |
| C. Phillips (TROG/ Peter McCallum Hospital) | R. L. Jeffree (Neurosurgery), A. Coulthard (Radiology) | A Phase II study of local therapy only (stereotactic radiosurgery and/or surgery) for treatment of up to 5 brain metastases from HER2 positive Breast Cancer (Local HER-0). |

2017 RESEARCH GRANTS - AWARDED

| INVESTIGATORS (RBWH STAFF IN BOLD) | RBWH RESEARCH GROUPS / DEPARTMENTS | PROJECT TITLE | GRANTING BODY | AMOUNT IN 2017 | TOTAL AMOUNT (YEARS) |
|---|------------------------------------|--|---|----------------|----------------------|
| Y. C. Lim, A-M Patch, B. Day, N. Waddell, S. Rose, B. Chua, R. Jeffree | Neurosurgery, Radiation Oncology | Using molecular-guided PET/MRI imaging to understand the development of hypoxia induced radiotherapy resistance in GBM: A prospective pilot study to uncover the dynamics of radioresistance in brain cancer | QIMR Berghofer Clinician Research Collaboration Award | \$33 100 | \$33 100 |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|---|
| Journal Article | Kevin Phan, Vignesh Ramachandran, Tommy M. Tran, Kevin P. Shah, Matthew Fadhil, Alan Lackey, Nicholas Chang, Ai-Min Wu, Ralph J. Mobbs Systematic review of cortical bone trajectory versus pedicle screw techniques for lumbosacral spine fusion. <i>Journal of Spine Surgery</i> (2017) Vol 3 (4) doi: 10.21037/jss.2017.11.03 |
| Journal Article | Lackey A , Laing B, Perkins A, Bryant M . Diagnosis in subdural myeloid sarcoma. <i>Neuroradiol J.</i> 2017 Jun;30(3):269-273. |
| Journal Article | Candy N, Young A, Devadass A, Dean A, McMillen J , Trivedi R. Dual lumbar bronchogenic and arachnoid cyst presenting with sciatica and left foot drop. <i>Acta Neurochir (Wien).</i> 2017 Oct;159(10):2029-2032. |
| Journal Article | Candy N, Young A, Allinson K, Carr O, McMillen J , Trivedi R. Metastatic Neuroendocrine Carcinoma of Unknown Origin Arising in the Femoral Nerve Sheath. <i>World Neurosurg.</i> 2017 Aug;104:1047 |
| Journal Article | Antony J , Tetsworth K , Hohmann E. Influence of sagittal plane component alignment on kinematics after total knee arthroplasty. <i>Knee Surg Sports Traumatol Arthrosc.</i> 2017 Jun;25(6):1686-1691. |
| Journal Article | Philips, C., Jeffree, R. L. & Khasraw M. Management of breast cancer brain metastases: a practical review. <i>The Breast</i> (2017) 6 (31): 90-98 |
| Journal Article | Ulett, K; Cockburn, J; Jeffree, R; Woods, M. Cerebral Cryptococcoma Mimicking Glioblastoma BMJ Case Reports Published online 10 February (2017), doi:10.1136/bcr-2016-218824 |
| Letter | Phillips C, Jeffree R , Khasraw M. Reply to Dr Altundag from the authors of 'Management of breast cancer brain metastases; a practical review'. <i>Breast.</i> (2017) Aug;34:133. |
| Journal Article | Benyamin, B., J. He, Q. Zhao, J. Gratten, F. Garton, P. J. Leo, Z. Liu, M. Mangelsdorf, A. Al-Chalabi, L. Anderson, T. J. Butler, L. Chen, X. D. Chen, K. Cremin, H. W. Deng, M. Devine, J. Edson, J. A. Fiffita, S. Furlong, Y. Y. Han, J. Harris, A. K. Henders, R. L. Jeffree , Z. B. Jin, Z. Li, T. Li, M. Li, Y. Lin, X. Liu, M. Marshall, E. P. McCann, B. J. Mowry, S. T. Ngo, R. Pamphlett, S. Ran, D. C. Reutens , D. B. Rowe, P. Sachdev, S. Shah, S. Song, L. J. Tan, L. Tang, L. H. van den Berg, W. van Rheenen, J. H. Veldink, R. H. Wallace, L. Wheeler, K. L. Williams, J. Wu, X. Wu, J. Yang, W. Yue, Z. H. Zhang, D. Zhang, P. G. Noakes , I. P. Blair, R. D. Henderson , P. A. McCombe , P. M. Visscher, H. Xu, P. F. Bartlett, M. A. Brown, N. R. Wray and D. Fan (2017). "Cross-ethnic meta-analysis identifies association of the GPX3-TNIP1 locus with amyotrophic lateral sclerosis." <i>Nat Commun</i> 8(1): 611. |
| Journal Article | Phan, K., V. Ramachandran, T. M. Tran, K. P. Shah, M. Fadhil, A. Lackey , N. Chang, A.-M. Wu and R. J. Mobbs (2017). "Systematic review of cortical bone trajectory versus pedicle screw techniques for lumbosacral spine fusion." <i>Journal of Spine Surgery</i> 3(4): 679-688. |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|--|
| Poster | J. Robusto, N. Ma Spinal Dysraphism: The Queensland Experience AANS CNS Paediatric Conference 2017 |
| Poster | V. Ramen, R. L. Jeffree, D. A. Grieve. Conservative Management of Moderate to Severe Traumatic Brain Injury: Does it matter where? Neurosurgical Society of Australasia Annual Scientific Meeting 2017 |

ORAL & MAXILLOFACIAL SURGERY UNIT

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 also acquired and began operating a virtual surgical planning and 3D printing facility. This will allow various projects to commence in this exciting surgical planning arena.

SUPERVISED POST-GRADUATE RESEARCH STUDENTS

| NAME (RBWH STAFF IN BOLD) | CURRENT STUDIES (E.G. PHD, MASTERS ETC.) UNIVERSITY (DURATION) | RESEARCH PROJECT TITLE | SUPERVISORS (RBWH STAFF IN BOLD) |
|---------------------------|--|---|---|
| Michael Hurrell | PhD | Treatment delay in facial trauma | Martin Batstone |
| Timothy Liu | MPhil | Intermediate risk Oral cavity SCC | Martin Batstone |
| Benjamin Fu | MPhil | Determinants and outcome in odontogenic infection | Martin Batstone |
| Kelsey Moore | PhD (completed Jan 17) | Patient perception of survivorship following head and neck cancer treatment | Martin Batstone |
| Kelly McGowan | PhD, Griffith (2016-2019) | Risk factors for medication-related osteonecrosis of the jaws (MRONJ) | Caroline Acton , Newell Johnson, Robert Ware, Saso Ivanovski |

2017 CURRENT RBWH RESEARCH GROUP / DEPARTMENT LED RESEARCH ACTIVITY

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|------------------------------|---|
| Martin Batstone | Andrew Higgins | Intraoperative CT scanning in Zygomatic fractures |
| Martin Batstone | Rachel Hsieh | Flo-Seal for dental extractions in inherited bleeding disorders |
| Caroline Acton | Saso Ivanoski, Kelly McGowan | Management of patients taking direct oral anticoagulants undergoing invasive dental treatment: a cohort study |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal Article | Beech NM, Porceddu S, Batstone MD . Radiotherapy-associated dental extractions and osteoradionecrosis. <i>Head Neck</i> . 2017 Jan;39(1):128-132. |
| Journal Article | Johnson NR, Roberts MJ, Doi SA, Batstone MD . Total temporomandibular joint replacement prostheses: a systematic review and bias-adjusted meta-analysis. <i>Int J Oral Maxillofac Surg</i> . 2017 Jan;46(1):86-92. |
| Journal Article | Burgess M, Leung M, Chellapah A, Clark JR, Batstone MD . Osseointegrated implants into a variety of composite free flaps: A comparative analysis. <i>Head Neck</i> . 2017 Mar;39(3):443-447. |
| Journal Article | Van Genechten ML, Batstone MD . The fate of the free flap pedicle after free tissue transfer to the head and neck area. <i>Oral Oncol</i> . 2017 Feb;65:65-67. |
| Journal Article | Pateman KA, Batstone MD , Ford PJ. Joining the dots: Can UW-QoL free-text data assist in understanding individual treatment experiences and QoL outcomes in head and neck cancer? <i>Psychooncology</i> . 2017 Feb 7. |
| Journal Article | Hsieh JT, Klein K, Batstone M . Ten-year study of postoperative complications following dental extractions in patients with inherited bleeding disorders. <i>Int J Oral Maxillofac Surg</i> . 2017 Sep;46(9):1147-1150. |
| Journal Article | Borgna SC , Clarke PT, Schache AG, Lowe D, Ho MW, McCarthy CE, Adair S, Field EA, Field JK, Holt D, Risk JM, Rajlawat BP, Triantafyllou A, Shaw RJ. Management of proliferative verrucous leukoplakia: Justification for a conservative approach. <i>Head Neck</i> . 2017 Oct;39(10):1997-2003. |
| Journal Article | Cho H, David MC, Lynham AJ, Hsu E . Effectiveness of irrigation with chlorhexidine after removal of mandibular third molars: a randomised controlled trial. <i>Br J Oral Maxillofac Surg</i> . 2017 Dec 6. pii: S0266-4356(17)30738-6. |
| Journal Article | Cho H, Lynham AJ, Hsu E . Postoperative interventions to reduce inflammatory complications after third molar surgery: review of the current evidence. <i>Aust Dent J</i> . 2017 Dec;62(4):412-419. |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|--|
| Oral Invited | M Batstone . Radiotherapy is overused in early stage Head and Neck Cancer. Australian and New Zealand Head and Neck Cancer Society Annual Scientific Meeting. Brisbane October 2017 |
| Oral Invited | M Batstone . Mandibular Reconstruction. Australian and New Zealand Association of Oral and Maxillofacial Surgeons Annual Scientific Meeting. Sydney October 2017 |
| Oral Invited | M Batstone . Disasters from the masters. Australian and New Zealand Association of Oral and Maxillofacial Surgeons Annual Scientific Meeting. Sydney October 2017 |
| Oral Invited | M Batstone . Oral Cancer- Who, how, where, why. Brisbane Cancer Conference. Brisbane November 2017 |
| Oral Invited | M Batstone . Margins in Oral Cavity Cancer. International Association of Oral and Maxillofacial Surgeons. Hong Kong. April 2017 |
| Oral Invited | M Batstone . Maxillary Reconstruction. International Association of Oral and Maxillofacial Surgeons. Hong Kong. April 2017 |
| Oral invited | M Batstone . Implant based rehabilitation. Challenges and solutions. International Academy of oral oncology. Bangalore, India May 2017 |

OPHTHALMOLOGY

The Ophthalmology Department carries out a number of research activities. The Oculoplastic Clinic continues to conduct ongoing clinical research into a number of areas including Ocular Adnexal Lymphoproliferative Disease, Thyroid Eye Disease, Orbital tumours and Periocular Malignancy.

Our corneal, retinal and glaucoma sub specialties have contributed a large amount of presentations and papers in 2017.

2017 RESEARCH POSITIONS: COORDINATORS, FELLOW, ADJUNCT AND HONORARY POSITIONS

| NAME | TYPE OF FELLOWSHIP | RESEARCH PROJECT | UNIVERSITY (YEARS) |
|------------------|--|---|--------------------------------|
| Hogden, J | Corneal | Vancouver Eye Care Center | University of British Columbia |
| Chow, S-P | Research Advisory Committee Responsible for reviewing research grants from Australia and New Zealand; total of \$539,205 awarded in 2017 | Ophthalmic Research Institute of Australia (ORIA) | |

2017 CURRENT RBWH RESEARCH GROUP / DEPARTMENT LED RESEARCH ACTIVITY

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|--|
| Sing-Pey Chow Tim Sullivan | Suyi Siow | Ocular Manifestations and Quality of Life in Australian Patients with Ichthyosis |
| Sing-Pey Chow | Harrison Bennett, Andrew Apel, Peter Beckingsale | Management and Prevention of Corneal Graft Rejection: Current Practice Patterns of Australian and New Zealand Corneal Surgeons |

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|--------------------------------|---|---|
| Chiang, M | Rising Star in Eye Health and Vision Care | Vision 2020 – Rising Star in Eye Health and Vision Care event, Parliament House, Canberra, September 2017 |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal Article | Davies M, Patheja R, Sullivan TJ "Adult Orbital and Adnexal Xanthogranulomatous Disease" Asia Pacific Journal of Ophthalmology (Phila). 2017 Sep-Oct;6(5):435-443 |
| Journal Article | Joos Z, Sullivan TJ Peri-Levator Palpebrae Superioris Triamcinolone Injection for the Treatment of Thyroid Eye Disease-Associated Upper Eyelid Retraction Clinical and Experimental Ophthalmology 2017 Aug;45(6):651-652 |
| Journal Article | Mombaerts, Ilse, Bilyk, Jurij R., Rose, Geoffrey E., McNab, Alan A., Fay, Aaron, Dolman, Peter J., Allen, Richard C., Devoto, Martin H., Harris, Gerald J., Bernardini, Francesco P., Bonavolonta, Giulio, Codere, François, Cockerham, Kimberly P., Cruz, Antonio A. V., Dutton, Jonathan J., Garrity, James A., Goldberg, Robert A., Grove, Arthur S., Kazim, Michael, Kennerdell, John S., Kersten, Robert C., Kim, Yoon-Duck, Levine, Mark R., Lucarelli, Mark J., Mourits, Maarten P., Nerad, Jeffrey A., Orcutt, James C., Perry, Julian D., Putterman, Allen M., Seah, Lay Leng, Selva, Dinesh, Sivak-Callcott, Jennifer A., Stefanyszyn, Mary A., Strianese, Diego, Sullivan, Timothy J. and Verity, David "Consensus on diagnostic criteria of idiopathic orbital inflammation using a modified delphi approach" (2017) Consensus on diagnostic criteria of idiopathic orbital inflammation using a modified delphi approach. JAMA Ophthalmology, 135 7: 769-776 |
| Book Chapter | Sullivan TJ "Lymphoproliferative Disorders" Chapter 15 In Diseases and Disorders of the Orbit and Ocular Adnexa, 1Ed Aaron Fay Peter Dolman (eds) Elsevier 2017 |
| Book Chapter | Sullivan TJ "Histiocytic, Haematopoietic and Lymphoproliferative Disorders" In Lambert and Lyons: Pediatric Ophthalmology and Strabismus 5th Ed Elsevier |
| Journal Article | Undurraga EA, Behrman JR, Emmett SD, Kidd C, Leonard WR, Piantadosi ST, Reyes-García V, Sharma A , Zhang R, Godoy RA. "Child stunting is associated with weaker human capital among native Amazonian" - Am J Hum Biol. 2017 Sep 13. doi: 10.1002/ajhb.23059 |
| Journal Article | Lin TC, Holland SP, Verma S, Hogden J and Arba-Mosquera S. Postoperative corneal asphericity in moderate and high myopic eyes after SmartSurf ACE photorefractive keratectomy. Journal of Cataract and Refractive Surgery (JSCRS), 2017 |
| Book Chapter | Lin D, Holland S and Hogden, J. Chapter 15: Topography guided excimer laser surgery: Indications and Techniques. [In press] Management of Irregular Astigmatism. Springer Publishing |
| Journal Article | Chiang MY , Camugulia JE, Khaw PT. Novel method of extending glaucoma drainage tube – 'tube-in-tube' technique. J Glaucoma. 2017; 26: 93-95. |
| Book Chapter | Khaw PT, Chiang M , Shah P, Sii F, Lockwood A, Khalili A. Enhanced trabeculectomy: the Moorfields Safer Surgery System. Dev Ophthalmol, 59. Bettin P, Khaw PT, ed. Karger, 2017 |
| Journal article | Chow S-P , Hopkinson CL, Toole DM, Jones MN, Cook SD, John Armitage W; National Health Service Blood and Ocular Tissue Advisory Group and Contributing Ophthalmologists (OTAG Study 23). Stability of visual outcome between 2 and 5 years following corneal transplantation in the UK. British Journal of Ophthalmology (2018) 102(1):37-41. |
| Journal Article | Fraenkel A, Lee LR , Todd B; Optic disc pit maculopathy. 2017 Oct 9 [Epub ahead of print] |
| Journal Article | Fraenkel A, Lee LR , Lee GA. Recurrent intraocular haemorrhage due to pars plana Baerveldt glaucoma drainage device. 2017 Jun 11 [epub ahead of print] |

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|---|
| Journal Article | Fraenkel A, Lee LR , Lee GA. Managing corneal foreign bodies in office-based general practice. Aust Fam Physician. 2017 Mar |
| Journal Article | Porter AJ, Lee LR , Bradshaw C. Bispectral index monitoring in vitrectomy surgery under local anaesthetic block with sedation: a single surgeon, single anaesthetist review. 2017 Jul [Epub 2017 Mar 31] |
| Journal Article | Simon P. Holland, MB, FRCSC (Presenting Author); David T.C. Lin, MD, FRCSC; Samuel Arba Mosquera, PhD; John Hogden , MD FRANZCO; Nicholas Davey, MD Trans-Epithelial Photorefractive Keratectomy (TEPRK) for Very Low Myopic Corrections. ASCRS, Los Angeles. May 2017. |
| Journal Article | David T.C. Lin, MD, FRCSC (Presenting Author); Simon P. Holland, MB, FRCSC; Samuel Arba Mosquera, PhD; John Hogden MD FRANZCO. Outcome of Moderate and High Myopic Trans-Epithelial Photorefractive Keratectomy with High Speed Excimer at One Year. ASCRS, Los Angeles. May 2017. |
| Journal Article | Simon P. Holland, MB, FRCSC (Presenting Author); David T.C. Lin, MD, FRCSC; John Hogden, MD FRANZCO; Samuel Arba Mosquera, PhD; Nicholas Davey, MD. Early Results of Topography Guided Photorefractive Keratectomy and Collagen CrossLinking for Post LASIK Ectasia. ASCRS, Los Angeles. May 2017. |
| Journal Article | David T.C. Lin, MD, FRCSC (Presenting Author); Simon P. Holland, MB, FRCSC; John Hogden , MBBS B.Sc; Samuel Arba Mosquera, PhD. Early Results of Topography Guided Photorefractive Keratectomy with Collagen Cross Linking for Keratoconus. ASCRS, Los Angeles. May 2017. |
| Journal Article | David T.C. Lin, MD, FRCSC (Presenting Author); Simon P. Holland, MB, FRCSC; John Hogden , MD FRANZCO; Samuel Arba Mosquera, PhD. Outcome of Photorefractive Keratectomy Versus Laser Assisted in Situ Keratomileusis for Myopia. ASCRS, Los Angeles. May 2017. |
| Journal Article | Simon P. Holland, MB, FRCSC (Presenting Author); David T.C. Lin, MD, FRCSC; John Hogden , MD FRANZCO; Samuel Arba Mosquera, PhD; Nicholas Davey, MD. Topography Guided Photorefractive Keratectomy for Correction of Irregular Astigmatism Following Penetrating Keratoplasty. ASCRS, Los Angeles. May 2017. |
| Journal Article | Lingwood, Barbara, MD (principal investigator), Eilby, Yvonne, MD, Ratnasingham, Abirami, UQCCR, Colditz, Paul, UQCCR, Donovan, Tim, MD . Long-term consequences of altered neonatal adiposity. 2017 |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|--|
| Invited Paper | Sullivan TJ “The Management of Thyroid Eye Disease: An Overview” Presented as an invited paper as part of the ANZSOPS Symposium at the 49th RANZCO Annual Scientific Meeting, Perth WA, October 2017 |
| Invited paper | Sullivan TJ “Surgical management of Lacrimal Drainage system tumors” Presented as an invited paper at the XII Meeting of the International Society of Dacryology and Dry Eye, Athens Greece, October 2017 |
| Invited paper | Sullivan TJ “Facial Nerve Palsy and Dry Eyes” Presented as an invited paper at the XII Meeting of the International Society of Dacryology and Dry Eye, Athens Greece, October 2017 |
| Invited paper | Sullivan TJ “Congenital anomalies other than CNLDO “ Presented as an invited paper at the XII Meeting of the International Society of Dacryology and Dry Eye, Athens Greece, October 2017 |
| Free paper | Holland L , Harrison J, Mitchell K, Brauchli D, Sullivan TJ “Endovascular treatment of carotid-cavernous sinus fistulas” Free Paper presentation at the Orbital Society Meeting, Brisbane, August 2017 |

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|---|
| Invited paper | Sullivan TJ “Ophthalmic Management of Facial Nerve Palsy” Invited Keynote lecture combined ANZSOPS and NZAPS meeting Queenstown, New Zealand, August 2017 |
| Invited paper | Sullivan TJ “Reconstruction of defects in the Periocular Region” Invited Keynote lecture combined ANZSOPS and NZAPS meeting Queenstown, New Zealand, August 2017 |
| Invited paper | Sullivan TJ “Endoscopic Lacrimal Surgery my way” Invited Keynote lecture 3rd International Endoscopic Orbital Surgery Conference, Wenzhou, July 2017 |
| Invited paper | Sullivan TJ “Thyroid Orbitopathy, the changing paradigm” Invited Keynote lecture 3rd International Endoscopic Orbital Surgery Conference, Wenzhou, July 2017 |
| Invited paper | Sullivan TJ “Understanding Ptosis” Invited Keynote lecture New Zealand RANZCO Branch Meeting Waitangi May 2017 |
| Invited paper | Sullivan TJ “Thyroid Eye Disease in the 21st Century” Invited Keynote lecture New Zealand RANZCO Branch Meeting Waitangi May 2017 |
| Invited paper | Sullivan TJ “Oculoplastic Update 2017” Invited Keynote lecture New Zealand RANZCO Branch Meeting Waitangi May 2017 |
| Invited paper | Sullivan TJ “Choosing Eyelid reconstruction Techniques” Invited Keynote lecture New Zealand RANZCO Branch Meeting Waitangi May 2017 |
| Invited paper | Sullivan TJ “Considering challenging cases in oculoplastics. Thinking, planning and cutting, or not” Invited Keynote lecture New Zealand RANZCO Branch Meeting Waitangi May 2017 |
| Invited paper | Sullivan TJ “Orbital Tumours: Towards Targeted Therapy” presented as an invited speaker at the ISOO Biennial Meeting Sydney March 2017 |
| Invited paper | Sullivan TJ “Surgical Approaches to the Orbit” presented as part of the Ocular Adnexal Film Festival at the NSW RANZCO ASM, Sydney, March 2017 |
| Invited paper | Sullivan TJ “Margin Control: En face frozen section control of margins” Presented as part of a Symposium on Margin Control for periocular malignancy at the NSW RANZCO ASM, Sydney, March 2017 |
| Invited paper | Sullivan TJ “Clinical Aspects of Ocular Adnexal Lymphoma” Presented as part of the combined RANZCO ISOO Ophthalmic Pathology Workshop at the ISOO Biennial Meeting Sydney March 2017 |
| Invited paper | Sullivan TJ “Congenital Orbital Deformities” Presented as an invited paper in the Orbital Instruction Course at the 32nd APAO meeting in Singapore March 1-4 2017 |
| Invited paper | Sullivan TJ “IgG4 related Orbital Disease, Clinical Aspects” Presented as an invited paper in the APSOPRS Orbital Inflammation Symposium at the 32nd APAO meeting in Singapore March 1-4 2017 |
| Invited paper | Sullivan TJ “Steroids and other immunosuppressive strategies” Presented as an invited paper in the APSOPRS Thyroid Eye Disease Symposium at the 32nd APAO meeting in Singapore March 1-4 2017 |
| Oral paper | Park JJ “Management of diabetic retinopathy” Cotonou Ophthalmology Meeting, Cotonou, Benin, 11th January 2017, Invited lecture |
| Oral paper | Park JJ “Laser or not” case presentation, Qld RANZCO Meeting, Gold Coast, 5th August 2017 |
| Presenting Author | Hogden J , MD FRANZCO; Simon P. Holland, MB, FRCS; David T.C. Lin, MD, FRCS; Samuel Arba Mosquera, PhD. Postoperative Asphericity after Transepithelial PRK with High Speed Excimer Laser. ASCRS, Los Angeles. May 2017. |
| Presenting Author | Hogden J , MD FRANZCO; Simon P. Holland, MB, FRCS; David T.C. Lin, MD, FRCS; Samuel Arba Mosquera, PhD. Ocular Scattering Index after Advanced Ablation with High Speed Excimer Laser. ASCRS, Los Angeles. May 2017. |
| Oral Invited | Chiang M. MIGS – Indications, Tips & Complications – Invited panel discussion. The Australian and New Zealand Glaucoma Interest Group Meeting 2017, Brisbane |
| Oral Invited | Chiang M. Exploring the Angle: What’s wrong or is it normal? Australian Vision Convention 2017, Gold Coast |
| Oral Invited | Chiang M. Complex Glaucoma Cases: Do I need to operate? Australian Vision Convention 2017, Gold Coast |
| Oral Invited | Chiang M. Glaucoma – What’s on the horizon? Australian Vision Convention 2017, Gold Coast |
| Oral Invited | Chiang M. Role of MIGS in Complex Glaucoma. RANZCO Annual Meeting 2017, Perth |

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|---|
| Oral Invited | Chiang M. Upda Oral Invited te on Pseudoexfoliation Syndrome and Pigment Dispersion Syndrome. RANZCO Annual Meeting 2017, Perth |
| Oral Invited | Chiang M. Assessing Barrier to Ophthalmology Services in QLD. RANZCO Annual Meeting 2017, Perth |
| Invited speaker | Chow S-P. Eye-banking in the United Kingdom. Eye Bank Association of Australia and New Zealand (EBAANZ) Annual Scientific Meeting, February 2017. |
| Invited speaker | Chow S-P. Management of the High-Risk Corneal Transplant. Australian and New Zealand Cornea Society (ANZCS) Annual Scientific Meeting, February 2017. |
| Invited speaker | Chow S-P. Corneal transplantation in 2017. Cornea and Contact Lens Society (Queensland Chapter) meeting, May 2017. |
| Oral presentation | Bennett H, Beckingsale P, Apel A, Chow S-P. Prevention and Management of Corneal Graft Rejection: Current Practice Patterns of Australian and New Zealand Corneal Surgeons. Royal Australian and New Zealand College of Ophthalmologists (RANZCO) Annual Scientific Meeting, October 2017. |
| Oral presentation | Lawrence, L. Euretina 2017 Optic Disc Pit Maculopathy |
| Oral presentation | Lawrence, L. Qld RANZCO 2017: Medical Retina Audit Poll & Case presentation chair |
| Oral presentation | Lawrence, L. APVRS 2017 : Posterior segment Trauma guidelines |
| Oral presentation | Lawrence, L. APVRS 2017: VR complications of glaucoma surgery |

ORTHOPAEDIC SURGERY

The RBWH Department of Orthopaedic Surgery is widely recognised for its innovation and clinical excellence, while also consistently producing high quality research. We have been able to build on the momentum that has gathered over the past several years by collaborating with others locally, nationally, and internationally, fostering relationships that generate synergies. Once again, more than 20 formal publications from our Department appeared in 2017, marking the third consecutive year this milestone has been reached.

The key achievements for the year 2017 include publication of three separate systematic reviews and meta-analyses, one dealing with multi-ligament knee injuries, one comparing open and arthroscopic techniques for shoulder stabilisation, and the third comparing two different methods for rotator cuff repair. The FAITH trial finally concluded, after we have been involved for several years in this important international effort to investigate alternatives for fixation of displaced femoral neck fractures. It was extremely gratifying to see this study, involving 81 centres in 8 countries around the world, finally culminate in a publication in The Lancet.

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 are already well established as one of the leaders in the reconstruction of massive long bone defects using 3D printed patient-specific titanium cages, a technique we pioneered here in 2015. Using this technology, we have been able to perform “world’s first” surgical procedures on a routine basis. Finally, we most recently acquired an Aether-1 bio-printer, one of the few available anywhere in the world, and will begin to investigate printing a novel marine collagen product. This complements our other 3D printers, with three currently in operation.

SUPERVISED POST-GRADUATE RESEARCH STUDENTS

| NAME (RBWH STAFF IN BOLD) | CURRENT STUDIES (E.G. PHD, MASTERS ETC.) UNIVERSITY (DURATION) | RESEARCH PROJECT TITLE | SUPERVISORS (RBWH STAFF IN BOLD) |
|---------------------------|--|---|---|
| Nick Green | Masters – QUT – awarded December 2017 | Impact of “in-house” 3D Printing used as a preoperative planning aide for complex fracture treatment | Kevin Tetsworth, Vaida Glatt, Carolyn Grant |
| Bilal Zahoor | PhD – University of Queensland | 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 | Kevin Tetsworth, Daryl Wall |
| Joyce Antony | PhD – University of Queensland | Comparison of Subjective and Objective Measures of Patient Outcomes After Total Knee Replacement | Kevin Tetsworth, Erik Hohmann |
| Min Tri Phan | PhD – QUT | Femoral morphology variations and relevant implant fit in relation to peritrochanteric and distal femur fractures | Kevin Tetsworth, Beat Schmutz |
| Antony Rapisarda | PhD – UNSW | Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis | Kevin Tetsworth, Jeff Lipman, Ross Crawford |
| Naomi Paxton | PhD - QUT | The future of clinical biofabrication: Creating patient-specific melt-electrospun scaffolds for bone regeneration | Kevin Tetsworth, Mia Woodruff |

| NAME (RBWH STAFF IN BOLD) | CURRENT STUDIES (E.G. PHD, MASTERS ETC.) UNIVERSITY (DURATION) | RESEARCH PROJECT TITLE | SUPERVISORS (RBWH STAFF IN BOLD) |
|---------------------------|--|--|--|
| Joseph Coory | Masters – James Cook University | Using a social media based psychological profile to predict dissatisfaction with elective total knee replacement | Kevin Tetsworth , Peter McEwen |
| Paul Tuckett | PhD – University of Queensland | Randomised controlled trial of operative vs non-operative treatment of humeral shaft fractures | Kevin Tetsworth , Bruce McPhee, Vaida Glatt |
| Chris Conyard | PhD – University of Queensland | Knee pain after IM nailing of tibial shaft fractures: Randomised controlled trial of infra-patellar vs supra-patellar insertion techniques | Kevin Tetsworth , Ross Crawford |

2017 RESEARCH POSITIONS: COORDINATORS, FELLOW, ADJUNCT AND HONORARY POSITIONS

| NAME | TYPE OF FELLOWSHIP | RESEARCH PROJECT | UNIVERSITY (YEARS) |
|-------------------|---|---|---|
| Mark Young | Honorary Research Fellow in Orthopaedic Surgery | A phase 1 study to evaluate the safety and feasibility of mesenchymal stromal cell therapy in participants with non-union tibial bone fractures | University of Queensland (2017-current) |
| Nick Green | Orthopaedic 3D Medical Modeller | 3D Modelling and Printing in Orthopaedic Surgery | MNHHS (2015-current) |

2017 CURRENT RBWH RESEARCH GROUP / DEPARTMENT LED RESEARCH ACTIVITY

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|---|--|
| Brett Halliday | Jon Anderson , Debbie Geertshuis | Clinical outcomes and patient satisfaction following total hip and knee arthroplasty in patients with inherited coagulopathies: A retrospective analysis of 20 years |
| Richard Hanly | Luca Daniele , James Powell | Prospective case-controlled series using ankle arthroscopy in trauma |
| Paul McEnery | Luca Daniele | Assessment of biomechanical stability and kinematics using a novel anatomic distal radio-ulnar joint reconstruction |
| Jerry van de Pol | John Kinyanjui , Marita Prior , Macy Lu | Randomised controlled trial comparing short vs long tunnels for anterior cruciate ligament knee reconstructions: Clinical and radiographic characteristics |
| Andrew Mayo , Kevin Tetsworth | Luca Daniele | The effect of scaphoid reduction on carpal kinematics in scaphoid nonunion. |
| Kevin Tetsworth | Nick Green , Steve Kent , George Patterson, Vaida Glatt, Joyce Antony , George Banic | Statistical shape modelling from CT scans to assess the morphology and morphometry of adult human cadaveric tali: Gender-specific differences |
| Kevin Tetsworth | Nick Green , Luke Visscher , Marita Prior | Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human scapula: Design considerations for implants for surgical stabilisation |

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|---|
| Kevin Tetsworth | Nick Green, Luke Visscher, Marita Prior | Statistical shape modelling from CT scans to assess the morphology and morphometry of the adult human humerus |
| Kevin Tetsworth | Nick Green, Luke Visscher, Marita Prior, Erik Hohmann | 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 |
| Kevin Tetsworth | Jessica van den Heuvel, Marita Prior | The natural history of post-traumatic malalignment: radiographic correlation between varus/valgus and medial/lateral degenerative arthritis |
| Kevin Tetsworth | Miran Stubican, Marita Prior | Clinical and radiographic characteristics of combined pilon and talus/talar dome injuries |
| Kevin Tetsworth | Bhanu Manickavasagam, Nick Green | 3D bioprinting of a novel marine collagen for use in orthopaedic regenerative medicine |
| Kevin Tetsworth | Ibin Varughese | Clinical series using the Masquelet induced membrane technique for long bone reconstruction |
| Kevin Tetsworth | Matt Randell, Vaida Glatt, Annabelle Stabler, Tom Bussoletti, Erik Hohmann | Case-match controlled series comparing minimally invasive percutaneous anterior plating to formal open reduction and internal fixation for humeral shaft fractures |
| Kevin Tetsworth | Rishi Narasimhan | Meta-synthesis of outcomes after anterior minimally invasive plating for stabilization of humeral shaft fractures – the first 1,000 cases published globally |
| Kevin Tetsworth | | Design considerations for an implant specific for percutaneous anterior minimally invasive plating of humeral shaft fractures |
| Kevin Tetsworth | Luke Visscher, Nick Green | Design considerations for an implant specific for stabilisation of scapular fractures |
| Kevin Tetsworth, Jerry van de Pol | Steven Kent | Validation of a classification scheme for malunions and nonunions of the proximal tibia and tibial plateau |
| Kevin Tetsworth | Ishwar Bhattarai, Elliott D'Costa | 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 |
| Kevin Tetsworth | Alexey Borshch | Analysis of failure of surgical treatment for adult chronic osteomyelitis |
| Kevin Tetsworth, Jerry van de Pol | Tom Crookes, Marita Prior | Clinical and radiographic outcomes after internal fixation of glenoid neck fractures through a modification of the modified Judet approach |
| Kevin Tetsworth | Daryl Wall, Bilal Zahoor, 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 |
| Kevin Tetsworth | Jeff Lipman, Antony Rapisarda, Sara Martinez-Martos | Identification of serum biomarkers for the diagnosis of orthopaedic infections and sepsis |
| Kevin Tetsworth | Chris Conyard, Ross Crawford | Knee pain after intra-medullary nailing of tibial shaft fractures: Randomised controlled trial of infra-patellar vs supra-patellar insertion techniques |
| Kevin Tetsworth | Richard Hanly | Delays in coverage of open fractures: clinical outcomes and incidence of deep infection with type 4 open tibial fractures |
| Kevin Tetsworth | Nick Green | Geographical mapping of injuries to the talar dome and talus associated with distal tibial pilon fractures |
| Kevin Tetsworth, Mark Young, Jerry van de Pol | 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 |

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|---|--|
| Kevin Tetsworth | Liz Hines, Samantha Dowling | Infections associated with fasciotomy wounds |
| Kevin Tetsworth | Peter Wong | Preliminary results using infrared thermal imaging to determine bone viability in open tibial fractures |
| Kevin Tetsworth | Peter Wong | Bisphosphonate related atraumatic spino-pelvic dissociation |
| Kevin Tetsworth | | Temporal evolution of the microbiome in Type 4 (neglected) open fractures |
| Kevin Tetsworth | Marita Prior | Proposed classification scheme for post-traumatic skeletal defects, with a validation study in a clinical series of long bone fractures |
| Kevin Tetsworth | Rishi Narasimhan, Minoo Patel (Melbourne), Australian Limb Lengthening and Reconstruction Society | Clinical implications of patients returning to Australia after undergoing complex limb reconstruction and elective lengthening procedures overseas |
| Kevin Tetsworth | Vaida Glatt, Anna Woloszyk (Univ of Texas, San Antonio) | 3D printed patient-specific titanium scaffolds for the management of massive bone defects |
| Kevin Tetsworth | Paul Tuckett, Vaida Glatt (Univ of Texas, San Antonio) | Randomised controlled trial of operative vs non-operative treatment of humeral shaft fractures |
| Kevin Tetsworth | Travis Parkulo (Marshall University, West Virginia), Erik Hohmann (Dubai), Julian Tetsworth | Triangular antiprisms: The geometry of hexapod external fixators and the etiology of paradoxical accelerated lengthening |

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|---|------------------------|---|
| Erik Hohmann (Dubai), Vaida Glatt (Univ of Texas, San Antonio), Natalie Keough (Pretoria), Reinhard Putz, Andreas Imhoff (Munich) | Kevin Tetsworth | The biomechanical properties of fresh versus fresh/frozen and preserved (Thiel and Formalin) long head of biceps tendons: A comparative investigation |
| Erik Hohmann (Dubai), Vaida Glatt (Univ of Texas, San Antonio), | Kevin Tetsworth | Surgical treatment of Neer type-II distal clavicle fractures. An overview of contemporary techniques. |
| Erik Hohmann, Vaida Glatt (Univ of Texas, San Antonio), Maketo Malepo, Franz Birkholtz (Pretoria) | Kevin Tetsworth | Functional outcomes of failed plate fixation in distal tibial fractures salvaged by hexapod external fixators |

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|---|---|--|
| Erik Hohmann (Dubai), Vaida Glatt (Univ of Texas, San Antonio), | Kevin Tetsworth | Hamstring/quadriceps ratios in anterior cruciate ligament-deficient and anterior cruciate ligament-reconstructed knees |
| Erik Hohmann (Dubai), Vaida Glatt (Univ of Texas, San Antonio), | Kevin Tetsworth | Open versus arthroscopic acromioclavicular joint resection: a systematic review and meta-analysis |
| Erik Hohmann (Dubai), Vaida Glatt (Univ of Texas, San Antonio), Andrew Jamieson (Glasgow) | Kevin Tetsworth | Swimming induced pulmonary oedema in athletes: A systematic review |
| Vaida Glatt, Anna Woloszyk (Univ of Texas, San Antonio) | Kevin Tetsworth | Genomic analysis of growth factors associated with human induced (Masquelet) membranes: differential gene expression specific to osteogenesis, chondrogenesis, angiogenesis, and stem cell recruitment |
| Vaida Glatt, Anna Woloszyk (Univ of Texas, San Antonio) | Kevin Tetsworth | Genomic analysis of growth factors associated with early fracture healing under different mechanical conditions |
| Vaida Glatt (Univ of Texas, San Antonio), Steve Block, Greg Hardy | Kevin Tetsworth | Design of biomimetic 3D printed titanium cages |
| Joseph Coory, Peter McEwen, Matthew Wilkinson (Townsville) | Kevin Tetsworth | Using a social media based psychological profile to predict dissatisfaction with elective total knee replacement |
| Ian Harris (Sydney), Mithun Joshi, John Limbers, Zsolt Balogh (Newcastle) | Kevin Tetsworth | SOFIE (S urgery for O lecranon F ractures I n the E lderly): Randomized controlled trial of operative vs non-operative treatment of olecranon fractures in the elderly |
| Ajay Pandey (QUT), Ross Crawford | Kevin Tetsworth, Nick Green, Richard Hanly | Robotic-assisted reduction and stabilisation of intra-articular calcaneal fractures |
| Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu | Kevin Tetsworth | Transcutaneous endo-prosthetic reconstruction of wheelchair bound transfemoral amputees |
| Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu | Kevin Tetsworth | Transcutaneous endo-prosthetic reconstruction of military blast injuries |
| Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu | Kevin Tetsworth | Transcutaneous endo-prosthetic reconstruction of trans-tibial amputees |
| Munjed Al Muderis (University of Notre Dame, Sydney), Seamus Thompson, William Lu | Kevin Tetsworth | Osseointegrated implants for transfemoral amputees: Radiographic evaluation of bone remodeling |

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|---|
| Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu | Kevin Tetsworth | Osseointegrated implants for transfemoral amputees: Temporal evaluation of changes in bone mineral density in the femoral residuum and the adaptive response to loading |
| Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu, Fareed Khadim (Baghdad) | Kevin Tetsworth | Mega-prosthetic reconstruction of devastating military blast injuries of the shoulder and elbow: Preliminary clinical results of a consecutive series in Baghdad, Iraq |
| Munjed Al Muderis (University of Notre Dame, Sydney), Solon Rosenblatt, William Lu | Kevin Tetsworth | Morphology and morphometry of the residual femur after transfemoral amputation – implications for the design of implants used for osseointegration to reconstruct amputees |
| Edward Botros, Randy Bindra (Gold Coast) | Kevin Tetsworth | Complications following internal fixation of olecranon fractures: comparison of plates and tension-band wires |
| Paul Tuckett, Matthew Hope (Princess Alexandra) | Kevin Tetsworth, Arvind Puri | Transarticular tibio-talo-calcaneal nailing versus open reduction and internal fixation for treatment of the elderly ankle fracture: protocol for a multi-centre, prospective, randomised controlled trial. |
| Pablo Corona (Barcelona) | Kevin Tetsworth, Vaida Glatt (Univ of Texas, San Antonio) | Using 3D printed models to preoperatively plan for the application of circular fixators for gradual deformity correction |
| Cengiz Sen (Istanbul) | Kevin Tetsworth | Supracondylar nail augmented acute shortening/lengthening for the treatment of infected nonunion of the distal femur with bone loss |
| Matthew Hope (Princess Alexandra), Cliff Pollard, Kirsten Vallmuur, Cate Cameron, Jacelle Lang (Jamieson Trauma Institute) | Kevin Tetsworth, Jerry van de Pol | The economic impact of lower extremity injuries at two major trauma centres in Brisbane, Australia |
| Gunnar Norstedt (Karolinska Institute, Stockholm), (Per Prisell (Burnie), Mark Wilson (Sunshine Coast) | Kevin Tetsworth | Genomic analysis of hip muscles for biomarkers specific to heterotopic ossification: comparison of gluteus minimus and medius muscles |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal Article | Piercey J, McEniery P, Green N . Deep transverse metacarpal ligament reconstruction using suture button and A1 pulley. <i>Techniques in Hand & Upper Extremity Surgery</i> 2017; 21(4): 128–30; doi: 10.1097/BTH.000000000000169 |
| Journal Article | Hanly RJ , Sokolowski S, Timperley AJ. The SPAIRE technique allows sparing of the piriformis and obturator internus in a modified posterior approach to the hip. <i>Hip Int</i> 2017; 27(2): 205 – 209; DOI: 10.5301/hipint.5000490. |
| Journal Article | Glatt V, Evans C, Tetsworth K . A concert between biology and biomechanics: The influence of the mechanical environment on bone healing. <i>Frontiers in Physiology</i> 2017; 7: 678; https://doi.org/10.3389/fphys.2016.00678 . |
| Journal Article | Tetsworth K , Block S, Glatt V. Putting 3D modeling and 3D printing into practice: Virtual surgery and preoperative planning to reconstruct complex post-traumatic skeletal deformities and defects. <i>SICOT-J</i> 2017; 3,16: 1-8; DOI: 10.1051/sicotj/2016043. |
| Journal Article | Kumar K, Thomas A, Tetsworth K , Hohmann E. Is there a short-term benefit from an intra-articular steroid injection in female patients with adhesive capsulitis of the shoulder treated with physiotherapy? <i>J Orthop Surg</i> 2017; 25 (1): 1-6, 2309499016684976. DOI: 10.1177/2309499017690463. |
| Journal Article | Hohmann E, Meta M, Navalgund V, Tetsworth K . The relationship between radiological alignment of united distal radius fractures and functional and patient-perceived outcomes in elderly patients. <i>J Orthop Surg</i> 2017; 25 (1): 1-6, 2309499016684976. DOI: https://doi.org/10.1177/2309499016684976 . |
| Journal Article | Tetsworth K , Fraser D, Glatt V, Hohmann E. Use of Google Scholar public profiles in orthopaedics: Rate of growth and changing international patterns. <i>J Orthop Surg</i> 2017; 25(1) 1–7; DOI: 10.1177/2309499017690322. |
| Journal Article | Wang Q, Verrall I, Walker R, Tetsworth K , Drobetz H. U-type bilateral sacral fracture with spino-pelvic dissociation caused by epileptic seizure. <i>J Surg Case Reports</i> 2017; 3:1-3; doi: 10.1093/jscr/rjx043. |
| Journal Article | Hohmann E, Glatt V, Tetsworth K . Orthopaedic research in Australia. <i>Bibliometrics of publication rates in the top 15 journals</i> . <i>ANZ Journal of Surgery</i> 2017; 15: 23-30. |
| Journal Article | Hohmann E, Birkholtz F, Glatt V, Tetsworth K . The “Road to Union” protocol for the reconstruction of isolated complex high-energy tibial trauma. <i>Injury</i> 2017; 48: 1211-16. DOI: http://dx.doi.org/10.1016/j.injury.2017.03.018 . |
| Journal Article | Al Muderis M, Lu W, Tetsworth K , Bosley B, Li JJ. Single-stage osseointegrated reconstruction and rehabilitation of lower limb amputees: the Osseointegration Group of Australia Accelerated Protocol-2 (OGAAP-2) for a prospective cohort study. <i>BMJ Open</i> . 2017; 7(3): e013508. doi: 10.1136/bmjopen-2016-013508. PMID: 28336738. |
| Journal Article | Anthony J, Varughese I , Glatt V, Tetsworth K , Hohmann E. Influence of the labrum on version and diameter of the glenoid: A morphometric study using magnetic resonance images. <i>Arthroscopy</i> 2017; 33(8): 1442-47. pii: S0749-8063(17)30119-6. doi: 10.1016/j.arthro.2017.01.045. [Epub ahead of print] PMID:28412061. |
| Journal Article | Van Niekerk AH, Birkholtz FF, de Lange P, Tetsworth K , Hohmann E. Circular external fixation and cemented PMMA spacers for the treatment of complex tibial fractures and infected nonunions with segmental bone loss. <i>J Orthop Surgery</i> 2017; 25(2): 1-8. DOI: 10.1177/2309499017716242. |
| Journal Article | Hohmann E, Glatt V, Tetsworth K . World orthopaedic research activity 2010-2014. Publication rates in the top 15 orthopaedic journals related to population size and gross domestic product. <i>World J of Ortho</i> 2017; 8(6): 514-23. |
| Journal Article | Tetsworth K , Paley D, Sen C, Jaffe M, Maar D, Glatt V, Hohmann E, Herzenberg J. Bone transport versus acute shortening for the management of infected tibial non-unions with bone defects. <i>Injury</i> 2017; 48(10): 2276-84. |
| Journal Article | Hohmann E, Glatt V, Tetsworth K . Early or delayed reconstruction in multi-ligament knee injuries: A systematic review and meta-analysis. <i>Knee</i> 2017; 24(5): 909-16. http://dx.doi.org/10.1016/j.knee.2017.06.011 |

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal Article | Hohmann E, Tetsworth K , Glatt V. Open versus arthroscopic surgical treatment for anterior shoulder dislocation: a comparative systematic review and meta-analysis over the past 20 years. J Shoulder Elbow Surg 2017; 26(10): 1873-80. https://doi.org/10.1016/j.jse.2017.04.009 . |
| Journal Article | Hohmann E, König A, Kat CJ, Glatt V, Tetsworth K , Keough N. Single- versus double-row repair for full-thickness rotator cuff tears using suture anchors. A systematic review and meta-analysis of basic biomechanical studies. Eur J Orthop Surg Traumatol. 2017 Dec . doi:10.1007/s00590-017-2114-6. PMID: 29270867. |
| Journal Article | Antony J, Tetsworth K , Hohmann E. Influence of sagittal plane component alignment on kinematics after total knee arthroplasty. Knee Surg Sports Traumatol Arthrosc 2017; 16: 1-6. |
| Journal Article | Hohmann E, Footitt F, Tetsworth K . Relationships between radiographic pre- and post-operative alignment and patient perceived outcomes following Weber B and C ankle fractures. Foot Ankle Int 2017; 38(3): 270-76. doi:10.1177/1071100716674703. |
| Journal Article | FAITH Investigators. Fracture fixation in the operative management of hip fractures (FAITH): An international, multi-centre, randomised controlled trial. Lancet 2017 March 3; pii: S0140-6736(17)30066-1. doi: 10.1016/S0140-6736(17)30066-1. PMID: 28262269. (Including Flynn A, Halliday B, Holt M, Tetsworth K, Yang S, Pincus P, Gervais T) |
| Book chapter | FAITH Tetsworth K , Bhattarai I: "Surgical management of chronic adult osteomyelitis", in Basic Techniques for Extremity Reconstruction. Edited by Cakmak, Sen, Eralp, Balci, Springer Verlag International, Switzerland (2016) ISBN 97x-3-31x-0363x-0. |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|---|
| Oral | Geertshuis D, Anderson J, Halliday B . Clinical outcomes and patient satisfaction following total hip and knee arthroplasty in patients with inherited coagulopathies: A retrospective analysis of 20 years experience. AOA Annual Scientific Meeting, Adelaide, South Australia, 9 October 2017 |
| Oral | Tetsworth K . Al Muderis M. Is single stage surgery the future of osseointegration? 7th International Conference – Advances in Orthopedic Osseointegration - Coronado, San Diego, California - March 12-13, 2017. |
| Oral | Tetsworth K . Al Muderis M. Clinical outcomes of osseointegrated reconstruction of wheelchair bound trans-femoral amputees. 7th International Conference – Advances in Orthopedic Osseointegration - Coronado, San Diego, California - March 12-13, 2017. |
| Oral | Tetsworth K . Al Muderis M. Osseointegration in patients with peripheral vascular disease 7th International Conference – Advances in Orthopedic Osseointegration - Coronado, San Diego, California - March 12-13, 2017. |
| Invited speaker | Tetsworth K . 3D modelling and printing in the management of segmental bone defects. Limb Lengthening and Reconstruction Society Specialty Day, American Academy of Orthopedic Surgeons San Diego, California - March 18, 2017. |
| Invited speaker | Tetsworth K . The mangled lower extremity. Masters Fracture Forum Huntington Beach California – April 22, 2017. |
| Oral | Tetsworth K , Al Muderis M. Osseointegration in patients with peripheral vascular disease. ISPO World Congress Cape Town, South Africa May 8-11 2017 |
| Oral | Tetsworth K , Al Muderis M. Mid to long-term outcomes following lower extremity osseointegration. ISPO World Congress Cape Town, South Africa May 8-11 2017 |
| Invited speaker | Tetsworth K Management of complex distal tibial plafond fractures. APAC and Emerging Markets Trauma Solutions, Singapore, May 13-14 2017 |

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|---|
| Invited speaker | Tetsworth K. Management of ankle and calcaneus fractures. APAC and Emerging Markets Trauma Solutions, Singapore, May 13-14 2017 |
| Invited speaker | Tetsworth K. Distal femoral traumatic bone loss. APAC and Emerging Markets Trauma Solutions, Singapore, May 13-14 2017 |
| Invited speaker | Tetsworth K. Neglected open fractures. APAC and Emerging Markets Trauma Solutions, Singapore, May 13-14 2017 |
| Invited speaker | Tetsworth K. Pre-operative planning of lower extremity deformity: malalignment test, CORA method, and osteotomy rules. 3rd Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 24-27 2017 |
| Invited speaker | Tetsworth K. Taylor Spatial Frame: How does it differ from Ilizarov? 3rd Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 24-27 2017 |
| Invited speaker | Tetsworth K. Options for management of traumatic segmental skeletal defects. 3rd Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 24-27 2017 |
| Invited speaker | Tetsworth K. Advantages of the Masquelet technique. 3rd Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 24-27 2017 |
| Invited speaker | Tetsworth K. Extra articular deformity: Implications for total knee arthroplasty. 3rd Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 24-27 2017 |
| Invited speaker | Tetsworth K. Combined techniques for the safe correction of very large tibial rotational deformities in adults. 3rd Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 24-27 2017 |
| Invited speaker | Tetsworth K, Al Muderis M. Osseointegration: The ultimate post-traumatic limb reconstruction? 3rd Intercontinental Meeting of 3D Surgery (Defects, Deformities, Discrepancies), Istanbul, Turkey, May 24-27 2017 |
| Invited speaker | van de Pol J, 3D printing and modeling: Orthopaedic applications, Annual Scientific Meeting of the Royal Australian College of Surgeons, Adelaide, South Australia, 11 May 2017 |
| Oral | Narasimhan R, Stabler A, Tetsworth K. Percutaneous anterior plating of humeral shaft fractures: Experience at the Royal Brisbane Hospital. Australian Orthopaedic Trauma Society Annual Meeting, Hamilton Island, Queensland 23-25 June 2017 |
| Oral | Tetsworth K, Wong P. Preliminary results using infrared thermal imaging to determine bone viability in open tibial fractures 3rd World Ortho Recon Congress and Combined ASAMI/ILLRS Meeting, Estoril, Portugal, 31 August- 2 Sept 2017 |
| Oral | Tetsworth K, Al Muderis M. The use of osseointegrated titanium implants to reconstruct trans-tibial amputees 3rd World Ortho Recon Congress and Combined ASAMI/ILLRS Meeting, Estoril, Portugal, 31 August- 2 Sept 2017 |
| Oral | Tetsworth K Triangular antiprisms: the geometry of the hexapod and the aetiology of paradoxical accelerated lengthening. 3rd World Ortho Recon Congress and Combined ASAMI/ILLRS Meeting, Estoril, Portugal, 31 August- 2 Sept 2017 |
| Oral | Tetsworth K Designing 3D printed scaffolds to reconstruct skeletal defects 3rd World Ortho Recon Congress and Combined ASAMI/ILLRS Meeting, Estoril, Portugal, 31 August- 2 Sept 2017 |
| Oral | Tetsworth K Using 3D printed scaffolds together with the Masquelet technique for the reconstruction of segmental bone defects 3rd World Ortho Recon Congress and Combined ASAMI/ILLRS Meeting, Estoril, Portugal, 31 August- 2 Sept 2017 |
| Invited speaker | Tetsworth K Percutaneous anterior plating of humeral shaft fractures, 4th American Academy of Orthopedic Surgeons/Indian Orthopedic Association Trauma Conclave, Goa, India, 8-11 Sept 2017 |
| Invited speaker | Tetsworth K Complex reconstruction of distal tibial fractures using external fixation, 4th American Academy of Orthopedic Surgeons/Indian Orthopedic Association Trauma Conclave, Goa, India, 8-11 Sept 2017 |
| Invited speaker | Tetsworth K Mastering debridement of chronic osteomyelitis, 4th American Academy of Orthopedic Surgeons/Indian Orthopedic Association Trauma Conclave, Goa, India, 8-11 Sept 2017 |
| Invited speaker | Tetsworth K Percutaneous ilio-sacral screw stabilization of pelvic ring injuries, 4th American Academy of Orthopedic Surgeons/Indian Orthopedic Association Trauma Conclave, Goa, India, 8-11 Sept 2017 |

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|---|
| Invited speaker | Tetsworth K Technique for application of a Spatial Frame for acute fractures, 4th American Academy of Orthopedic Surgeons/Indian Orthopedic Association Trauma Conclave, Goa, India, 8-11 Sept 2017 |
| Invited speaker | Tetsworth K Infected non-union distal humerus, 4th American Academy of Orthopedic Surgeons/ Indian Orthopedic Association Trauma Conclave, Goa, India, 8-11 Sept 2017 |
| Oral | Tetsworth K Using custom 3D printed scaffolds together with the Masquelet technique for the reconstruction of massive femoral bone defects, 33rd Annual Meeting of the Orthopedic Trauma Association, Vancouver, British Columbia, Canada, 11-14 Oct 2017 |
| Oral | Daniele L , Rebgetz P, Oechsner A, Taylor F. Biomechanical stability of radial head fracture fixation with headless compression screws. Australian Orthopaedic Association Annual Meeting, Adelaide, South Australia 8-11 Oct 2017 |
| Oral | Wong P, Tetsworth K . Preliminary results using infrared thermal imaging to determine bone viability in open tibial fractures. Australian Orthopaedic Association Annual Meeting, Adelaide, South Australia 8-11 Oct 2017 |
| Oral | Randell M, Stabler A, Tetsworth K . Percutaneous anterior plating of humeral shaft fractures. Australian Orthopaedic Association Annual Meeting, Adelaide, South Australia 8-11 Oct 2017 |
| Oral | Green N , Tetsworth K , Grant C, Glatt V. Impact of “in-house” 3D printing as a preoperative planning aide for calcaneal fracture treatment. Australian Orthopaedic Association Annual Meeting, Adelaide, South Australia 8-11 Oct 2017 |
| Oral | Tetsworth K . Al Muderis M Osseointegrated implants for transfemoral amputees - radiographic evaluation of bone remodeling, 33rd Annual Meeting of the Orthopedic Trauma Association, Vancouver, British Columbia, Canada, 11-14 Oct 2017 |
| Invited speaker | Tetsworth K Using ring fixators in trauma: Tibial plateau fractures, 33rd Annual Meeting of the Orthopedic Trauma Association, Vancouver, British Columbia, Canada, 11-14 Oct 2017 |
| Invited speaker | Tetsworth K Principles of fracture fixation, AO Trauma Basic Course, Sydney, NSW, 6 March 2017 |
| Invited speaker | Tetsworth K Fracture classification: Developing a treatment plan, AO Trauma Basic Course, Sydney, NSW, 6 March 2017 |
| Invited speaker | Tetsworth K Chronic osteomyelitis: Debridement techniques and treatment strategies in the 21st Century, Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, NSW, 2-4 June 2017 |
| Invited speaker | Tetsworth K 3D modelling and printing in the management of segmental skeletal defects, Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, NSW, 2-4 June 2017 |
| Invited speaker | Tetsworth K Normal axes and the malalignment test, Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, NSW, 2-4 June 2017 |
| Invited speaker | Tetsworth K Taylor Spatial Frame web-based software, Australian Limb Lengthening and Reconstruction Society Annual Meeting, Sydney, NSW, 2-4 June 2017 |
| Invited speaker | Tetsworth K 3D Printed patient specific implants in complex limb salvage, Deformity Down Under – Spinal Surgery Meeting, Sydney, NSW, 4 August 2017 |
| Invited speaker | Tetsworth K 3D printed patient-specific implants and complex orthopaedic reconstruction: Game changer or over hyped nonsense? 2cd Annual Combined Orthopaedic and Anaesthetics Meeting, Terrigal, NSW, 10 November 2017 |
| Poster | Tetsworth K , Isaacs J, Glatt V. Patient-specific 3D printed titanium truss strut implants combined with the Masquelet technique for segmental bone loss: Preliminary results of treatment. Orthopedic Research Society, San Diego, California – 20-21 March 2017. |
| Poster | Tetsworth K , Lu W, Rosenblatt S, Muderis MA. Osseointegrated reconstruction of wheelchair bound amputees. 16th ISPO World Congress, Cape Town, South Africa – 8-11 May 2017 |
| Poster | Mudyara L, Lu W, Rosenblatt S, Tetsworth K , Muderis MA. The use of osseointegrated titanium implants to treat bilateral amputees. 16th ISPO World Congress, Cape Town, South Africa – 8-11 May 2017 |

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|--|
| Poster | Muderis MA, Lu W, Li JJ, Glatt V, Tetsworth K . Osseointegration for the reconstruction of devastating lower limb military and terrorist blast injuries. 16th ISPO World Congress, Cape Town, South Africa – 8-11 May 2017 |
| Poster | Manickavasagam B, Green N, Tetsworth K . 3D bioprinting of a novel marine collagen for use in orthopaedic regenerative medicine. 2017 Defense Innovation Technology Acceleration Challenges, Tampa Florida – 3-5 October 2017 |

Other communications and outputs:

(a) **Kevin Tetsworth ResearchGate Profile:** https://www.researchgate.net/profile/Kevin_Tetsworth

(b) **Kevin Tetsworth Google Scholar Profile:** <https://scholar.google.com.au/citations?user=bx9ktUgAAAAJ&hl=en>

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

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

(e) **Kevin Tetsworth/RBWH AOA Research Networking Map:** <https://www.aoa.org.au/research/researchmap>

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

RESEARCH INTEREST GROUP ON ANAESTHETICS/ DEPARTMENT OF ANAESTHETICS

The ultimate goal and objective behind research within the department of Anaesthetics and Research Interest Group in Anaesthesia (RIGA) is to improve patient care. The department has placed a strong focus on investigator lead research, as well as translation of evidence based best practice through the development and official opening of the Centre for Excellence and Innovation in Anaesthesia (CEIA). This combined with the continuing work through the ANZCA CTG has made 2017 a very busy and rewarding year for the department.

There are 7 research higher degree staff members within the department, 6 of which successfully gained scholarships to conduct their research in 2017. The department has also been awarded \$150,000 worth of funding from national and international grant bodies. Our research has been acknowledged through the presentation of several awards and accolades:

- Victoria Eley - Complex Health Challenges, Obstetric Medicine Research Team, Metro North Excellence Awards and
- Victoria Eley, Adrian Chin, Isabelle Tham, Jee Poh, Perminder Aujla, Emma Glasgow, Hannah Brown, Katherine Steele, Lachlan Webb, André van Zundert - The Professor William Egerton Award, Royal Brisbane and Women's Hospital Symposium
- Julie Lee - Kevin McCaul Prize, Australian Society of Anaesthetists
- Rochelle Ryan - Gilbert Troup Prize, Australian Society of Anaesthetists
- Prof Andre van Zundert – top 10 Anaesthesia paper of the year, Journal of the Association of Anaesthetists of Great Britain and Ireland.
- Genevieve Goulding Women in Medicine Award, Australian Medical Association

Victoria Eley completed her PhD this year. Following this she was also awarded an academic title of Associate Professor with the University of Queensland.

At the end of 2017 our department has 6 staff members undertaking a higher degree, published 8 book chapters, 1 book, 37 journal articles and 13 conference presentations. There has been an increase in all research output compared to 2016, and we are looking to continue to expand our research capability in 2018.



SUPERVISED POST-GRADUATE RESEARCH STUDENTS

| NAME (RBWH STAFF IN BOLD) | CURRENT STUDIES (E.G. PHD, MASTERS ETC.) UNIVERSITY (DURATION) | RESEARCH PROJECT TITLE | SUPERVISORS (RBWH STAFF IN BOLD) |
|----------------------------|--|--|--|
| Cienwen Town | PhD (2017-2021) | Regional Anaesthesia as an intervention for the treatment of burn related procedural pain. | Haakan Strand, Prof Andre van Zundert , James Johnson . |
| Lizanne Dagleish | PhD (2016-2020) | Microcirculatory Dysfunction and Skin failure in critically ill patients: an exploratory study. | Prof Fiona Coyer , Kathleen Finlayson, Prof Andre van Zundert , Jill Campbell . |
| Victoria Eley | PhD-completed (2017) | Clinical guidelines relating to the anaesthetic management of obese parturients: an evaluation of the evidence supporting the recommendations and their utility in clinical practice | Prof Leonie Callaway , Prof Jeffrey Lipman and Prof Andre van Zundert |
| Julie Lee | PhD (2015 -2019) | ROTEM Thromboelastometry in Obstetrics | Prof Andre van Zundert , Jeremy Cohen , A/Prof Kerstin Wyssusek , and A/Prof Victoria Eley . |
| Michelle Roets | PhD (2017- 2021) | Intraoperative cell salvage: A cost-benefit analysis. | A/Prof David Sturgess, Prof Andre Van Zundert , A/Prof Kerstin Wyssusek and Dr Melinda Dean |
| Sue Lawrence | MPhil (2017-2019) | Lumbar interspinous ligament scissure: a detailed anatomical and imaging investigation. | Prof. David Reutens, A/Prof. David Sturgess. |
| Kersi Taraporewalla | PhD (2017- 2021) | Teaching and learning psychomotor skill in anaesthesia. | Prof Van Zundert , Prof Jeffery Lipman , |

2017 CURRENT RBWH RESEARCH GROUP / DEPARTMENT LED RESEARCH ACTIVITY

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|---|
| Rebecca Christensen | Rebecca Christensen , Victoria Eley , Dwane Jackson , Rochelle Ryan , Prof Van Zundert , Prof Jason Roberts , Prof Jeffrey Lipman . | Therapeutic concentrations cephazolin + oxytocin in bariatric Caesarean section patients. |
| A/Prof Victoria Eley | Rochelle Ryan , Dwane Jackson , Victoria Eley , Rebecca Christensen , Prof Van Zundert , Prof Jason Roberts , Prof Jeffrey Lipman . | Therapeutic concentrations cephazolin in bariatric surgical patients. |
| Prof Andre Van Zundert | Prof Andre Van Zundert , Heather Reynolds . | LMA Protector™ Study. |

| RBWH RESEARCH GROUP / DEPARTMENT LEAD RESEARCHERS | COLLABORATIVE RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|--|
| A/Prof Kersi Taraporewalla | A/Prof Kersi Taraporewalla , Penelope Sanderson, Marcus Watson, Heather Reynolds , Prof Andre Van Zundert . | Respiratory Sonification Trial. |
| Prof Andre Van Zundert | Prof Andre Van Zundert , A/Prof Kerstin Wyssusek , Anthony Hade . | Positioning of supraglottic airway devices. |
| Gareth Collins | Gareth Collins , Lizanne Dalgleish , Cienwen Town . | Optic nerve sheath study to measure ICP. |
| Julie Lee | Prof Andre van Zundert , A/Prof Jeremy Cohen , A/Prof Kerstin Wyssusek , A/Prof Victoria Eley , Amy Krepska , Clare Manning . | ROTEM® and platelet function in pre-eclamptic obstetric patients. |
| Julie Lee | Julie Lee , Victoria Eley , Rebecca Kimble, Andre van Zundert , John Rowell | ROTEM® thromboelastometry in obstetrics: baseline parameters in normal and complicated pregnancies. A prospective observational study on elective Caesarean patients. |
| Julie Lee | Julie Lee , Victoria Eley , Rebecca Kimble, Andre van Zundert , John Rowell | ROTEM® thromboelastometry in obstetrics: baseline parameters in normal and complicated pregnancies. A prospective observational study on labour ward inpatients. |
| Cienwen Town | Andre van Zundert , James Johnson , Julie Lee . | Ultrasound-Guided Regional Anaesthesia in Patients receiving Dressing Change After Split-Skin Grafting for Upper Limb Burns Injuries: A Prospective Randomized Study . |
| Cienwen Town | Andre van Zundert , James Johnson , Julie Lee . | Ultrasound-Guided Regional Anaesthesia in Patients receiving Split-Skin Grafting for Various Burns with Donor Sites from the Upper Thigh: A Prospective Randomized Study. |
| A/Prof Victoria Eley | Rebecca Christiansen , Leonie Roberts , Leah Rickards , Helen Barrett | Arm and Finger Measurements in Pregnant Women. |
| A/Prof Victoria Eley | Adrian Chin , Isabelle Tham, Jee Poh, Emma Glasgow, Hannah Brown , Kate Steele, Lachlan Webb, Andre van Zundert | The failure rate of extending epidural analgesia to anaesthesia for emergency caesarean section in women with a body mass index ≥ 40 compared with women with a body mass index ≤ 30 . |
| A/Prof Victoria Eley | Dr Adrian Chin , Dr Renuka Sekar, A/Prof Tim Donovan, Dr Amy Krepska , Dr Sheridan Bell , Dr Mitchell Lawrence , Dr Shaun McGrath, Dr Alex Robinson, Mr Lachlan Webb, Professor Andre van Zundert. | Subcutaneous Fat in Pregnancy |
| Michelle Roets | A/Prof David Sturgess, Prof Andre Van Zundert , A/Prof Kerstin Wyssusek , Dr Melinda Dean, A/Prof Louisa Gordon | Intraoperative cell salvage: A cost-benefit analysis. |
| Michelle Roets | Melinda Dean, John-Paul Tung, Pro Robert Flower, A/Prof Kerstin Wyssusek . | Does transfusion-related immune modulation occur following intraoperative cell salvage: A pilot study |

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|---|--|--|
| A/Prof Timothy Short (University of Auckland) | Michael Edwards, David Belavy, Victoria Eley | The BALANCED Anaesthesia Study: A prospective, randomised clinical trial of two levels of anaesthetics depth in patient outcomes after major surgery |
| Prof Tomás Corcoran (University of Western Australia) | Julie Lee, Gareth Collins, Victoria Eley | The Perioperative Administration of Dexamethasone and Infection |

2017 RESEARCH AWARDS AND ACHIEVEMENTS

| RECIPIENT | AWARD | EVENT |
|--------------------|--|---|
| Victoria Eley | Complex Health Challenges - Obstetric Medicine Research Team | Metro North Excellence Awards |
| Victoria Eley | The Professor William Egerton Award | Royal Brisbane and Women's Hospital Symposium |
| Rochelle Ryan | Gilbert Troup Prize | Australian Society of Anaesthetists |
| Julie Lee | Kevin McCaul Prize | Australian Society of Anaesthetists |
| Genevieve Goulding | Women in Medicine Award | Australian Medical Association |

2017 RESEARCH GRANTS - AWARDED

| INVESTIGATORS (RBWH STAFF IN BOLD) | RBWH RESEARCH GROUPS / DEPARTMENTS | PROJECT TITLE | GRANTING BODY | AMOUNT IN 2017 | TOTAL AMOUNT (YEARS) |
|--|---|--|---------------|----------------|----------------------|
| Rochelle Ryan , Victoria Eley , Rebecca Christensen , Dwane Jackson , Jeffery Lipman , Jason Roberts . | Research Interest Group in Anaesthesia (RIGA) | Does Cefazolin prophylaxis during elective bariatric surgery achieve therapeutic concentration in plasma and interstitial fluid. | ANZCA | \$30,963 | \$30,963 (2017) |
| Rebecca Christensen , Victoria Eley , Rochelle Ryan , Dwane Jackson , Jeffery Lipman , Jason Roberts . | RIGA | Does Cefazolin prophylaxis during elective bariatric caesarean section achieve therapeutic concentration in plasma and interstitial fluid. | ANZCA | \$30,963 | \$30,963 (2017) |

| INVESTIGATORS (RBWH STAFF IN BOLD) | RBWH RESEARCH GROUPS / DEPARTMENTS | PROJECT TITLE | GRANTING BODY | AMOUNT IN 2017 | TOTAL AMOUNT (YEARS) |
|--|------------------------------------|--|-----------------|----------------|----------------------|
| Rebecca Christensen, Victoria Eley, Rochelle Ryan, Dwane Jackson, Jeffery Lipman, Jason Roberts. | RIGA | 'Does Routine Antibiotic Administration in Overweight Women Having Elective Caesarean Section Achieve Therapeutic Levels?' | RBWH foundation | \$40,000 | \$40,000 (2017) |
| Julie Lee, Amy Krepska, Claire Manning, Victoria Eley, Kerstin Wyssusek, Paul Gray, Andre van Zundert, Rebecca Kimble, John Rowell. | RIGA | ROTEM Pre-Eclampsia | ANZCA | \$52,912.73 | \$52,912.73 (2017) |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Book chapters | Hendrickx JF, Van Zundert A , De Wolf A. Inhaled anaesthetics. Chapter 14 - In: Oxford Textbook of Anaesthesia, UK, 2017. |
| Book chapters | Chin A, Van Zundert A . Spinal Anesthesia. Chapter 23 - In: NYSORA Textbook of Regional Anesthesia and Acute Pain Management, 2ed.- Ed. Admir Hadzic, USA, 2017, PP 328-369. |
| Book chapters | Gatt S, Sturgess D, Samedani L, Van Zundert A . The Future of Advanced Haemodynamic Monitoring Devices. Chapter - IN: Monitoring in Anesthesia and Perioperative Care. Trikhan A, Singh PM (Eds.), Jaypee Brothers Medical Publishers, New Delhi, India, 2017 |
| Book chapters | Lawrence S , Langley A, Sturgess D. (2017) Regional: Dissecting epidural failure in the obese parturient: Time to carefully consider the lumbar interspinous ligament. In Riley R. (Ed.), Australasian Anaesthesia (the Blue Book) (PP.159-168). |
| Book chapters | Lee J, Wyssusek K, Cohen J, & Van Zundert A . Coagulation: Rotational thromboelastometry (ROTEM) in obstetrics. In Riley R (Ed.), Australasian Anaesthesia (the Blue Book). 2017, pp.95-104. |
| Book chapters | Willington S, & Roets M . (2017). Coagulation: Intraoperative cell salvage. In Riley, R(Ed.) Australasian Anaesthesia (the Blue Book), Australasian Anaesthesia (the Blue Book). (PP.135-143) |
| Book chapters | Van Zundert A , Hadzic A. Chapter 14: Electrical Nerve Stimulators and Localization of Peripheral Nerves. In: NYSORA Textbook of Regional Anesthesia and Acute Pain Management, 2ed.- Ed. Admir Hadzic, USA, 2017, pp 194-210. |
| Book chapters | Van Zundert A . Thoracic combined spinal-epidural (CSE) anaesthesia. In: Diwan S, van Zundert A. (eds). Regional Nerve Blocks. Paras Medical Publisher, New Delhi India, 2018, pp. 39-49. |
| Book | Diwan S, van Zundert A . Regional Nerve Blocks. Paras Medical Publisher, New Delhi, India, 2018. ISBN: 978-81-8191-484-2, 550 pages. |
| Journal article | Bos M, Janssen M, Smeets A, Temel Y, van Zundert A , Ackermans L. Use of dexmedetomidine during deep brain stimulation for Tourette syndrome; a case report and review of the literature. Anaesthesia Cases 2017-0019. |
| Journal article | Boyle R, Van Zundert A . Professor Tess Cramond (1926-2015) – An appreciation of her contributions to anaesthesia and pain Medicine. Anaesth Intensive Care 2017;45:S4-12. |

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|---|
| Journal article | Brown H , Barrett HL, Lee J , Pincus JM , Kimble RM, Eley VA . (2017). Successful Resuscitation of Maternal Cardiac Arrest With Disseminated Intravascular Coagulation Guided by Rotational Thromboelastometry and Transesophageal Echocardiography: A Case Report. <i>A&A Case Reports</i> . |
| Journal article | Chin A , Heywood L , Iu P , Pelecanos AM, Barrington MJ. (2017). The effectiveness of regional anaesthesia before and after the introduction of a dedicated regional anaesthesia service incorporating a block room. <i>Anaesthesia and intensive care</i> , 45(6), 714. |
| Journal article | Dortangs EJM, Niesten MW, van Loon FHJ, Van Zundert AAJ . Preventive methods using lidocaine for reduction of pain associated with propofol intravenous administration: a double blind randomized controlled trial. <i>Acta Anaesthesiol Belg</i> 2017; 68:13-18 |
| Journal article | Eley V , Callaway L, Van Zundert A , Lipman J, Gallois C. Interpretation of Care Guidelines for Obese Women in Labor: Intergroup Language and Social Identity. <i>J Lang Soc Psychol</i> . 2017;36:388-414. |
| Journal article | Fielding D, Bashirzadeh F, Son JH, Todman M, Tan H , Chin A , Steinke K, Windsor M. First Human Use of a New Robotic-Assisted Navigation System for Small Peripheral Pulmonary Nodules Demonstrates Good Safety Profile and High Diagnostic Yield. <i>Chest</i> . 2017 Oct 31;152(4):A858 |
| Journal article | Gibbs NM, Culwick M , Merry AF. A cross-sectional overview of the first 4,000 incidents reported to webAIRS, a de-identified web-based anaesthesia incident reporting system in Australia and New Zealand. <i>Anaesth Intensive Care</i> 2017;45:28-35. |
| Journal article | Gibbs NM, Culwick M , Merry AF. Patient and procedural factors associated with an increased risk of harm or death in the first 4,000 incidents reported to webAIRS. <i>Anaesth Intensive Care</i> 2017;45:159-65. |
| Journal article | Greenland KB, Bradley P, Chapman WPL, Goulding GA , Irwin MG. Emergency front-of-neck access: scalpel or cannula—and the parable of Buridan’s ass. 2017; <i>BJA Volume 118, Issue 6, 1 June 2017</i> , Pages 811–814, https://doi.org/10.1093/bja/ae101 |
| Journal article | Greenland KB, Bradley WPL, van Zundert A , Irwin MG. Airway assessment/management paradigm - does a spectral or a binary approach fit better? <i>Anaesthesia</i> . 2017;72:1035-1037. |
| Journal article | Gordon J, Stankiewicz M, Pollock H . Christensen M, Barker-Gregory N, Dulhunty J. A trial of two prophylactic sacral dressings (2PSD) in the prevention of Stage 1 sacral pressure injury in the critically ill patient: A study protocol. <i>Wound Practice & Research: J Austral Wound Man Ass</i> 2017;25:82. |
| Journal article | Hockey CA, van Zundert AA , Paratz JD. Does objective measurement of tracheal tube cuff pressures minimise adverse effects and maintain accurate cuff pressures? A systematic review and meta-analysis. <i>Survey Anesthesiol</i> 2017;71:6. |
| Journal article | Krepska A , Hastings J, Roodenburg O. The metabolic and endocrine response to trauma. <i>Anaesth Intensive Care Medicine</i> 2017;18:414-417. |
| Journal article | Lee J , Wyssusek K , Cohen J , van Zundert A . Rotational thromboelastometry (ROTEM®) in obstetrics. <i>Aust Anaesth</i> 2017. |
| Journal article | Leslie K, Culwick MD , Reynolds H , Hannam JA, Merry AF. Awareness during general anaesthesia in the first 4,000 incidents reported to webAIRS. <i>Anaesth Intensive Care</i> 2017;45:441-447. |
| Journal article | Nethathe GD , Tshukutsoane S, Denny KJ. Cost awareness among healthcare professionals at a South African hospital: A cross-sectional survey. <i>S Afr Med J</i> 2017;107:1010-14. ISSN 2078-5135. Available at: < http://www.samj.org.za/index.php/samj/article/view/12107/8279 >. |
| Journal article | Pieters BMA, Maas EHA, Peelen LM, Knappe JTA, Van Zundert AAJ . Videolaryngoscopy vs. direct laryngoscopy use by experienced anaesthetists in patients with known difficult airways: A systematic review of the literature and meta-analysis. <i>Anaesthesia</i> . 2017; 72:1532-1541. Sep 22. doi: 10.1111/anae.14057. |
| Journal article | Pieters B, Van Zundert A . Videolaryngoscopy – a monumental leap towards better airway management. <i>Neth J Anesthesiol</i> 2017;30:16-20. |
| Journal article | Pieters B, Theunissen M, Van Zundert AAJ . Macintosh blade videolaryngoscopy combined with rigid Bonfils® intubation endoscope offers a suitable alternative for patients with difficult airways. <i>Anesth Analg</i> 2017. |

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal article | Ramlogan R, Niazi AU, Jin R, Johnson J , Chan VW, Perlas A. A Virtual Reality Simulation Model of Spinal Ultrasound: Role in Teaching Spinal Sonoanatomy. <i>Reg Anesth Pain Med.</i> 2017;42:217-222. |
| Journal article | Reina MA, Puigdemiviol-Sanchez, Gatt SP, De Andres JA, Prats-Galino A, van Zundert A . Electron microscopy studies of dural and arachnoid lesions produced by 29G spinal Whitacre needles. <i>Reg Anesth Pain Med.</i> 2017;42:709-18. |
| Journal article | Senapthai TG, Wiryana M, Aribawa IGVM, Van Zundert A , Labobar OA. Bonfils intubation fiberscope versus C-MAC videolaryngoscope: hemodynamic stability and incidence of sore throat in endotracheal intubated patients. <i>Bali Med J</i> 2017;6:247-250. |
| Journal article | Sekandarzad MW, Van Zundert AAJ , Lirk PB, Doornebal CW, Hollmann MW. Perioperative Anesthesia Care and Tumor Progression. <i>Anesth Analg.</i> 2017;124:1697-1708. |
| Journal article | Sekandarzad MW, Van Zundert AAJ , Doornebal C, Hollmann MW. Regional anesthesia and analgesia in cancer care: is it time to break the bad news? <i>Curr Opin Anesthesiol</i> 2017;30:606-12. |
| Journal article | Sherlock S . ECHM Consensus Conference and levels of evidence. <i>Diving and hyperbaric medicine</i> 2017;47:133. |
| Journal article | Sturgess DJ, Greenland KB, Senthuran S, Ajvadi FA , Van Zundert A , Irwin MG. Tracheal extubation of the adult intensive care patient with a predicted difficult airway - a narrative review. <i>Anaesthesia.</i> 2017;72:248-261. |
| Journal article | Van Zundert AAJ , Gatt SP, Mahajan RP. Open Access, Crowd-Sourced Repository of Anesthesia Information (Wiki-Anesthesia) as Antidote to Inaccurate Internet-Based Resources. <i>Anesth Analg.</i> 2017;124:1741-1742. |
| Journal article | Van Zundert AA , Gatt SP, Kumar CM, Van Zundert TC. Vision-guided placement of supraglottic airway device prevents airway obstruction: a prospective audit. <i>Br J Anaesth</i> 2017;118:462-463. |
| Journal article | Van Zundert AAJ , Gatt SP, Kumar CM, Van Zundert TCRV, Pandit JJ. Failed supraglottic airway: an algorithm for suboptimally placed supraglottic airway devices based on videolaryngoscopy. <i>Br J Anaesth.</i> 2017;118:645-649. |
| Journal article | Van Zundert, André and Wyssusek, Kerstin (2016) In reference to "Review of videolaryngoscopy pharyngeal wall injuries". <i>The Laryngoscope</i> , . doi:10.1002/lary.26375 |
| Journal article | Van Zundert A , Wyssusek K , Dalgleish L , Town C , Eley V . Centre translates anaesthesia theory into practice. <i>ANZCA Bulletin</i> 2017; September: 52-53. |
| Editorial | Callaway L, Eley V . Obesity and Complications from Neuraxial Analgesia – We Need to Know More. <i>Paediatr Perinat Epidemiol</i> 2017 (In Press) |
| Letter | Van Zundert AAJ , Gatt SP, Kumar CM, Van Zundert TCRV, Pandit JJ. 'Failed supraglottic airway': Reply to Tobin and colleagues. <i>Br J Anaesth</i> 2017; 118:844. |
| Letter | Van Zundert A . Incidence and severity of chronic pain after Caesarean Section: A systematic Review with meta-analysis – Comment. <i>Obstet Anesth Digest</i> 2017;37:117-8. |
| Letter | Van Zundert AAJ, Gatt SP, Kumar CM, Van Zundert TCRV, Pandit JJ. 'Failed supraglottic airway': Authors' reply to Thomas et al. <i>Br J Anaesth.</i> 2017;119:1244. |
| Letter | Van Zundert A. Incidence and severity of chronic pain after Caesarean Section: A systematic Review with meta-analysis – Comment. <i>Obstet Anesth Digest</i> 2017;37:117-8. |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|--|
| Oral | Increased abdominal subcutaneous fat thickness measured by ultrasound at 18-22 weeks gestation is associated with adverse maternal pregnancy outcomes. A/Prof Victoria Eley, Dr Adrian Chin , Dr Renuka Sekar, A/Prof Tim Donovan, Dr Amy Krepska , Dr Sheridan Bell, Dr Mitchell Lawrence , Dr Shaun McGrath, Dr Alex Robinson, Mr Lachlan Webb, Professor Andre van Zundert Presented at: SOMANZ/ADIPS National Conference, Canberra, October 2017 |
| Oral | Epidural extension in women with class 3 obesity is comparable to that of non-obese women. A Prospective two-centre cohort study. Victoria Eley, Adrian Chin , Isabelle Tham, Jee Poh, Perminder Aujla, Emma Glasgow, Hannah Brown , Katherine Steele, Lachlan Webb, André van Zundert Presented at: The Royal Brisbane and Women's Hospital Health Symposium September 2017. |
| Oral | What is the failure rate of extending epidural analgesia to anaesthesia for emergency caesarean section in women with a body mass index ≥ 40 compared with women with a body mass index ≤ 30 ? A prospective two-centre cohort study. Victoria Eley, Adrian Chin , Isabelle Tham, Jee Poh, Perminder Aujla, Emma Glasgow, Hannah Brown , Katherine Steele ^{1,2} , Lachlan Webb, André van Zundert Presented at: The Australian Society of Anaesthetists National Scientific Congress, October 2017, Perth. Finalist in Gilbert Troup Prize Session and Best Poster Prize Session. |
| Oral | Does Cefazolin Prophylaxis During Elective Bariatric Surgery Achieve Therapeutic Concentrations in Plasma and Interstitial Fluid? Rochelle Ryan, Dwane Jackson , George Hopkins, Victoria Eley, Rebecca Christensen, Andre Van Zundert , Steven Wallis, Jeffrey Lipman, Jason A Roberts. The Australian Society of Anaesthetists National Scientific Congress, October 2017, Perth. Gilbert Troup Prize for oral presentation and Best Poster Prize Finalist. |
| Poster | Does Cefazolin Prophylaxis During Elective Obese Caesarean Section Achieve Therapeutic Concentrations in Plasma and Interstitial Fluid? Rebecca Christensen, Victoria Eley , Mathew Smith, Dwane Jackson, Rochelle Ryan, Andre Van Zundert , Steven Wallis, Jeffrey Lipman, Jason A Roberts. The Australian Society of Anaesthetists National Scientific Congress, October 2017, Perth. |
| Poster | Being prepared for CICO. Organisation of equipment to facilitate a 'can't intubate, can't oxygenate' (CICO) crisis. Wai Mee Foong, Kerstin Wyssusek , Martin Culwick, André van Zundert . The Australian Society of Anaesthetists National Scientific Congress, October 2017, Perth. |
| Poster | Pain in Pelvic Exenteration: The Role of the Epidural in Major Gastrointestinal Surgery. Dr Angela Tognolini , Dr Nicholas Black, Dr Dwane Jackson . The Australian Society of Anaesthetists National Scientific Congress, October 2017, Perth. Trainee Best Poster Prize Finalist. |
| Poster | An audit of peri-operative anaesthesia and analgesia management for major lower limb amputations. Chris Futter, Julie Lee, Nathan Peters, Surya Bhamidipaty-Pelosi . RBWH Health Symposium 2017. |

Other communications and outputs:

1. Obstetric Anaesthesia Special Interest Group: Statement regarding the use of Tramadol in breastfeeding women. July 2017 Lead Author Victoria Eley
2. Link between obesity and failed epidurals. Article in the Australian newspaper, May 15, 2017 Interview with Victoria Eley concerning PhD. Link: <https://www.sbs.com.au/news/link-between-obesity-and-failed-epidurals>

TRAUMA SERVICE

2017 COLLABORATIVE RESEARCH ACTIVITY INVOLVING RBWH RESEARCH GROUP / DEPARTMENT

| COLLABORATIVE LEAD RESEARCHERS | RBWH RESEARCHERS | RESEARCH PROJECT TITLE |
|--------------------------------|------------------|---|
| Fran Williamson | | RBWH positive FAST in trauma patients Number of ICP and Craniectomy cases |
| Alistair Hamilton | | RBWH MTP audit |
| Michelle Tsui | Daryl Wall | Vitamin D pilot study |
| Pamela Symons | Liam Coulthard | Multi-audit |
| Tina Moriarty | | MVC Rollover - Trauma Bypass Pilot Study - re-run |
| Michael Handy | Nathan Brunott | Spinal Injuries (Cord and Fracture) in 2016 |
| Michael Muller | Michael Handy | Stabbing Injury Incidents (LUQ areas and flank and cases that went wrong) |
| Kirsten Vallmurr | | Cycling trauma study |
| Priyanka Dhillon | | ICP and Craniectomy cases in trauma patients |

2017 RESEARCH PUBLICATIONS

| TYPE (JOURNAL ARTICLE / BOOK / BOOK CHAPTER / LETTER) | PUBLICATION INFORMATION (RBWH STAFF IN BOLD) |
|---|--|
| Journal article | Stoddart, S, Handy M, Cleland P, Wall D , Brown A. Traumatic dislocation of the first rib: A case report and review of the literature Emergency Medicine Australasia 29: 746-748. DOI:10.1111/1742-6723.12866 |

2017 CONFERENCE PRESENTATIONS – INVITED SPEAKER, ORAL AND POSTER:

| TYPE (ORAL / POSTER / INVITED) | PRESENTATION INFORMATION (RBWH STAFF IN BOLD) |
|--------------------------------|--|
| Oral | Pamela Martin-Dines, Frances Williamson . The Prevalence of Suboptimal Pelvic Binder Placement Among Trauma Patients Arriving to a Level 1 Trauma Centre. Annual Scientific Meeting of the Australasian College for Emergency Medicine 2017 (ACEM ASM 2017) |
| Invited speaker | Michael Handy . Traumatic wounds. Acute Wound Care Conference, Brisbane. 16th November 2017 |
| Oral | Michael Handy . Intergration of the Red Blanket Process and Telemedicine. Queensland Clinical Senate Meeting. Brisbane 24th March 2017 |
| Oral | Dan Bodnar, Michael Handy . Trauma Ultrasound in the Pre-Hospital Environment (TUPHEn Study). Queensland Autumn Symposium. Brisbane 16 May 2017 |