

Candidate Information

| Position: | Lecturer in Data Science |
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| School/Department: | Centre for Public Health |
| Reference: | 23/111018 |
| Closing Date: | Monday 26 June 2023 |
| Salary: | £44,414 - £54,421 per annum |
| Anticipated Interview Date: | Wednesday 2 August 2023 |
| Duration: | Permanent |

JOB PURPOSE:

To undertake research in line with the School's research strategy, to teach at undergraduate and postgraduate level, and to contribute to School administration/outreach activity.

The principal aims of the lecturer post are: to develop a research and teaching programme in Data Science applied and allied to the work of a range of programmes linked to the Belfast City Deal and the Centre for Public Health (CPH) and the School of Medicine, Dentistry and Biomedical Sciences; to increase and advance the use of data science methodologies to the evaluation of City Deal programmes and to public health; to teach at undergraduate and postgraduate level; and contribute to School and CPH administration/outreach activity.

MAJOR DUTIES:

Teaching:

- 1. Develop teaching methods, design modules and courses and deliver teaching and assessment activities including lectures, coursework, practicals, and fieldwork according to own area of subject specialism.
- 2. Deliver tutorials and lectures as a part of ongoing Medical Statistics teaching run by the Centre for Public Health.
- 3. Develop approaches to teaching and learning which are appropriate for the subject area and reflect developing practice.
- 4. Contribute to the enhancement of quality teaching within the subject, School or Faculty.
- 5. Develop and advise others on learning and teaching tasks and methods.
- 6. Contribute to the design of innovative teaching programmes.

Research:

- Develop, implement and sustain a research plan in data science applied to programmes linked to the Belfast Regional City Deal and to Public Health, including managing and undertaking research activities in accordance with the specific project plans of the appropriate research team in CPH, in IREACH and GII.
- 2. Sustain a high-quality publication record by publishing in refereed journals and presenting at conferences so that the School's and CPH's research profile is enhanced.
- 3. Develop research proposals and successful funding bids in collaboration with CPH researchers and other researchers and relevant practitioners.
- 4. Direct, coach and develop research staff, where appropriate.
- 5. Ensure that research projects are completed on time and within budget.

Administration/Contribution to the Community:

- 1. Make a tangible contribution to the achievement of strategic goals.
- 2. Support internationalisation through, for example, development of global partnerships, reputation enhancement, and student recruitment.
- 3. Contribute to the School's outreach strategy by developing external links.
- 4. Develop links with relevant industries and external bodies to encourage technology transfer opportunities and create opportunities for future research projects.

- 5. Provide pastoral care for students within own area to ensure, as far as practicable, that all relevant issues are dealt with in a timely, sympathetic and effective manner.
- 6. Carry out designated School functions, including, for example, participation in committee work, assisting in the process of admissions, and preparation of submissions for teaching quality assessment or the REF.

ESSENTIAL CRITERIA:

- 1. Primary or Master's Degree in mathematics, statistics or a cognate subject.
- 2. PhD in a subject area related to Data Science, Medical Statistics, Computer Science or Epidemiology.
- 3. Relevant post-doctoral research experience at postdoctoral level in a relevant field.
- 4. Recent, relevant publications in peer reviewed/refereed journals that are recognised internationally as being high quality, commensurate with experience.
- 5. Experience in performing statistical analysis using STATA, SAS, R or Python.
- 6. Experience and expertise in use of a range of methods for the analysis of Big Data in health sciences.
- 7. Willingness to apply these methods in public health and the programmes of the Belfast Regional City Deal.
- 8. Research profile which complements the research priorities and strengths of the School of Medicine, Dentistry and Biomedical Sciences.
- 9. Experience of presentations at national and international meetings and conferences.
- 10. Relevant teaching experience at University Level.
- 11. Relevant academic administrative/management experience.
- 12. Sound reasoning ability and balanced judgement.
- 13. Ability to advance the research and teaching goals of the School.
- 14. Ability to strengthen the School's national and international research networks.
- 15. Commitment to advancing Data Science through research, leadership, and education.
- 16. Good presentation skills with the ability to communicate complex information effectively.
- 17. Good communicator, written and oral.
- 18. Ability to present research and other plans and reports to the wider academic community and non-academic audiences.
- 19. Ability to lead and motivate others.
- 20. Demonstrates the Queen's Core Values.
- 21. Clear commitment to interdisciplinary working.
- 22. Team player who can develop effective internal and external research and practice links.
- 23. Able to undertake national and international travel for conferences, research collaborations etc. throughout UK, Ireland and overseas.

DESIRABLE CRITERIA:

- 1. Masters in Public Health, Applied Statistics, Data Science or allied subject.
- 2. Completion of a PGCHET (or equivalent) or HEA membership.
- 3. Experience of application of data science methods (including machine learning algorithms) in healthcare, including for evaluation of public health interventions.
- 4. Experience in Knowledge Transfer/Exchange activities.
- 5. Evidence of having obtained external funding.
- 6. Contribution to a wide range of community outreach programmes/ initiatives to promote the subject area of Public Health.
- 7. Evidence of significant interaction with policy makers in designing, undertaking, or reporting on research.