

Candidate Information

Position: School/Department: Reference: Closing Date: Salary: Anticipated Interview Date: Duration: Research Fellow in Dementia and Delirium Centre for Public Health 20/108470 Monday 7 December 2020 £33,797 - £38,017 per annum Wednesday 16 December 2020 This post is available until 2 April 2022.

JOB PURPOSE:

The principal aim of this post is to support the follow-up of an existing research cohort. The cohort of 315 participants was recruited in 2012-2014 to investigate post-operative delirium following primary arthroplasty surgery.

Evidence is accumulating that postoperative delirium is a marker of brain vulnerability. Cognitive prognosis following delirium remains unclear. This project aims to test the hypothesis that participants who developed postoperative delirium will have worse cognition eight years later compared to those who did not develop postoperative delirium and the effect of delirium will be independent of preoperative cognition and biomarkers. This project will follow up participants previously recruited between 2012 and 2014 to an observational cohort study (n=315) investigating postoperative delirium following elective orthopaedic surgery which sampled DNA, plasma and cerebrospinal fluid. Participants will be invited for a telephone interview followed by a one-off follow-up study visit where updated medical history, repeat cognitive assessments, collateral history taking and blood sampling will be completed. It is anticipated that the results of this study will inform individualised prognosis following postoperative delirium. This in turn will strengthen the case for national and international guidelines regarding postoperative patient counselling, follow-up care planning and intervention to improve brain health and potentially modify Alzheimer's disease processes after postoperative delirium. If delirium is shown to independently predict subsequent cognitive decline, even when baseline vulnerability is comprehensively corrected for, this will have further implications for the prevention of dementia on a global scale. Given available effective multicomponent interventions to reduce risk, it could also provide a modifiable risk factor for dementia.

MAJOR DUTIES:

- 1. Work within the programme of work as determined by the Principal Investigator and co-investigators.
- 2. Work within multidisciplinary team to ensure smooth running of project.
- 3. Provide appropriate leadership for research nurses, PhD students and others as appropriate within the team.
- 4. Gain training in neuropsychological tests and contribute to fieldwork as required.
- 5. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
- 6. Oversee the creation of appropriate research databases which incorporate adequate safeguards of confidentiality.
- 7. Prepare, as necessary, submissions to Ethics Committees and other regulatory bodies and data transfer agreements.
- 8. Liaise with colleagues and collaborators analysing biomarkers and other aspects of the study datasets to plan abstracts, manuscripts and presentations.
- 9. Prepare papers for publication in national and international journals and presentations at national and international conferences.
- 10. Contribute to relevant press releases and public relations exercises.
- 11. Develop participant and carer liaison group to guide and inform research and publication directions.
- 12. Ensure adherence to project milestones and be responsible for regular production of progress reports.
- 13. Assist the Principal Investigator in the preparation of funding proposals and applications to external bodies.
- 14. Draft and present regular progress reports on research for the funders and for external 'audiences' in order to disseminate and publicise research findings.
- 15. Carry out routine administrative tasks associated with the research project to ensure that the work is completed on time. These might include organisation of project meetings and documentation, financial control, risk assessment of activities.

- 16. Maintain study website.
- 17. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
- 18. Any other duties related to the successful achievement of the above study.

Planning and Organising:

- 1. Plan for delivery of specific deliverables of the research project's scientific outputs on time.
- 2. Monitor project progress against planned timelines.
- 3. Plan for the use of research resources as appropriate.
- 4. Plan own day-to-day activity within framework of the agreed research programme.
- 5. Plan up to a year in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
- 6. Coordinate and liaise with other members of the research group regarding work progress.

Resource Management Responsibilities:

- 1. Ensure research resources are used in an effective and efficient manner.
- 2. Provide support and guidance as required to staff and students who may be assisting with the research.

Internal and External Relationships:

- 1. Liaise on a regular basis with colleagues and students involved in the project (e.g. research nurses, PhD students).
- 2. Maintain existing and establish new internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
- 3. Maintain existing and establish new external networks to share information and ideas.
- 4. Contribute to the School's outreach programme by maintaining existing and establishing new links with local community groups and dementia charities.

ESSENTIAL CRITERIA:

- 1. Honours Degree minimum of a 2:1 (or equivalent) in a health, social sciences, public health, or statistics related subject.
- 2. Have or be about to obtain a relevant PhD in epidemiology, social sciences, applied statistics, informatics, or public health related area including pharmacy and economics.
- 3. At least 3 years' relevant research experience and skills relevant to this project.
- 4. Experience of using statistical packages such as SPSS or STATA.
- 5. Demonstrable proficiency in academic paper writing.
- 6. Experience handling raw clinical data.
- 7. Sufficient breadth and depth of specialist knowledge of research methods pertinent to the present research programme.
- 8. Ability to deal competently with administrative tasks.
- 9. Knowledge and experience of using relevant statistical techniques, e.g. regression and survival analysis.
- 10. Excellent IT skills e.g. Microsoft Office suite.
- 11. Excellent organisational skills.
- 12. Excellent inter-personal skills.
- 13. Excellent oral and written communication skills.
- 14. Ability to work independently and demonstrate initiative whilst recognising limits of capabilities.
- 15. Clear and confident communicator.
- 16. Ability to build contacts and participate in internal and external networks.
- 17. Ability to give formal presentations.
- 18. Ability to work independently and on own initiative.
- 19. Ability to write reports and meet deadlines.
- 20. Ability to work in a multi-disciplinary environment as part of a research team.
- 21. Ability to act decisively and confidently.
- 22. Access to transport/ ability to meet the mobility requirements and a willingness to travel to meet the needs of the post.

DESIRABLE CRITERIA:

- 1. Experience of advanced statistical techniques.
- 2. Good publication track record commensurate with the stage of career.
- 3. Experience in use of database software.
- 4. Experience of data governance and issues related to data linkage.

- 5. Demonstrable knowledge and experience of research in the area of dementia and cognitive decline.
- 6. Experience of neuropsychological testing in a normal and/or cognitively impaired population.
- 7. Experience guiding and supporting more junior research colleagues.
- 8. Evidence of having co-ordinated a research project to successful completion.
- 9. Strong commitment to a career in research.