

Candidate Information

Position: School/Department: Reference: Closing Date: Salary: Anticipated Interview Date: Duration: Research Fellow - Molecular Epidemiology Centre for Public Health 20/108556 Wednesday 3 February 2021 £33,797 - £36,914 per annum Monday 22 February 2021 This post is available for 18 months or until 30 November 2022 (whichever is sooner)

JOB PURPOSE:

This post involves working with a multi-disciplinary, multi-centre team as part of an international collaborative project entitled "A multi-centre, multidimensional approach for New Onset Diabetes After Transplantation (NODAT)".

The proposed project plans to identify a NODAT 'signature' that will help identify individuals at higher-risk of developing NODAT, which will improve kidney transplant success rates and patient outcomes. This research proposal brings together multidisciplinary and synergistic research groups to advance our knowledge of the molecular determinants of NODAT, identify potential molecular targets, and facilitate clinical prediction. This cost-effective, carefully planned project will also provide excellent training and experience for a dedicated post-doctoral research fellow in a broad range of techniques.

The post may involve liaising with international collaborators, generating new molecular data, collating existing data, coordinating meetings and workshops, bioinformatic analysis of data, integrating datasets, preparing regular summary reports, and taking the lead writing academic outputs and research dessemination.

MAJOR DUTIES:

- 1. To assist in developing a detailed project plan to meet research objectives in accordance with best practice.
- 2. To conduct research under supervision within the research project and assist with the preparation of project evaluation reports.
- 3. To maintain continued quality assurance & curation of data generation, collation, analysis, and preparation for public archiving.
- 4. To promote data harmonisation procedures across international cohorts and participate in working groups within consortia.
- 5. To generate new molecular data using high density arrays and / or next generation sequencing approaches.
- 6. To conduct statistical and bioinformatic analysis of multi-omic datasets with an emphasis on genetic, epigenetic and transcriptomic analyses using cross-sectional and longitudinal study designs.
- 7. To summarise relevant data harmonisation requirements and ensure data is compliant with ethical and governance requirements.
- 8. To prepare regular summary reports for the project team and communication to stakeholders.
- 9. To prepare, in consultation with the project team, material for publication in national and international journals, and presentations at national and international conferences.
- 10. To assist with the submission of associated grant applications and the supervision of students.
- 11. To provide expert advice on own subject specialism to staff and students.
- 12. To assist with preparation of relevant ethical and research governance documents.
- 13. To facilitate personal and public involvement within this research project.
- 14. To carry out routine administrative tasks associated with this research project to ensure the project is completed on time and within budget.
- 15. To read academic papers, journals and textbooks to keep abreast of developments in the field and appropriately guide junior members of the team.

Planning and Organising:

- 1. To draw up a Gantt chart and plan for specific deliverables of the research project's scientific outputs.
- 2. To plan for the use of research resources and workshops where appropriate.
- 3. To plan own day-to-day activity within framework of the agreed research programme, particularly in relation to collaborative work with project partners and other components of the wider large-scale project.
- 4. To plan to meet deadlines for journal publications, project meetings, and to prepare presentations and papers for conferences.
- 5. Coordinate and liaise with other members of the research group and project team regarding progress.

Resource Management Responsibilities:

- 1. To ensure research resources are used in an effective and efficient manner.
- 2. To provide support and guidance as required to staff and students assisting with the research.

Internal and External Relationships:

- 1. To liaise on a regular basis with colleagues, students and key stakeholders.
- 2. To maintain existing and establish new internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
- 3. To maintain existing and establish new external networks to share information and ideas.
- 4. To contribute to the School's outreach programme by maintaining existing and establishing new links with local community groups.

ESSENTIAL CRITERIA:

- 1. Have or about to obtain PhD in relevant discipline.
- 2. At least 3 years' relevant research experience.
- 3. Experience handling biological samples to generate genomic, epigenomic and / or transcriptomic data.
- 4. Experience working with multi-omic data, and / or statistics for molecular biology, and / or molecular bioinformatics or other fields relevant to the post.
- 5. Demonstrated experience of research methods and techniques pertinent to molecular epidemiology, longitudinal studies, and / or public health research using a range of methodologies.
- 6. Experience of using data analysis packages such as SPSS or Partek.
- 7. Experience of project management, delivering research outcomes, and proven ability to work in a multi-disciplinary environment as part of a research team.
- 8. A publication track record commensurate with the stage of career.
- 9. Excellent IT skills e.g. Microsoft Office suite.
- 10. Excellent organisational and leadership skills.
- 11. Excellent inter-personal skills.
- 12. Excellent oral and written communication skills.
- 13. Evidence of ability to write reports and meet deadlines.
- 14. Evidence of ability to deal competently with administrative tasks and contribute to broader management tasks.
- 15. Clear and confident communicator.
- 16. Ability to give formal presentations.
- 17. Ability to work independently and on own initiative.
- 18. Ability to act decisively and confidently.
- 19. Access to transport and willingness to travel to meet the needs of the post.
- 20. Ability to work outside normal hours when necessary.

DESIRABLE CRITERIA:

- 1. First or Upper Second Class Honours Degree in a relevant discipline, a Master's degree and / or relevant professional qualification.
- 2. Experience working with relevant international data protection guidelines and requirements.
- 3. Experience using high density arrays and next generation sequencing tools.
- 4. Experience working as part of international networks / consortia for multicentre projects.
- 5. Experience conducting multi-omic analysis with a focus on SNP, methylation and transcriptomic datasets.
- 6. Experience developing a funding proposal.
- 7. Experience supervising students.
- 8. Proven ability to participate in or initiate collaborative research.
- 9. Evidence successfully managing resources.

- 10. Evidence of having co-ordinated a research project to successful completion.
- 11. Strong commitment to a career in Research.