



## Candidate Information

<b>Position:</b>	Research Assistant
<b>School/Department:</b>	Centre for Public Health
<b>Reference:</b>	22/109654
<b>Closing Date:</b>	Monday 4 April 2022
<b>Salary:</b>	£28,756 - £31,406 per annum
<b>Anticipated Interview Date:</b>	Thursday 14 April 2022
<b>Duration:</b>	Available until 31/10/2023

### JOB PURPOSE:

This exciting position will allow the successful candidate to work on the SPACE (Supportive environments for Physical and social Activity, healthy ageing and CognitivE health) project funded by the Economic and Social Research Council (ESRC) as part of the UKRI Healthy Ageing Challenge. The successful candidate will become a member of the QUB Epidemiology and Public Health Research Group in the Centre for Public Health working with Prof Ruth Hunter, Prof Bernadette McGuinness and Dr Claire Cleland. The programme of research is focused on investigating the impact of the urban environment on cognitive health in older adults in Northern Ireland. A team of researchers work on the project from across the University. This particular post will assist the team in collecting, collating and processing physical activity and GPS data. A brief overview of the rationale for the project and methods is provided below.

### MAJOR DUTIES:

1. Working with the SPACE study team, assist with the recruitment of older adult participants (n=1000) as part of the wider NICOLA (Northern Ireland Cohort Longitudinal Study of Ageing) study.
2. Assist with the collection of GPS and physical activity data (Actigraph accelerometers), compile and clean datasets.
3. Support the research team with data gathering, management and analysis.
4. Support the SPACE project team with routine administrative duties as requested (e.g. arranging research group meetings, helping organise travel etc.)
5. Assist in the development and maintenance of the project website and social media account, and keeping them up-to-date with research materials and project publications.
6. Work with other members of the research team in delivering a detailed project plan for the research, in accordance with Case for Support funded by the ESRC grant, outlined above.
7. Assist in the coordination of project activities with the research team and stakeholders.
8. Assist with the development of regular progress reports to members of the research group, other groups within the Centre/University, external audiences nationally and internationally and external bodies to disseminate and publicize research findings.
9. Assist with the preparation, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
10. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines and engage in technical training as needed.
11. Participate and in some cases lead outreach activities on behalf of the group/Centre.

### ESSENTIAL CRITERIA:

1. A relevant primary degree (1st or 2:1 classification) related to the duties of the post such as physical activity, public health, urban planning, geography, psychology, or epidemiology.
2. Recent experience of management, co-ordination and analysis of health-related research involving recruitment and/or data collection with human participants.
3. Recent research experience and skills relevant to this project (e.g. public health intervention research, participant recruitment, data collection, data entry, statistical analysis).

4. Excellent IT skills (e.g. Microsoft Office suite).
5. Excellent leadership skills.
6. Excellent organisational skills.
7. Excellent inter-personal skills.
8. Excellent oral and written communication skills.
9. Evidence of ability to write reports and meet deadlines.
10. Evidence of ability to deal competently with administrative tasks.
11. Ability to communicate complex information clearly.
12. Good team working skills in multiple team settings.
13. Excellent problem-solving skills and able to use own initiative.
14. Must have a UK driving licence (must be able to obtain business insurance for travel purposes associated with the role), access to a car, and be willing and able to travel for data collection purposes or ability to meet mobility requirements of the post.
15. Irregular hours, including weekend working, might be a component of the research at times.

**DESIRABLE CRITERIA:**

1. About to complete a PhD (expected submission prior to interview) in a public health related subject such as physical activity, public health, urban planning, geography, psychology, or epidemiology.
2. Recent experience of collecting device-measured physical activity data.
3. Recent experience of conducting research involving older adults.
4. Recent experience of conducting research involving older adults.
5. Proven ability to participate in collaborative research.
6. Experience of public engagement activities and disseminating research to non-academic audiences.

**ADDITIONAL INFORMATION:**

Project Summary

The number of people worldwide living with dementia and cognitive impairment is increasing, mainly due to people living longer, so we want to figure out how where we live affects dementia and brain health as we get older. Some research suggests that where we live might influence our brain health. For example, poor air quality in towns and cities, can lead to a decline in brain health. As more of us now live in towns and cities, it is important that the environment where we live is scientifically designed and improved to maximise our brain health.

The complex social and physical environments where we live make some people more vulnerable than others to developing cognitive impairment. In other words, the factors that account for who is most likely to develop cognitive ill-health due to the environment has less to do with 'how' we live and more to do with 'where' we live. We do not know how these factors interact to make urban environments a problem for brain health, nor which are the best policies and interventions for promoting healthy ageing and brain health for our poorest communities.

Our project will provide evidence for policies and practices that provide supportive urban environments to promote healthy ageing, including promoting brain health. This could include using creative urban designs to support people to adopt and maintain healthier lifestyles such as being more active. However, this needs a strong evidence base with expert community advocates who can articulate how supportive urban environments can improve brain health.

Our research has the following steps:

1. First, with the help of stakeholders, including those from business, industry, and local government, and a review of existing research, we will represent the relationships between our biology, our lifestyles and our environment in a diagram illustrating how they likely interact to affect brain health, because visual thinking can help stakeholders better identify possible intervention sweet-spots to improve brain health.
2. By analysing data from over 8,000 older people in Northern Ireland, and linking this to information about where they live, such as the amount of air pollution, the toxins in soil, or how walkable their neighbourhoods are, we will explore how different environmental factors relate to brain health.
3. Next, we will collect new data on a subgroup of 1,000 older people including more in-depth measures of brain health and better measures of physical activity, using GPS devices worn around the waist that monitor our locations. This will allow us to explore how the urban environment influences our brain health.
4. Then, we will explore how aspects of our biology play a role in how the urban environment affects our brain health.
5. We will host workshops with local citizens to 'sense-check' our findings and co-develop promising prevention approaches. In these, we will explore the acceptability, affordability, feasibility and sustainability of new initiatives to improve the environmental influences on brain health. This might include, for example, policies on: expanding the car-free areas of the city to reduce air pollution; increasing the number of footpaths and cycle paths to encourage walking and cycling; improving public transport to reduce car use.