**PhD Advert and Job Description**

**Job Title**
4 Fully-funded 3-year PhD Studentships

**Department / Section**
NIHR Imperial Patient Safety Translational Research Centre (NIHR Imperial PSTRC)

Located at the Institute of Global Health Innovation, Imperial College London

**Location**
St Mary’s Campus

**Reporting to**
Academic leads in research themes

**Working closely with**
Academic staff, Post-Doc Researchers, PhD students (including Clinical Research Fellows), support staff within both Centres and translational partners, Imperial College Healthcare Trust, the Institute of Global Health Innovation

**Job Family/Level**
PhD student

**Working Hours**
36 months

**Fixed-Term**
The studentship will pay EU/UK tuition fees and annual stipend of £21,000 for max of 36 months

**Application deadline**
26th February, 2019

**Interviews**
Beginning of March, 2019

**Starting date**
In-post by 1st July 2019

**Summary of Posts**

Applications are invited for 4 PhD Studentships across the research themes of the NIHR Imperial Patient Safety Translational Research Centre (NIHR Imperial PSTRC).
The Centre

The NIHR Imperial Patient Safety Translational Research Centre (PSTRC) is part of National Institute for Health Research (NIHR). It is a partnership between Imperial College Healthcare NHS Trust and Imperial College London, with researchers from a specialised set of research groups working together to improve patient safety and the quality of healthcare services. The NIHR Imperial PSTRC, now in its second cycle of funding, was renewed in 2017 for £7.3 million.

Our aims are to advance the scientific understanding of patient safety, address safety challenges as healthcare evolves and further international research collaborations. We work with local, national and international partners to support the wider dissemination and implementation of patient safety improvements and interventions.

We develop patient safety in the NHS and internationally through engagement with patients and the public, clinical partners, healthcare organisations, industry and government. We use our funding to deliver sustainable long-term, high impact programmes of translational research in patient safety.

Research Areas

The studentships currently available relate the following research areas:
1. Safer systems across the continuum of care
2. Partnering with patients for safer care
3. Enhancing diagnostic accuracy
4. Health economics

Please note that projects are currently being scoped and successful applicants will have the ability to define the research projects. There is also the potential to shape the PhD around the candidate’s interests. Interested applicants are encouraged to seek more information through the website. Informal, exploratory chats can also be scheduled. Please:

- Email the Centre Manager, Dr Kelsey Flott (k.flott14@imperial.ac.uk), for general queries regarding the Centre and the hiring process.

Safer systems across the continuum of care

The theme, led by Professor the Lord Ara Darzi (please email Kelsey Flott at k.flott14@imperial.ac.uk with queries regarding the theme’s research). The theme aims to create safer systems for patients as they move along their care pathways, thereby reducing error and enhancing quality. It will firstly seek to identify the patient safety problems across the continuum of care, and then develop and evaluate robust interventions for enhancing safety in the wider system. Finally, it will explore how best to promote the diffusion of innovation. Examples of initial projects (not exhaustive) include:

- Trialling novel techniques, including digital innovations and artificial intelligence, for managing high risk patients to enhance safety
- Trailing behavioural approaches to managing transitions of care
- Understanding and designing interventions to reduce error using behavioural insights

Partnering with patients for safer care

The theme, led by Mr Erik Mayer (e.mayer@imperial.ac.uk, k.flott14@imperial.ac.uk), aims to create practical and actionable solutions for addressing priorities in patient empowerment and engagement in safety, and generate high-quality evidence for implementation and diffusion of practical and sustainable patient engagement initiatives. Ultimately, we aim to support more active, and safe, involvement of patients in their own care. Examples of initial projects (not exhaustive) include:

- Patient-centred health and social care
- Patient-driven Innovative solutions to improving safety, effectiveness and experience of care delivery
- Clinical Analytics & Informatics

Improving diagnostic accuracy and decision-making

The theme, led by Olga Kostopoulou and Professor the Lord Ara Darzi (please email Kelsey Flott at k.flott14@imperial.ac.uk with queries) aims to tackle the challenges related to diagnosis and decision-making in primary care and in peri-operative situations. Translational solutions will harness the scientific and technological capabilities of our team to support decision-making. Examples of initial projects (not exhaustive) include:

- Developing and integrating evolving real time diagnostic technologies with existing hospital systems and across sectors
- Exploring the value of point of care diagnostics (link with Health Economics work)

Ensuring value for money in patient safety

The theme, led by Professor Elias Mossialos and supported for Dr Soren Kristensen (please contact Soren for queries related to the research in the theme, s.kristensen@imperial.ac.uk), aims to better understand the wider economic burden of avoidable harm and generate evidence on the cost-effectiveness of safety-related initiatives to inform policy, improve efficiency, and incentivise safer, high-value care. It will work in close collaboration with other themes to test the cost-effectiveness of the developed solutions. Examples of initial projects (not exhaustive) include:

- Understanding and estimating the societal burden of patient safety events
- Understanding and estimating the impact of patient safety initiatives with a particular focus on understanding the mechanisms that make interventions effective
- Applying economic evaluation methods to patient safety to estimate cost and benefit of safety-related interventions across their lifecycle
- Understanding the value of point of care diagnostics
Qualifications and person-specifications

We are looking for candidates with a strong academic background (with a first class degree) or MSc in the following subjects or related:

- Health policy
- Health economics
- Health services research and service evaluation
- Psychology, decision-making, behavioural science and other related disciplines
- Data science and medical informatics
- Statistics
- Healthcare quality improvement

Successful candidates will have experience in undertaking independent research in the above subjects. Applicants must also demonstrate familiarity with mainstream qualitative or quantitative research methods used in patient safety. We are looking for individuals with experience in one or more of the following areas and an interest to further develop his/her skills.

- Qualitative methods, including:
  - Ethnographic research (including observational)
  - Focus groups
  - In-depth interviews
  - Thematic analysis
  - Consensus studies
  - Service audits and evaluation
- Qualitative methods with specific understanding of psychology or behavioural science
  - Human factor methodologies
- Quantitative methods, including:
  - Survey design and data collection
  - Data mining techniques applied to healthcare
  - Proficiency in data preparation, cleaning and analysis using standard statistical packages (e.g. SPSS, Stata, R)
  - Experimental studies of human judgment
- Quantitative methods with specific understanding of economics, including:
  - Econometrics, analysis of large patient-level datasets
  - Economic evaluation and decision-analytic modelling

The PhD student will be supervised by the multi-disciplinary team in the Division of Surgery. Through the research programme at Imperial, the PhD student will benefit from strong links and involvement with the Institute for Global Health Innovation.

All students will be registered through the Imperial Graduate School which provides a full programme of training in research and transferable skills. Further details of the
Department can be found at: http://www3.imperial.ac.uk/graduateschools.

How to apply

In the first instance, please:

☐ Email: k.flott14@imperial.ac.uk with an expression of interest by early 26 February 2019.
☐ Your expression of interest should contain the following items:
  o Your CV
  o A personal statement no more than 1000 words outlining: 1) your interest, 2) your background, and 3) which research area(s) you would like to base your project on
  o Scans of your educational certificates and transcripts from your Master’s degree and your Bachelor’s degrees
  o Names and contact details of 2 referees who can speak to your educational background. Reference letters from these referees are ideal, but not required at this stage.

Short-listed candidates will be informed via email and will be interviewed.
Successful candidates will be required to formally apply through the Imperial College London Postgraduate Research (PhD) Programme route.