Candidate Information

Position:	Research Fellow
School/Department:	School of Medicine, Dentistry and Biomedical Sciences
Reference:	24/111858
Closing Date:	Monday 27 May 2024
Salary:	£37,841 - £45,148 per annum
Anticipated Interview Date:	Tuesday 11 June 2024
Duration:	16 months

JOB PURPOSE:

This exciting position will allow the successful candidate to join the funded by the UK Prevention Research Partnership-funded GroundsWell consortium (https://groundswelluk.org/). 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 GroundsWell consortium 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.

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.

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 and as a member of our research team.
5. Prepare, often in consultation with supervisors, 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 training and supervision of undergraduate and post-graduate students and visiting researchers, and 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 about to obtain, a PhD in public health, epidemiology, computer science, biostatistics, engineering, geography, urban planning, or a related area.
2. Specific, relevant experience of development of agent-based models of human populations, including modelling of inequalities.
3. Demonstrated experience working in public health, health behaviours, or urban health.
4. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within the established research programme.
5. Publications commensurate with career stage.
6. Familiarity with the governance and ethical arrangements for accessing and using data for agent-based modelling.
7. Willingness to teach undergraduate and postgraduate students.
8. Demonstrated skills in using at least one agent-based modelling package.
9. Demonstrated skills in using at least one statistical analysis package (e.g., Python, R, Stata).
10. Ability to contribute to broader management and administrative processes.
11. Willingness to contribute to the School's outreach program by links with industry, community groups, etc.
12. Ability to communicate complex information clearly.
13. Ability to build contacts and participate in internal and external networks.
14. Good team working skills in multiple team settings, as well as leadership qualities.
15. Excellent problem-solving skills and able to use own initiative.
16. Must be willing to travel to national and international meetings and collaborative research groups.
17. Excellent IT skills e.g. Microsoft Office suite.
18. Excellent organisational skills.
19. Excellent inter-personal skills.
20. Excellent oral and written communication skills.
21. Ability to write reports and meet deadlines.
22. Good presentation skills.
23. Articulate, fluent.
24. Ability to work independently and on own initiative.
25. Strong commitment to a career in research.

DESIRABLE CRITERIA:

1. Grant, manuscript, and abstract writing experience.
2. Research project management.
3. Demonstrated skills in using version control methods and platforms.
4. Demonstrated skills in using at least one spatial analysis package (e.g., Python QGIS, ArcGIS).
5. Demonstrated skills in quantitative and/or qualitative methods useful for agent-based model development.