

Candidate Information

Position: School/Department: Reference: Closing Date: Salary: Duration: Research Fellow Centre for Public Health 19/107634 Wednesday 7 August 2019 £33,199 per annum Available until September 2023

JOB PURPOSE:

This exciting position will allow the successful candidate to join the recently established Health Data Research Wales Northern Ireland Substantive Site, one of only six sites in the UK as part an initial overall investment of £54M by Health Data Research UK (HDR-UK). Particular thematic areas include Modernising Public Health and Enabling Precision Medicine The successful candidate will become a member of the QUB HDR-Wales Northern Ireland research team assisting Professor Frank Kee, Dr Ruth Hunter and academic colleagues in the Institute of Electronics, Communications and Information Technology (ECIT) in a programme of research focused on using public health datasets and data from wearable sensors and cameras, GPS and telecommunications data and other digital footprints from social media and GIS platforms to better define the socio-ecological determinants that shape health related behaviours and health and wellbeing outcomes in the population. The post will involve the application of hypothesis-driven computational approaches (including statistical, machine learning, graph-based or other approaches) for the discovery and validation of novel behavioural phenotypes, their mediators and predictors of their health outcomes, as appropriate for the interrogation and analysis of population level "Big Data" and "Small Data" (the quantified self). The applicant will also use the intelligence from such data-streams and Ecological Momentary Assessments to design and test interventions using novel designs such as SMART, Just in Time and MOST. The applicant will have the opportunity to conduct high quality research that will resonate at local, national and global levels.

MAJOR DUTIES:

- 1. Carry out statistical analyses, critical evaluations, generate reports using appropriate methodologies.
- 2. Present regular progress reports on research to members of the research group, other groups within the Centre/University, to external audiences nationally and internationally to disseminate and publicize research findings.
- 3. Develop and plan an area of personal research and expertise, and/or undertake research under supervision within a specific research project or as a member of a research team.
- 4. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
- 5. Assist grant holder in the preparation of funding proposals and applications as well as project progress reports to external bodies.
- 6. Carry out routine administrative tasks associated with the research projects/group to ensure that project/s are completed on time and within budget and that the group functions efficiently and may include organisation of project/group meetings and documentation.
- 7. Carry out undergraduate/post-graduate student and visiting researcher training and supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
- 8. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines and engage in technical training as needed.
- 9. Participate and in some cases lead outreach activities on behalf of the group/Centre.

Planning and Organising:

1. Plan for specific aspects of research programs. Timescales range from 1-12 months in advance and contribute to research group planning.

- 2. Plan for the use of research activities and workshops where appropriate.
- 3. Plan own day-to-day activity within framework of the agreed research program.
- 4. Plan up to a year in advance to meet deadlines for grant applications, journal publications and to prepare presentations and papers for conferences and meetings.
- 5. Coordinate and liaise with other members of the research group and collaborative research groups over work progress and stock management.

Resource Management Responsibilities:

- 1. Ensure research resources are used in an effective and efficient manner.
- 2. Provide guidance as required to support staff and any post-graduate/under-graduate students and visiting researcher who may be assisting with research.

Internal and External Relationships:

- 1. Liaise on a regular basis with supervisor, colleagues, students and collaborators.
- 2. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
- 3. Be prepared to travel to and present at scientific meetings and collaborative laboratories.
- 4. Join external networks to share information and ideas and help develop external collaborations, as appropriate.
- 5. Contribute to the School's outreach program by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

- 1. Have, or about to obtain, a PhD in public health, epidemiology, computer science, biostatistics, engineering or a related area.
- At least 3 years relevant research experience, involving a range of modern statistical and computational approaches relevant to the interrogation of large population based and clinical data-sets, including those for causal inference and with experience of modern quantitative methods for complexity science such as Social Network Analysis, Agent Based Modelling and Dynamic Systems modelling.
- 3. Publications commensurate with career stage.
- 4. Familiarity with the governance and ethical arrangements for accessing and using administrative and clinical data-sets.
- 5. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programs.
- 6. Good team working skills in multiple team settings as well as leadership qualities.
- 7. Excellent IT skills.
- 8. Excellent organisational skills.
- 9. Excellent oral and written communication skills.
- 10. Ability to contribute to broader management and administrative processes.
- 11. Ability to communicate complex information clearly.
- 12. Ability to build contacts and participate in internal and external networks.
- 13. Excellent problem-solving skills and able to use own initiative.
- 14. Ability to work independently and on own initiative.
- 15. Willingness to teach postgraduate/undergraduate students
- 16. Irregular hours including weekend working will be a component of the research at times.
- 17. Must be willing to travel to national and international meetings and collaborative laboratories.

DESIRABLE CRITERIA:

- 1. Experience working in public health or health behaviours.
- 2. Grant, manuscript and abstract writing experience.
- 3. Research project management.
- 4. Evidence of having presented at conferences (poster or oral).