RCEM Trainees Research Engagement Day
on behalf of the Academic Trainees

Date: Thursday 14 January 2021
Venue: Virtual
RCEM accredited for CPD.
GMC domains covered: 1, 2, 3

This year’s virtual research engagement day is open to all academic and non-academic trainees, foundation doctors, advanced practitioners, nurses, paramedics and others interested in emergency research.

As well as an update from TERN and practical guidance from senior our academics on how to turn your research idea into a reality, we’ll be exploring themes such as big data, precision medicine, qualitative research and the importance of patient-oriented outcomes in emergency research.

Who should attend?
- EM trainees with an interest in, or who are active in, EM research
- Medical students with an interest in, or who are active in, EM research
- Nurses or AHPs with an interest in, or who are active in, EM research

09:00 – 09:05
Join the virtual meeting space

09:05 – 09:10
Welcome and introduction

Session 1: TERN Update
Chair: Robert Hirst, EM ST3, Southmead Hospital, and TERN Fellow

Updates from ITERN - NERAA
Etimbuk Umana, EM Specialist Registrar, ITERN Lead, Children’s Health Ireland, Temple Street, Dublin

09:10 - 09:50

What is TETRIS?
Harriet Tucker, PhD Fellow, Centre for Trauma Sciences, and EM Consultant St George’s Hospital

09:50 - 10:35

Session 2: Your research profile and disseminating your work
Chair: Laura Cottey, EM ST3, Derriford Hospital

Presentations from
Charlie Reynard, NIHR Clinical Doctoral Research Fellow – EM

Disseminating the research: Lessons learnt from the TIRED study
Laura Cottey, EM ST3, Derriford Hospital

Sharing your work with the wider world
Amy King, Media and Communications Officer, University of Plymouth

Panel Q&A

10:35 - 10:45
Break

Session 3: Linking precision medicine and EM
Chair: Mohammed Elwan, Honorary Research Fellow and EM Registrar, University Hospitals of Leicester NHS Trust

Precision emergency medicine
Tim Coats, Professor of EM, University Hospitals of Leicester NHS Trust

Haemodynamic precision: Individualising fluid therapy in ED
Mohammed Elwan, Honorary Research Fellow and EM Registrar, University Hospitals of Leicester NHS Trust

Non-invasive diagnostics in critical illness: infrared thermal imaging
Matt Charlton, Honorary Clinical Lecturer and Consultant in ECMO, Intensive Care Medicine and Anaesthesia, University Hospitals of Leicester NHS Trust

Panel Q&A

11:25 - 12:05

Session 4: Existing support structures and experience within EM research: using what’s around you
Chair: Anisa Jafar, NIHR ACL ST5 EM, Manchester

The NIHR Incubator: how it can help you
Rick Body, Clinical Professor of EM and EM Consultant - University of Manchester and Manchester Royal Infirmary
Charlie Reynard, NIHR Clinical Doctoral Research Fellow – EM Tom Roberts, EM ST4 and RCEM Doctoral Fellow, University of the West of England

Programme timings and content subject to change.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair/Presenter</th>
</tr>
</thead>
</table>
| 11:25 - 12:05 | **Tips on funding: RCEM & NIHR**  
Jason Smith, EM Consultant, Derriford Hospital, Defence  
Professor of Emergency Medicine, Academic Department of Military Emergency Medicine, Royal Centre for Defence Medicine and Chair, RCEM Research Committee |                                     |
|            | **Panel Q&A**                                                                                |                                                                                  |
| 12:05 - 12:45 | **Session 5: Asking the difficult questions: qualitative research**  
Chair: Daniel Darbyshire, NIHR Doctoral Fellow and EM ST5, Lancaster University and Salford Royal Hospital |                                     |
| 12:45 - 13:25 | **We're all natural qualitative researchers**  
Daniel Darbyshire, NIHR Doctoral Fellow and EM ST5, Lancaster University and Salford Royal Hospital |                                     |
|            | **Interpretative phenomenological analysis**  
Katherine Fitzgerald, Clinical Psychologist, Aneurin Bevan University Health Board |                                                                                  |
|            | **Video reflexive ethnography**  
Aimee Charnell, PhD Candidate, Leeds Institute of Medical Education and Surgical Research Fellow, Medical Officer, 212 Field Hospital (R). |                                                                                  |
|            | **Panel Q&A**                                                                                |                                                                                  |
| 13:25 - 14:05 | **Session 6: Patient Reported Outcomes in EM Research**  
Chair: James van Oppen, NIHR Doctoral Research Fellow and EM Specialty Registrar, University of Leicester |                                     |
|            | **Existing outcome measures for EM research and QI initiatives**  
James van Oppen, NIHR Doctoral Research Fellow and EM Specialty Registrar, University of Leicester |                                     |
|            | **What matters to patients?**  
Blair Graham, Lecturer in Urgent and Emergency Care and EM Specialty Registrar, University of Plymouth) |                                                                                  |
|            | **Development and implementation of PROM-ED**  
Samuel Vaillancourt, Associate Scientist and Emergency Physician, St. Michael’s Hospital, Toronto |                                                                                  |
|            | **Panel Q&A**                                                                                |                                                                                  |
| 14:05 - 14:20 | **Session 7: All about the numbers**  
Chair: Jamie Miles, NIHR Clinical Doctoral Research Fellow (Paramedic), RCEM Trainee ACP |                                     |
| 14:20 - 15:05 | **Beyond logistic regression - choosing machine learning in EM**  
Jamie Miles, NIHR Clinical Doctoral Research Fellow (Paramedic), RCEM Trainee ACP |                                     |
|            | **Health economics in emergency care**  
Peter McMeekin, Professor of Health Economics, Northumbria University |                                                                                  |
|            | **Panel Q&A**                                                                                |                                                                                  |
| 15:05 - 15:50 | **Session 8: The evidence based primary survey**  
Chair: Sophie Richter, EM SPR and Wellcome Trust PhD Fellow, University of Cambridge and Daniel Whitehouse, ACCS EM Academic Clinical Fellow, University of Cambridge |                                     |
|            | **Tracheal intubation in TBI**  
Benjamin Gravesteijn, Doctoral Researcher, Department of Public Health, Centre for Medical Decision Making, Erasmus University Medical Centre, Rotterdam, the Netherlands |                                     |
|            | **EICO2 monitoring in moderate-severe TBI**  
James Price, EM SPR and Clinical Research Fellow, East Anglian Air Ambulance, Department of Research, Audit, Innovation, & Development (RAID), East Anglian Air Ambulance, Norwich, UK |                                     |
|            | **Outcomes after traumatic cardiac arrest**  
Ed Barnard, Consultant in EM and Pre-Hospital EM, East Anglian Air Ambulance, Norwich, UK and Senior Lecturer, Academic Department of Military Emergency Medicine |                                                                                  |
|            | **Outcome prediction following moderate and severe TBI**  
Isabel Retel Helmrich, Researcher and PhD candidate, Department of Public Health, Centre for Medical Decision Making, Erasmus University Medical Centre, Rotterdam, the Netherlands |                                                                                  |
|            | **Summary and final comments**  
Alasdair Corfield, Consultant in Emergency and Retrieval Medicine, Royal Alexandra Hospital, Paisley; Honorary Clinical Associate Professor, University of Glasgow and RCEM Associate Professor |                                                                                  |
| 16:00 | **Close** |                                                                                  |