Candidate Information

Position:	Lecturer in Bioinformatics
School/Department:	Patrick G Johnston Centre for Cancer Research
Reference:	21/109181
Closing Date:	Thursday 7 October 2021
Salary:	£42,149 - £51,799 per annum
Anticipated Interview Date:	Tuesday 2 November 2021
Duration:	3 years

JOB PURPOSE:

To undertake research in the Patrick G Johnston Centre for Cancer Research and the School of Medicine, Dentistry and Biomedical Sciences at Queen's University Belfast (QUB). The post holder will develop a bioinformatics research theme in line with the School/Centre's research strategies, teach at undergraduate and postgraduate level and contribute to the School's administration/outreach activity.

MAJOR DUTIES:

Teaching:

1. Develop teaching methods, design course units 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 molecular biology teaching and develop teaching material on best practices in data management and reproducible research.
3. Provide support and guidance to postgraduate students learning relevant programming languages.
4. Prepare and supervise suitable scenarios to educate undergraduate students in scientific research and project work.
5. Develop approaches to teaching and learning, which are appropriate for the subject area and reflect developing practice, particularly in the digital/ online arena.
6. Contribute to the enhancement of quality teaching within the subject, School and / or Faculty, with a view to enriching the student experience and improving career outcomes.
7. Guide others in the support of learning and teaching.
8. Contribute to the design of innovative teaching programmes.

Research:

1. Develop an independent research portfolio and contribute to the wider research strategies of the Centre, School and Faculty in bioinformatics.
2. Develop research proposals and funding bids in collaboration with others.
3. Sustain a high quality publication record by publishing in refereed journals and presenting at conferences to assist individual research and so that the School's research profile is enhanced.
4. Contribute high quality research-related contributions through conference papers and presentations.
5. Direct, coach and develop research staff, where appropriate.

Administration/Contribution to the Community:

1. Contribute to the School's outreach strategy by developing external links.
2. Develop links with relevant industries and external bodies to encourage technology transfer opportunities and create opportunities for future research projects.
3. Carry out designated School functions, including, for example, participation in relevant committee work.
4. 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.

Planning and Organising:

1. Plan for and set teaching and research objectives over a number of years.
2. Plan and manage own teaching and tutorials as agreed with Centre Director / Head of School.
3. As module leader, co-ordinate with others (such as support staff or academic colleagues) to ensure student needs and expectations are met.
4. Design/update modules in line with School's teaching strategy.
5. Plan for the use of teaching and research resources, laboratories and workshops as appropriate.
6. Prepare research proposals for submission for external funding.

Resource Management Responsibilities:

1. Mentor colleagues with less experience and advise on personal development.
2. Depending on the area of work, may supervise the work of others, for example in research teams and projects.
3. Manage own teaching, research and administrative demands with appropriate supervision.
4. Assist in the development of skills and competence in others (for example through the supervision of research students).
5. Manage use of resources for research and teaching.
6. Participate in judgements regarding the use of resources within their research project/school.
7. Act as mentor for students in capacity of personal tutor.

Internal and External Relationships:

1. Communicate complex and conceptual ideas to students as well as to peers using high level skills and a range of media.
2. Member of the School Board and other committees relevant to administrative duties.
3. Collaborate with other academics within School.
4. Participate in and develop networks, for example to identify sources of funding, contribute to student recruitment, act as website editor, secure student placements, market the institution, facilitate out-reach work, generate income, obtain consultancy projects, or build relationships for future activities.
5. Contribute to the School's outreach programme, for example by establishing links with local community groups and / or industry partners.

ESSENTIAL CRITERIA:

1. Primary or higher degree in a life sciences, mathematics, programming or a cognate subject.
2. PhD in a biomedical science, biology, or a related discipline to bioinformatics.
3. A minimum of three years' recent experience in discipline(s) related to bioinformatics.
4. Experience of use of the R statistical environment; python or similar higher level scripting/programming techniques.
5. Recent, relevant publications in peer reviewed/refereed journals that are high quality and are commensurate with stage of career.
6. Experience of working in collaborative research projects.
7. Experience of developing research methodologies, models, approaches and techniques.
8. Research profile which complements the research priorities and strengths of the School of Medicine, Dentistry and Biomedical Sciences.
9. Experience of giving presentations at national and international meetings and conferences.
10. Teaching experience at University level.
11. Relevant academic administrative/management experience commensurate with stage in career.
12. Demonstrates sound reasoning ability and balanced judgement.
13. Ability and commitment to advance the research and teaching goals of the School.
14. Ability to strengthen the School's national and international research networks.
15. Articulate and fluent oral and written communication skills with the ability to communicate complex information effectively.
16. Good presentation skills.
17. Ability to present research and represent Queen's University to the wider academic and non-academic community, nationally and internationally.
18. Evidence of being a good team player with the ability to lead and get the best from others.
19. Commitment to working in line with Queen's Values.
20. Clear commitment to interdisciplinary working with the ability to develop effective internal and external research and practice links.
21. Motivated to avail of the opportunity to build an interdisciplinary research programme of international standing.
22. Able to undertake overseas travel where appropriate.

DESIRABLE CRITERIA:

1. Completed PGCHET / HEA (or equivalent).
2. Experience in supervising research activities of other post-doctoral scientists, technicians or postgraduate students.
3. Evidence of having obtained funding from government or private charitable agencies to support independent research.
4. Contribution to a wide range of community outreach programmes/ initiatives to promote bioinformatics research.
5. Experience in the development and management of research teams.
6. Proven capacity and enthusiasm for collaborating with the teaching and research activities of cognate disciplines.
7. Proven ability to work with industry or practitioners to commercialise or translate research.