

*6th Edinburgh Stroke*

*Winter School*

*18th – 20th February 2019*

*St Leonard’s Hall –*

*St Trinnean’s & Bonnar rooms*

*Edinburgh First,*

*18 Holyrood Park Road,*

*Edinburgh EH16 5AY*

*Accommodation – Salisbury Green Hotel & Bistro*

  



**FACULTY**

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| Rustam | Al-Shahi Salman | Professor of Clinical Neurology, University of Edinburgh |
| Atul | Anand | CSO Clinical Lecturer |
| Alan | Carson | Professor of Neuropsychiatry, Editor JNNP, University of Edinburgh/NHS Lothian |
| Hanne | Christensen | Professor of Neurology, University of Copenhagen |
| Yvonne | Chun | Specialist Registrar in Geriatric Medicine, NHS Lothian & CSO Academic Fellow, University of Edinburgh |
| Charlotte | Cordonnier | Professor of Neurology, Lille University Hospital |
| Martin | Dennis | Professor of Stroke Medicine, University of Edinburgh |
| Fergus | Doubal | Senior Lecturer in Stroke Medicine, University of Edinburgh |
| Richard | Francis | Head of Research Awards, Stroke Association |
| Euan | Haig | Naval Architect |
| Jemma | Hopewell | Associate Professor of Genetic Epidemiology and Clinical Trials, University of Oxford |
| Lisa | Kidd | Reader, University of Glasgow |
| Gillian | Mead | Professor of Stroke Care, University of Edinburgh |
| Tom | Moullaali | BHF Research Training Fellow, University of Edinburgh |
| Christian | Oveson | Research Fellow, University of Denmark |
| Terry | Quinn | Clinical Senior Lecturer, University of Glasgow |
| Peter | Sandercock | Emeritus Professor of Medical Neurology, University of Edinburgh |
| Else | Sandset | Consultant in Stroke Medicine, Oslo University Hospital |
| Bart | van der Worp | President, ESO, and Neurologist, UMC Utrecht. |
| Frederike | van Wijck | Professor Neurological Rehabilitation, Glasgow Caledonian University |
| Joanna | Wardlaw | Professor of Applied Neuroimaging, University of Edinburgh |
| William | Whiteley | Scottish Senior Research Fellow, University of Edinburgh |

  

**Monday 18th February 2019**

**Developing Questions**

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| **Learning objectives**  To be able to develop a research question that is relevant to:   * patients * clinical practice * science   and which has not been answered already and can be answered within reasonable time and cost constraints | | | |
| 09:00-09:10 | Welcome | **Introduction, questions**  What is expected: review clinical research questions, to present this idea to others throughout the course, write a grant application | Dr Else Sandset  Dr Fergus Doubal |
| 09:10-09:20 | Welcome | **Doing research that matters**  Why research matters to people who have had a stroke, (or who at risk of stroke) and why their involvement in stroke research matters | Euan Haig |
| 09:20-10:00 | Lecture | **Developing clinical trials: tales from the frontline**  Tales of success and failure in stroke research, and the characteristics of a good clinical researcher | Dr Bart van der Worp |
| 10:00-10:30 | Lecture | **Fantastic questions and where to find them: define a PICO and other research questions**  Where to find excellent PICO questions, how to define them for intervention studies, and for other study designs | Prof Peter Sandercock |
| **10:30-10:50** |  | **Refreshment break in St Leonard’s Foyer** |  |
| 10:50-11:45 | Lecture | **What makes a deliverable research question?**  Converting a research question into a deliverable project | Prof Martin Dennis |
| 11:45-13:00 | Lecture + workshop | **Developing your research questions: has it been answered before?**  Groups of 4-5  **Learning objectives**  1. Define question precisely in PICO or other PICO-like format (<https://medhealth.leeds.ac.uk/info/639/information_specialists/1500/search_concept_tools>)  2. Know how to construct a literature search question  3. General principles of systematic review  **Activities**   * Groups of 4-5, with faculty leader * Each group with flipchart * Each participant with own device:-   1. Group lead defines questions of different types  2. Write research question, in PICO or other format, read to group. Encourage to be as specific as possible (?which stroke patients, for how long etc.)  3. Define search question using PubMed (using own devices, PubMed). Encourage to use clinical queries, and how to search for systematic reviews.  4. Identity systematic review relevant to their question (or absence of) from PubMed or another source | Dr Terry Quinn  Dr Christian Oveson  Dr Fergus Doubal  Dr Else Sandset  Dr Bart van der Worp  Prof Peter Sandercock  Prof Frederike van Wijck |
| **13:00-13:45** |  | **Lunch in St Leonard’s Foyer** |  |
| 13:45-14:30 | Lecture | **How many participants do you need? The sample size samba versus exact calculations**  What key pieces of information do you need to take to your statistician to work out the sample size of your study? What are the key principles of sample size calculation? What to do if your calculation say number needed is 5,000? | Prof Jemma Hopewell |
| 14:30-15:10 | Lecture | **Not everything is numbers: answering qualitative questions to improve health**  What is qualitative research? How can it work to improve therapies and other aspects of stroke care? What is needed to perform qualitative research? | Dr Lisa Kidd |
| **15:10-15:30** |  | **Refreshment break in St Leonard’s Foyer** |  |
| 15:30-16:50 | Workshop | **Developing your question: see the shortcomings of your question by explaining to your study group**  **Activities**   * Groups of 4-5 * Each group with flipchart * Each participant with own device   **Learning objectives**  1. to define a practical and clinically relevant research question  2. to articulate why a question is important  3. to understand key constraints on answering question within time, financial and worker constraints.  **Activities**  1. Leader presents usual practical constraints on any research project, and importance of delivery to time. Constraints – recruitment, finance, complexity of intervention or test, follow up  2. Each students present research question and identifies key constraints; debate constraints with group  3. Student reformulate research question and present to group | Dr Terry Quinn  Dr Christian Oveson  Dr Fergus Doubal  Dr Else Sandset  Prof Frederike van Wijck |
| 16:50-17:00 | Close |  | Dr Else Sandset  Dr Fergus Doubal |

**Tuesday 19th February 2019**

**Research Practicalities**

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| **Learning objectives**  Obtain knowledge on the planning of a research project including:     * Regulations: ethics, national drug agencies/competent authorities, and data protection agencies, hospitals, MHRA, data governance * ICH-GCP * Development of a protocol: get all the right data that can easily be analyzed and answer your question; find a format that can be shared with others * Means to ensure timely delivery | | | |
| 09:00-09:10 | Welcome | Reminder that grant application and PP deadline is tomorrow | Dr Will Whiteley  Prof Frederike van Wijck |
| 09:10-09:50 | Lecture | **Where next for stroke research?**  New ideas for stroke research, from thrombolysis to small vessel diseases | Prof Joanna Wardlaw |
| 09:50-10:50 | Lecture | **Why and how to develop a research protocol**  Stages in developing a protocol, with short exercise in protocol development for participants | Prof Gillian Mead |
| 10:50-11:10 |  | **Refreshment break in St Leonard’s Foyer** |  |
| 11:10-12:00 | Lecture | **Should your study be an observational study or a clinical trial? (?or organizing research team)** | Prof Rustam Al-Shahi Salman |
| 12:00-12:45 | Lecture | **How to organize you work to deliver better research – databases, data flow, analysis**  Organizing files, organizing data, organizing workflow of statistical analysis, where to store identifiable data. | Dr Atul Anand |
| 12:45-13:45 |  | **Lunch in St Leonard’s Foyer** |  |
| 13:35-15:15 | Lecture & workshop | **Regulation made less painful: R&D, Ethics, Medicines, and Data regulation**  **Learning objectives**  1. role of ethics committee  2. role of site approvals (‘R&D’)  3. role of data protection  4. role of medical regulatory bodies  **Activities**  Identify ethical issues with your study  Identify issues and costs interacting with health service  What will you need to do to comply with GDPR  Do you need approval from EMA or similar? | Prof Hanne Christensen  Dr Fergus Doubal  Dr Christian Oveson |
| 15:15-15:30 |  | **Refreshment break in St Leonard’s Foyer** |  |
| 15:30-16:30 | Workshop | **Get up and talk about your idea with no PowerPoint**  5 minute presentation from each student, depending on numbers in 2 small groups, or in one large group. | Prof Frederike van Wijck |
| 16:30-16:40 |  | Close | Dr Will Whiteley  Prof Frederike van Wijck |
| **1930** | **Course dinner: Blonde Restaurant: 71-75 St. Leonard's Street, EH8 9QR 668 2917** | | |
| **Email your one page grant application to** [**Judi.Clarke@ed.ac.uk**](mailto:Judi.Clarke@ed.ac.uk) **by 0700hrs 20th February 2019** | | | |

**Wednesday 20th February 2019**

**Communicating your ideas**

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| **Learning objectives**  Improve your skills as a researcher who:   * Can present work succinctly and understandably to others * Can critique others’ work positively and in a timely fashion * Can apply funding for future work * Has a good reputation as a researcher * Is a good research citizen | | | |
| 08:30-08:35 | Welcome |  | Dr Terry Quinn  Prof Hanne Christensen |
| 08:35-10:25 | Grant Board | Go through each one-page grant application in a grant board style: proposer summarises a grant for the panel, respondents from all board. Mark: fund, back for more work, reject.  10 minutes reading (all)  5-7 minutes per proposal (proposer, brief discussion)  Grading | All |
| **10:25-10:40** |  | **Refreshment break in St Leonard’s Foyer** |  |
| **10:40-11:20** | **Lecture** | **What are the key challenges in for research into intracranial haemorrhage?** | Prof Charlotte Cordonnier |
| 11:20-12:00 | Lecture | **Publishing your work**  What makes a paper acceptable, or instantly rejectable – experiences of a journal editor | Prof Alan Carson |
| **12:00-12:45** |  | **Lunch in St Leonard’s Foyer** |  |
| 12:45-13:00 | Lecture | **Funding your work: view from a grant awarding body** | Dr Richard Francis |
| 13:00-14:30 | Presentations of final projects | 5 minute presentation from each student, with PowerPoint | All |
| 14:30-15:30 | Workshop | **Creating a research reputation: positive criticism, research citizenship, public communication; advocacy**  (AF, television thrombectomy, reviewing, associate editor for stroke, encourage others) | Dr Terry Quinn |
| 15:30-16:00 | Lectures | **My research Journey**  5-10 minutes each | Dr Yvonne Chun  Dr Tom Moullaali |
| 16:00 |  | Close | Dr Terry Quinn  Prof Hanne Christensen |