

Candidate Information

Position:	Research Fellow
School/Department:	Centre for Public Health
Reference:	22/109810
Closing Date:	Monday 6 June 2022
Salary:	£34,304 - £38,587 per annum
Anticipated Interview Date:	Friday 17 June 2022
Duration:	36 months

JOB PURPOSE:

This exciting position will allow the successful candidate to join the recently funded UKPRP GroundsWell consortium. The successful candidate will become a member of the GroundsWell research team working with Dr Leandro Garcia and Prof Ruth Hunter. The programme of research is focused on developing agent-based models to inform systems transformations of urban green and blue spaces for the prevention of non-communicable disease and reduction of inequalities in the UK.

The successful candidate will have the opportunity and support to be creative and academically brave, add their own ideas and innovations to the Consortium, and conduct high-quality research that will resonate at local, national, and global levels. We are particularly interested in working with someone with experience in the development of agent-based models of human populations and their local environment, including skills in model design with multidisciplinary teams, coding, parametrization, model verification, scenario development, sensitivity analysis, and reporting. Complementary skills in quantitative and/or qualitative methods that can be used to inform the development of agent-based models are welcome.

The GroundsWell consortium, recently funded by the UK Prevention Research Partnership, which aims to drive community innovation applying systems science that maximise the contribution of urban green and blue spaces to the primary prevention of, and reduction of inequalities in, non-communicable diseases in urban settings. The consortium has over 20 co-investigators across 7 institutions, as well as a range of non-academic stakeholders. The post-holder will be based at the Centre for Public Health, Queen's University Belfast.

MAJOR DUTIES:

1. Develop agent-based models to test a portfolio of transformations of urban green and blue spaces and assess their potential population and planetary health benefits.
2. Carry out data analyses, critical evaluations, and reports using appropriate methods.
3. Present regular progress reports on research to members of the research group, other groups within the Centre/University, and to external audiences nationally and internationally, to disseminate and publicize research findings.
4. Undertake research under supervision within the GroundsWell consortium or as a member of a research team.
5. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
6. Participate with the grant holder in the preparation of funding proposals and applications, as well as project progress reports to external bodies.
7. Carry out routine administrative tasks associated with their research projects/group to ensure that projects are completed on time and within budget and that the group functions efficiently.
8. 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.
9. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines and engage in technical training as needed.
10. Participate, and in some cases lead, outreach activities on behalf of the group/Centre.

ESSENTIAL CRITERIA:

1. Have, or be about to obtain, a PhD in public health, epidemiology, computer science, biostatistics, engineering, geography, urban planning or a related area.
2. At least 3 years' experience of development of agent-based models of human populations.
3. Publications commensurate with career stage.
4. Familiarity with the governance and ethical arrangements for accessing and using data for agent-based modelling.
5. Willingness to teach postgraduate/undergraduate students.
6. Ability to contribute to broader management and administrative processes.
7. Willingness to contribute to the School's outreach program by links with industry, community groups etc.
8. Excellent problem-solving skills and able to use own initiative.
9. Demonstrated skills in using at least one agent-based modelling package.
10. Demonstrated skills in using at least one statistical analysis package (e.g., Python, R, Stata).
11. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within the established research programme.
12. Good team working skills in multiple team settings, as well as leadership qualities.
13. Ability to communicate complex information clearly.
14. Ability to build contacts and participate in internal and external networks.
15. Ability to work independently and on own initiative.
16. Must be willing to travel to national and international meetings and collaborative research groups.

DESIRABLE CRITERIA:

1. Experience working in public health, health behaviours, or urban health.
2. Grant, manuscript and abstract writing experience.
3. Research project management.
4. Evidence of having presented at conferences (poster or oral).
5. Experience working as part of a multidisciplinary team.
6. Experience in economic evaluations in public health.
7. Experience of social return on investment analysis.
8. Experience of Discrete Choice Experiments.
9. Experience in decision analytic modelling.
10. Demonstrated skills in using version control methods and platforms.
11. Demonstrated skills in using at least one spatial analysis package (e.g., Python QGIS, ArcGIS).
12. Demonstrated skills in quantitative and/or qualitative methods useful for agent-based model development.
13. Irregular hours, including weekend working, might be a component of the research at times.