

Centre for Clinical Research in Emergency Medicine

The Centre for Clinical Research in Emergency Medicine (CCREM) is a Centre within the Harry Perkins Institute of Medical Research, established in 2008 with start up and ongoing funding from Royal Perth Hospital, the Royal Perth Hospital Medical Research Foundation, and the Discipline of Emergency Medicine, University of Western Australia. Our research involves collaboration between academic emergency physicians working in the Emergency Department (ED), a team of research nurses recruiting patients presenting to the ED with acute illnesses, and scientists analysing samples in the laboratory using immunological and molecular biological techniques. We are unique in having a wet lab within the ED, which allows for timely specimen processing. CCREM research approaches include observational studies and laboratory work designed to uncover the mechanisms of disease, and randomised controlled trials designed to improve clinical care. We also endeavour to integrate laboratory and clinical research, using laboratory studies to help us understand the results of clinical trials. CCREM provides opportunities for both laboratory and clinical post-graduate honours and PhD students, and research terms for Emergency Medicine Advanced Trainees at Royal Perth Hospital and Fiona Stanley Hospital.

CCREM staff and associates

Royal Perth Hospital

Professor Daniel Fatovich MBBS FACEM PhD, Program Director
Dr Stephen Macdonald BSc MBChB DCH FRCP FACEM
Dr David McCutcheon MBBS FACEM
Dr Jessamine Soderstrom MBBS FACEM

Research management and administration

Ellen MacDonald RN, GradDipFN, MNursing, Clinical Nurse Manager (to July 2017)
Helen Hamersley RN and Jen Wurmel RN, acting Clinical Nurse Managers (from July 2017)
Cathy Read, BSc (Hons) National Coordinator (PSP Study)
Sophie Damianopoulos, Administrative Officer
Natasha Pringle, Administrative Officer (WISE Study)

Laboratory

Dr Erika Bosio BSc, PhD, Research Fellow
Dr Abbie Francis BSc, PhD, Research Officer
Ms Claire Neil BSc, Research Officer

Research Nurses

Helen Hamersley, Jen Wurmel, Rebecca Thompson, Karyn Lim, Karen Ridley

PhD Students

Dr Stephen Macdonald BSc MBChB DCH FRCP FACEM

Dr David McCutcheon MBBS FACEM

Ms Abbie Francis BSc (completed September 2017)

Dr Lisa Smart BVSc (Hons) DipACVECC

Fiona Stanley Hospital

A/Professor Yusuf Nagree MBBS GradDipCompSci FACEM MBA(E)

A/Professor Glenn Arendts MBBS MMed FACEM PhD

Research Nurse

Alannah Cooper

Armadale Hospital

Research Nurse

Jonathon Burcham

South West Area Health Service

Dr Hugh Mitenko MBBS FACEM

NHMRC Centre of Research Excellence (CRE) in Translational Venom and Antivenom Research

Prof Simon Brown, University of Western Australia, is CI-D, with Dr Abbie Francis as a named Early Career Researcher, supervised by Dr Erika Bosio.

Notable New Funding

Macdonald S, Shapiro N. 'Investigating the role of the endothelium in the pathogenesis of sepsis', University of Western Australia Research Collaboration Awards. \$29000

McCutcheon D, Raghavan M, Fatovich D, Soderstrom J, Macdonald E, Oosthuizen F. Western Australian Illicit Substance Evaluation (WISE). Royal Perth Hospital Medical Research Foundation. \$19653

Ryan N, Francis A, Bosio E. Development of a 3D In Vitro human cell culture system to investigate the mechanism of sudden collapse following snakebite envenoming. University of Sydney: Translational Australian Clinical Toxicology Pilot Grant. \$30000

Winnall C, Hillis G, Spiro J, Alcock R, Fatovich D, Macdonald S. The UtiLitY of cardiac myosin binding protein C in the Early triage of low risk patients with suspected acute coronary syndrome (ULYCES). Royal Perth Hospital Medical Research Foundation. \$20000

Ongoing Funding

Armstrong C, Bosio E, Fatovich D. Does the early miRNA profile of cardiac arrest have prognostic potential? Sophie Lewis Fellowship in Acute Cardiovascular Emergencies, Australasian College for Emergency Medicine. \$60000

Bosio E, Fatovich D. Does the early microRNA profile of stroke have diagnostic potential? Royal Perth Hospital Medical Research Foundation. \$20000

Briffa T, Cullen L, Chew D, Knuiman M, Fatovich D, Hickman P, Parsonage W, Nedkoff L, Sanfilippo F, Hillis G, Mitra B, Wilkes G, Schneider H, Rankin J, Karnon J, Scanlan S, Stapleton S, Mather V. Is highly-sensitive troponin testing advancing clinical practice, improving outcomes and cost-effective in the investigation and management of chest pain in the Emergency Department? National Health and Medical Research Council Project Grant APP1122792. \$1197000

Brown S (Fatovich D. AI). A randomised controlled trial of interventional versus conservative treatment of primary spontaneous pneumothorax. National Health and Medical Research Council. Project Grant APP 1084941 \$401143

Cameron P, Finn J, Bernard S, Grantham H, Smith K, Fatovich D, Arendts G, Bray J, Stub D, Perkins G. Centre of Research Excellence in Prehospital Emergency Care. National Health and Medical Research Council APP1116453. \$2499626

Forero R, Hillman K, Fatovich D, McCarthy S, Mountain D, Fitzgerald G, Richardson D, Sprivilis P, Middleton P. Validation and impact of the four hour rule in the emergency department: a large data linkage study. National Health and Medical Research Council. Partnership Project Grant APP 1029492. \$687000

Hillis G, Alcock R, Spiro J, Fatovich D, Macdonald S, Schultz C, Briffa T, Geelhoed E. The Royal Perth evidence-based accelerated chest pain pathway implementation (RAPID) study. State Health Research and Advisory Committee. Research Translation Project. \$242858

Isbister G, Buckley N, de Silva J, Brown S, Hodgson W, Lallo D, de Silva A, Dawson A, Gawarammana I, Graudins A. Translational Venom and Antivenom Research. National Health and Medical Research Council Centre for Research Excellence. \$2495164 Allocation to CCREM/UWA \$381455

Keijzers G, Macdonald SPJ, Kinnear F, Taylor D McD, Arendts G, Fatovich DM, Brown SGA, Asha S, Vlad I, McCutcheon D. Restricted Fluid Resuscitation in Sepsis associated Hypotension (REFRESH) trial. Emergency Medicine Foundation \$54125

Macdonald S, Bosio E. The role of Resistin in endothelial cell activation in human sepsis. Royal Perth Hospital Medical Research Foundation. \$20000 plus 1.0 FTE

Schnitker L, Beattie E, Arendts G, Carpenter C. The development and evaluation of an educational program for the care of older people with dementia in emergency departments. Alzheimer's Australia Dementia Research Foundation. \$50000

Schnitker L, Arendts G, Carpenter C, LaGiudice D, Caplan G, Beattie E. Building delirium care for people with dementia into the emergency department (ED): Systematic development of the Delirium Action Response in ED (DARe-ED) intervention. Dementia Collaborative Research Centres. \$49735

Sim M, Arendts G, Krishnan S, Fisher T, Clarnette R, Williams T. Better access to home hospital for residents in aged care facilities. Western Australian Health Targeted Research Fund. \$345769

Smart L, Ho KM, Mori T, Barden A, Boyd C. The effect of 4% succinylated gelatin on acute kidney injury in patients with critical illness. Royal Perth Hospital Medical Research Foundation. \$19463

Williams T, Finn J, Arendts G, Fatovich D, McQuillan B, Perkins G, Hendrie D, Bailey P, Summers Q, Brink D. A randomised controlled trial of Continuous Positive Airway Pressure (CPAP) for the treatment of severe respiratory distress by ambulance paramedics in the pre-hospital setting. State Health Research Advisory Council Research Translation Project. \$97345

New Research Projects

Coordinated by CREM

Does the early microRNA profile of stroke have diagnostic potential?

A laboratory-based investigation of microRNAs in samples from patients with ischaemic or haemorrhagic stroke and transient ischaemic attack to identify potential diagnostic biomarkers.

Does the early miRNA profile of cardiac arrest have prognostic potential?

A laboratory-based investigation of microRNAs in samples from patients post-cardiac arrest to identify biomarkers with prognostic utility.

The role of Resistin in endothelial cell activation in human sepsis.

A mechanistic investigation designed to investigate the effect of human Resistin on endothelial cell physiology with a view to understanding its role in sepsis. The significance of Resistin oligomer composition in sepsis patients will be evaluated.

Collaborations with other centres

Translational Venom and Antivenom Research

Development of a mast cell-based in vitro system within which to assess antivenom-induced anaphylactic responses in order to define the underlying mechanism. Strategies to reduce the prevalence of antivenom-induced anaphylaxis will also be evaluated using the in vitro system.

The effect of 4% succinylated gelatin on acute kidney injury in patients with critical illness.

A pilot randomised controlled trial comparing the effect of intravenous gelatine fluid with compound sodium lactate on urinary biomarkers of acute kidney injury in intensive care unit patients.

Australian Paediatric Head Injury Rules Study: Assessing the gap prior to implementation (APHIRST-Gap)

A mixed-methods study to identify gaps in current clinician knowledge and practice related to ordering CT brain for children with minor head injury. This will contribute to the knowledge translation strategy for the APHIRST study. (Paediatric Research in Emergency Departments International Collaborative).

Ongoing Research Projects

Coordinated by CCREM

Assessing Risk in Sepsis using Tissue Oxygen Saturation (ARISTOS)

A clinical observational study examining the use of near infrared spectroscopy derived tissue oxygen saturation at the bedside in emergency department patients with sepsis to determine the utility of this measure to predict organ dysfunction.

Critical illness and shock study (CISS)

A prospective study of patients presenting to the emergency department with critical illness or injury that compromise the cardiovascular and/or respiratory systems. Currently focussing on the acute immune response to anaphylaxis and septic shock.

Identification of biomarkers that correlate with clinical features and outcomes following concussion

Clinical data, imaging, neuropsychological testing and blood samples of patients with concussion will be correlated with outcomes. This may lead to the development of improved tools for diagnosis and prognosis.

Improving quality of life in residential aged care

A randomised controlled trial to reduce emergency department transfers and improve quality of life in residential aged care facilities.

NEED study

A prospective cohort study using a discharge risk nomogram to predict return of consecutive community dwelling discharged patients aged 65 and over to the Emergency Department.

Primary Spontaneous Pneumothorax Study

An Australasian randomised controlled trial of conservative management with observation only versus interventional (aspiration and/or insertion of chest drain) treatment of primary spontaneous pneumothorax.

Restricted Fluid Resuscitation in Sepsis-associated Hypotension Trial (REFRESH)

A multicentre randomised trial of fluid restricted versus fluid liberal resuscitation in early management of sepsis.

Western Australian Illicit Substance Evaluation (WISE)

A single centre observational study of patients with suspected intoxication with illicit stimulant drugs

Collaborations

Australian Snakebite Project (ASP)

A national multicentre observational study investigating the appropriate use, dose and safety of snake antivenoms in Australia. (Dr G Isbister, University of Newcastle, Calvary Mater Hospital).

The FluCAN Surveillance System

FluCAN is the first system in Australia to collect high quality and reliable data on hospitalised acute respiratory disease and other influenza related admissions in real time. Royal Perth Hospital participates as the sentinel site for Western Australia. (Dr A Cheng, Infectious Diseases Unit, Alfred Hospital).

The RESPOND Project

A multi-centre randomised controlled trial of the RESPOND program to reduce secondary falls in older people presenting to the emergency department with a fall (Monash University).

Patient outcomes for those receiving CPAP for severe respiratory distress in the prehospital setting

A randomised controlled trial of paramedic-administered continuous positive airways pressure (CPAP) with usual care or usual care for severe respiratory distress (Prehospital, Resuscitation and Emergency Care Research Unit, Curtin University).

Functional status of survivors of out-of-hospital cardiac arrest in Perth Western Australia

A retrospective review of medical records for OHCA victims who survived to hospital admission to determine functional / neurological outcome and estimate the uptake of post-resuscitation practices such as therapeutic hypothermia. (Prehospital, Resuscitation and Emergency Care Research Unit, Curtin University).

Publications

Arendts G. How comprehensive is comprehensive enough? Emergency department assessment of older people. *Age and Ageing*. 2017;46(3):340-1.

Arendts G, Burkett E, Hullick C, Carpenter C, Nagaraj G, Visvanathan R. Frailty, thy name is. *Emergency Medicine Australasia*. 2017;29(6):712-6.

Arendts G, Jan S, Beck M, Howard K. Preferences for the emergency department or alternatives for older people in aged care: A discrete choice experiment. *Age and Ageing*. 2017;46(1):124-9.

Arendts G, Love J, Nagree Y, Bruce D, Hare M, Dey I. Rates of delirium diagnosis do not improve with emergency risk screening: Results of the emergency department delirium initiative trial. *Journal of the American Geriatrics Society*. 2017;65(8):1810-5.

Armstrong C, Bosio E, Neil C, Brown S, Hankey G, Fatovich D. Distinct inflammatory responses differentiate cerebral infarct from transient ischaemic attack. *Journal of Clinical Neuroscience*. 2017;35(SC):97-103.

Borland M, Skarin D, Nagree Y. Comparison of methods used to quantify general practice type patients in the emergency department: A tertiary paediatric perspective. *Emergency Medicine Australasia*. 2017;29(1):77-82.

Brand G, Wise S, Siddiqui Z, Celenza A, Fatovich D. Capturing the 'art' of emergency medicine: Does film foster reflection in medical students? *Emergency Medicine Australasia*. 2017;29(4):433-437.

Carpenter C, Arendts G, Hullick C, Nagaraj G, Cooper Z, Burkett E. Major trauma in the older patient: Evolving trauma care beyond management of bumps and bruises. *Emergency Medicine Australasia*. 2017;29(4):450-5.

Egerton-Warburton D, Gosbell A, Wadsworth A, Fatovich D, Richardson D. Australia Day 2016: Alcohol-related presentations to emergency departments. *Medical Journal of Australia*. 2017;206(1):40.

Fatovich D, Phillips M. The probability of probability and research truths. *Emergency Medicine Australasia*. 2017;29(2):242-4.

Fatovich D. The time paradox of emergency medicine: Another inverted U curve. *Emergency Medicine Australasia*. 2017;29(6):730-2.

Fatovich D. The ACEM trainee research requirement is no longer relevant. *No*. *Emergency Medicine Australasia*. 2017;29(6):726-7.

Francis A, Bosio E, Stone S, Fatovich D, Arendts G, Nagree Y, Macdonald S, Mitenko H, Rajee M, Burrows S, Brown S. Neutrophil activation during acute human anaphylaxis: analysis of MPO and sCD62L. *Clinical and experimental allergy: Journal of the British Society for Allergy and Clinical Immunology*. 2017;47(3):361-70.

Fry M, Arendts G, Chenoweth L. Emergency nurses' evaluation of observational pain assessment tools for older people with cognitive impairment. *Journal of Clinical Nursing*. 2017;26(9-10):1281-90.

Halstrom A, MacDonald E, Neil C, Arendts G, Fatovich D, Fitzgerald M. Elevation of oxidative stress indicators in a pilot study of plasma following traumatic brain injury. *Journal of Clinical Neuroscience*. 2017;35:104-8.

Harper K, Barton A, Arendts G, Edwards D, Petta A, Celenza A. Controlled clinical trial exploring the impact of a brief intervention for prevention of falls in an emergency department. *Emergency Medicine Australasia*. 2017;29(5):524-30.

Harper K, Barton A, Bharat C, Petta A, Edwards D, Arendts G, Celenza A. Risk assessment and the impact of point of contact intervention following emergency department presentation with a fall. *Physical & Occupational Therapy In Geriatrics*. 2017;35(3-4):182-94.

Hullick C, Carpenter C, Critchlow R, Burkett E, Arendts G, Nagaraj G, Rosen T. Abuse of the older person: Is this the case you missed last shift? *Emergency Medicine Australasia*. 2017;29(2):223-8.

Katrina S, Lorna R, Arendts G, Semmens J. The impact of community-based palliative care on acute hospital use in the last year of life is modified by time to death, age and underlying cause of death. A population-based retrospective cohort study. *PLoS ONE*. 2017;12(9):e0185275.

Lung T, Howard K, Etherton-Beer C, Sim M, Lewin G, Arendts G. Comparison of the HUI3 and the EQ-5D-3L in a nursing home setting. *PLoS ONE* 2017; 12(2): e0172796.

Macdonald S, Bosio E, Neil C, Arendts G, Burrows S, Smart L, Brown S, Fatovich D. Resistin and NGAL are associated with inflammatory response, endothelial activation and clinical outcomes in sepsis. *Inflammation Research*. 2017;66(7):611-9.

Macdonald S, Taylor D, Keijzers G, Arendts G, Fatovich D, Kinnear F, Brown S, Bellomo R, Burrows S, Fraser J, Litton E, Ascencio-Lane J, Anstey M, McCutcheon D, Smart L, Vlad I, Winearls J, Wilbrow B. REstricted Fluid RESuscitation in Sepsis-associated Hypotension (REFRESH): study protocol for a pilot randomised controlled trial. *Trials*. 2017;18:399.

Macdonald S, Williams J, Shetty A, Bellomo R, Finfer S, Shapiro N, Keijzers G. Review article: Sepsis in the emergency department - Part 1: Definitions and outcomes. *Emergency Medicine Australasia*. 2017;29(6):619-25.

McLay S, MacDonald E, Fatovich D, on behalf of the Alcohol Harm in Emergency Departments Investigators. Alcohol-related presentations to the Royal Perth Hospital Emergency Department: A prospective study. *Emergency Medicine Australasia*. 2017;29(5):531-8.

Morello RT, Morris RL, Hill KD, Haines TP, Arendts G, Redfern J, Etherton-Beer CD, Lowthian JA, Brand CA, Liew D, Watts JJ, Barker AL. RESPOND: a program to prevent

secondary falls in older people presenting to the emergency department with a fall: protocol for an economic evaluation. *Injury Prevention* 2017;23:124-130

Morris R, Soh S-E, Hill K, Buchbinder R, Lowthian J, Redfern J, Etherton-Bear C, Hill A, Osborne R, Arendts G, Barker A. Measurement properties of the Health Literacy Questionnaire (HLQ) among older adults who present to the emergency department after a fall: a Rasch analysis. *BMC Health Services Research*. 2017;17:605.

Mountain D, Keijzers G, Chu K, Joseph A, Read C, Blecher G, Furyk J, Bharat C, Velusamy K, Munro A, Baker K, Kinnear F, Mukherjee A, Watkins G, Buntine P, Livesay G, Fatovich D. Correction: RESPECT-ED: Rates of Pulmonary Emboli (PE) and Sub-Segmental PE with Modern Computed Tomographic Pulmonary Angiograms in Emergency Departments: A Multi-Center Observational Study Finds Significant Yield Variation, Uncorrelated with Use or Small PE Rates. *PLoS ONE*. 2017;12(8):e0184219.

Riou M, Ball S, Williams T, Whiteside A, O'Halloran K, Bray J, Perkins G, Cameron P, Fatovich D, Inoue M, Bailey P, Brink D, Smith K, Della P, Finn J. The linguistic and interactional factors impacting recognition and dispatch in emergency calls for out-of-hospital cardiac arrest: a mixed-method linguistic analysis study protocol. *BMJ Open*. 2017;7(7).

Riou M, Whiteside A, Ball S, Williams T, O'Halloran K, Perkins G, Bray J, Cameron P, Smith K, Fatovich D, Inoue M, Brink D, Bailey P, Finn. 'Tell me exactly what's happened': When linguistic choices affect the efficiency of emergency calls for cardiac arrest. *Resuscitation*. 2017;117:58-65.

Shetty A, Macdonald S, Williams J, Bockxmeer J, van de Groot B, Esteve Cuevas L, Ansems A, Green M, Thompson K, Lander J, Greenslade J, Finfer S, Iredell J. Lactate ≥ 2 mmol/L plus qSOFA improves utility over qSOFA alone in emergency department patients presenting with suspected sepsis. *Emergency Medicine Australasia*. 2017;29(6):626-34.

Smart L, Macdonald S, Burrows S, Bosio E, Arendts G, Fatovich D. Endothelial glycocalyx biomarkers increase in patients with infection during emergency department treatment. *Journal of Critical Care*. 2017;42(SC):304-9.

Spilsbury K, Rosenwax L, Arendts G, Semmens J. The association of community based palliative care with reduced emergency department visits in the last year of life varies by patient factors. *Annals of Emergency Medicine*. 2017;69(4):416-25.

Spilsbury K, Rosenwax L, Arendts G, Semmens JB. The impact of community-based palliative care on acute hospital use in the last year of life is modified by time to death, age and underlying cause of death. A population-based retrospective cohort study. *PLoS ONE* 2017; 12(9):e0185275

Williams T, Blacker D, Arendts G, Patrick E, Brink D, Finn J. Accuracy of stroke identification by paramedics in a metropolitan prehospital setting: a cohort study. *Australasian Journal of Paramedicine*. 2017;14(2).

Investigator Group Papers

Johnston C, Ryan N, Page C, Buckley N, Brown S, O'Leary M, Isbister G (Soderstrom J. AI). The Australian Snakebite Project, 2005-2015 (ASP-20). Medical Journal of Australia. 2017;207(3):119-25.

Johnston C, Ryan N, O'Leary M, Brown S, Isbister G (Soderstrom J. AI). Australian taipan (*Oxyuranus* spp.) envenoming: clinical effects and potential benefits of early antivenom therapy. The Australian Snakebite Project (ASP-25). Clinical Toxicology. 2017;55(2):115-22.

Kelly A, Keijzers G, Klim S, Graham C, Craig S, Kuan W, Jones P, Holdgate A, Lawoko C, Laribi S, AANZDEM Study Group (Macdonald S). An observational study of dyspnea in emergency departments: The Asia, Australia, and New Zealand Dyspnea in Emergency Departments study (AANZDEM). Academic Emergency Medicine. 2017;24(3):328-36.

Published Abstracts

Ball S, Whiteside A, Inoue M, Bray J, Fatovich D, Cameron P, Williams T, Smith K, O'Halloran K, Brink D, Perkins G, Tohira H, Bailey P, Riou M, Finn J. The importance of staying on the call: recognition of cardiac arrest after initial dispatch. BMJ Open. 2017;7(S3):A6-A.

Riou M, Whiteside A, Ball S, Williams T, O'Halloran K, Perkins G, Smith K, Cameron P, Fatovich D, Inoue M, Bailey P, Brink D, Finn J. 'Tell me what's happened': when linguistic choices affect efficiency of ambulance dispatch for cardiac arrest. BMJ Open. 2017;7(S3):A7-A.

Williams T, Ho K, Tohira H, Fatovich D, Bailey P, Brink D, Gowens P, Perkins G, Finn J. Initial prehospital vital signs to predict subsequent adverse hospital outcomes. BMJ Open 2017;7(S3):A5-A6.

Williams T, Ho K, Tohira H, Fatovich D, Brink D, Bailey P, Perkins G, Finn J. Meeting abstract from the first European Emergency Medical Services congress (EMS2016): Identification of critical illness in the prehospital setting. Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine 2017;25(S1):16.

Posters

Arendts G. Systematic Development of the Delirium Action Response in ED Intervention (moderated poster presentation). 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Brand G, Wise S, Siddiqui Z, Celenza A, Fatovich D. Capturing the 'Art' and 'Science' of Emergency Medicine: Does film foster reflection in medical students? Australian & New Zealand Association for Health Professional Educators Conference, Adelaide.

Dumas S, Leyte N, Mandal B, Arendts G. The Fiona Stanley Hospital Falls Project. 50th AAG Meeting, Perth

Riou M, Whiteside A, Ball S, Williams T, O'Halloran K, Perkins G, Bray J, Cameron P, Smith K, Fatovich D, Inoue M, Brink D, Bailey P, Finn. 'Tell me what's happened': when linguistic choices affect efficiency of ambulance dispatch for cardiac arrest. European Emergency Medical Congress (EMS2017), Copenhagen.

Scotney B, Francis A, Fatovich D, Brown SGA, Isbister G, Bosio E. Improving treatment for snakebite: assessing antivenom safety. Combined Biological Sciences Meeting (CBSM), Perth

Tohira H, Fatovich D, Rao S, Williams T, Bailey P, Finn J. Helicopter transport of rural major trauma patients is no better than ambulance. XI European Congress of Emergency Medicine, Greece

Williams T, Ho K, Tohira H, Fatovich D, Bailey P, Brink D, Perkins G, Gowens P, Finn J. Prehospital vital signs to predict 7 day mortality for patients transported to ED by emergency ambulance services: A cohort study. Abstracts/Australian Critical Care 2017. doi.org/10.1016/j.aucc.2017.12.022

Conferences

International

Arendts G. The Emergency Department Delirium Initiative (EDDI) trial. 21st International Association of Gerontology and Geriatrics (IAGG) World Congress, San Francisco

National

Fatovich D. Clinical research, evidence and the emergency department. Anniversary Symposium, Emergency Medicine Foundation, Brisbane

Fatovich D. EM Hacks: Change your practice? 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Fatovich D. EM Research: How to for novice and early career researchers. 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Forero R, Nahidi S, Gibson N, McCarthy S, Fatovich D, Mohsin M. Emergency department staff perceptions and experiences during the implementation of the four hour rule/National Emergency Access Target (NEAT) in Australia: a social dynamic perspective. 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Forero R, Ngo H, Man N, Mountain D, Mohsin M, Fatovich D, Toloo S, Fitzgerald G, Celenza A, McCarthy S. The four-hour rule/ National Emergency Access Target (NEAT) and its impact on 30-day mortality among admitted patients: A trend analysis of record-linkage data from WA, NSW, QLD and ACT. 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Man N, Forero R, Ngo H, Toloo S, Fitzgerald G, Fatovich D, Mountain D, Mohsin M, Richardson D. Impact of the National Emergency Access Target (NEAT) on time-based and admission-related outcomes in emergency departments in NSW, ACT and QLD. 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Macdonald SPJ, Kinnear F, Arendts G, Ho KM, Fatovich DM, Brown SGA. Near infrared spectroscopy in sepsis: the Assessing Risk in Sepsis by Tissue Oxygen Saturations (ARISTOS) study. 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney (Prize Winner – Best Paper by a Fellow)

Macdonald SPJ, Arendts G, Fatovich DM, Brown SGA. Improving the predictive utility of the qSOFA score: effect of comorbidity. 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

McCutcheon, D. Waiver of Consent in Emergency Medicine Research. 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Ngo H, Forero R, Man N, Mountain D, Toloo S, Fitzgerald G, Richardson D, Fatovich D. Impact of the four-hour rule / National Emergency Access Target (NEAT) in emergency departments on ambulance ramping: preliminary analysis of linked administrative data from three Australian states (WA, NSW, and QLD). 34th Annual Scientific Meeting, Australasian College for Emergency Medicine, Sydney

Local

Fatovich D. Recreational drugs in the Emergency Department - the inside story. WA Family Pathways Network Annual Conference.

Macdonald S. Restricted fluid resuscitation in sepsis associate hypotension (REFRESH). WA Health Translation network clinical trials forum.

Macdonald S. Sepsis: a time critical illness? Australasian College for Emergency Medicine WA Faculty Annual Scientific Meeting.

McCutcheon, D. C-Spine Immobilisation: The Evidence. Australasian College for Emergency Medicine WA Faculty Annual Scientific Meeting, Perth

Scotney B, Francis A, Fatovich D, Brown S, Isbister G, Bosio E. Improving treatment for snakebite: assessing antivenom safety. Australian Society for Medical Research (ASMR) Symposium.

Annual Research Symposium

Taylor D. Professor, Emergency Medicine, University of Melbourne. (Keynote speaker) Emergency Medicine Research: Where are we up to and where are we going?

Brown S, Professor, Emergency Medicine, University of Tasmania. Simon says

Arendts G. Why do people from nursing homes come to ED? Introducing choice experiments.

McCutcheon D. Methamphetamine in the ED.

Macdonald S. Near-infrared spectroscopy in Sepsis: the ARISTOS study.

Bosio E. Can MiRNA tell us what stroke you've got? MicroRNA biomarkers as novel diagnostic tools.

Smart L. Inflammation and endothelial damage after hypertonic saline, compared to isotonic saline, in Emergency Department patients with infection: the Saline in Sepsis Trial (SST).

Fatovich D. Clinical research, evidence and the Emergency Department.

Awards for research excellence

Arendts G. Morson Taylor Award, Australasian College for Emergency Medicine
Vitamins and delirium in older emergency department patients.

Francis A. Royal Perth Hospital, Medical Research Foundation, Best Paper Award.
Francis A, Bosio E, Stone S, Fatovich D, Arendts G, Nagree Y, Macdonald S, Mitenko H, Rajee M, Burrows S, Brown S. Neutrophil activation during acute human anaphylaxis: analysis of MPO and sCD62L.

Macdonald S. Australasian College for Emergency Medicine Annual Scientific Meeting 2017, Best Paper Award.

Macdonald S, Kinnear F, Arendts G, Ho K, Fatovich D. Near-infrared spectroscopy to predict organ failure and outcome in sepsis: the Assessing Risk in Sepsis using a Tissue Oxygen Saturation (ARISTOS) study.

Riou M. European Emergency Medical Congress, Copenhagen. People's Choice Award.
Riou M, Whiteside A, Ball S, Williams T, O'Halloran K, Perkins G, Bray J, Cameron P, Smith K, Fatovich D, Inoue M, Brink D, Bailey P, Finn. 'Tell me what's happened': when linguistic choices affect efficiency of ambulance dispatch for cardiac arrest.

Other notable achievements

Fatovich D. Appointed deputy chair, WA State Government Methamphetamine Action Plan Taskforce