

Candidate Information

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| Position: | Research Fellow (Bioinformatician) |
| School/Department: | Centre for Cancer Research and Cell Biology |
| Reference: | 20/108275 |
| Closing Date: | Thursday 13 August 2020 |
| Salary: | £33,797 per annum |
| Anticipated Interview Date: | Friday 28 and Monday 31 August 2020 |
| Duration: | Until 31 March 2022 |

JOB PURPOSE:

The primary focus of the role will be to work within an established integrative analytical environment, with efforts to embed biological data, allowing invested users the ability to query information. The analytical environment allows researchers the ability to mine and analyse information remotely and securely with capacity to learn new insights into the data lake created. The candidate will offer support to curate and ingest information to providing feedback and capacity for extended data exploration.

This post is funded as part of the FastMan PCUK-Movember Prostate Cancer Centre of Excellence (CoE), a joint research programme with the CRUK Manchester Institute. The applicant will additionally be expected to support and contribute to the other ongoing work and publications stemming from this programme. Annual travel to Manchester for joint FastMan meetings is required.

MAJOR DUTIES:

1. To curate and archive data in appropriate database technologies being developed through in-house software. Management of a bespoke database framework with potential connections to pertinent public databases.
2. To understand and analyse modern 'big data' profiles generated through different data sources.
3. To enhance software to analyse data and assist in programming of frameworks in the project.
4. To assist in pipeline development for the processing and analysis of raw data.
5. To offer analytical expertise for data in bioinformatic analyses for the other key teams.
6. To offer analytical outputs in defined and acceptable formats from analysis that can be interrogated by research and clinical scientists as required.
7. To support end-users to ensure data is interrogated appropriately and meets all standards for peer-reviewed publications.
8. To prioritise work on a day-to-day basis and liaise with colleagues to co-ordinate the service provision and project.
9. To work as part of the team and have excellent communication with colleagues and supervisors.
10. To prepare scientific manuscripts and presentations for peer review and publication.
11. To support the team leader with results writing and project reporting.
12. To present progress reports to the FASTMAN team and supervisor regularly as well as external audiences.
13. To keep abreast of the field by reading scientific literature and attending relevant meetings when possible.
14. Any other reasonable duties within the general scope of the post and competence of post-holder.

Planning and Organising:

1. To plan and deliver the specific goals of the project and contribute to research group planning.
2. To plan for the use of research resources, data resources and workshops where appropriate.
3. To plan own day-to day activity within framework of the agreed research project.
4. To coordinate and liaise with other members of the research group over work progress.

Resource Management Responsibilities:

1. To ensure research resources are used in an effective and efficient manner.
2. To contribute to informatics hardware and software maintenance and troubleshooting.
3. To provide guidance as required to support staff and any team members who may be assisting with research.

Internal and External Relationships:

1. To liaise on a regular basis with colleagues and research project team, including FastMan colleagues in Manchester.
2. To build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
3. To contribute to the School's outreach project results by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

1. Have obtained or be within 6 months of obtaining a PhD in bioinformatics or related discipline.
2. At least 3 years relevant research experience in a computational field, leading to publications in high-impact factor journals.
3. Experience of working with Linux/UNIX environments.
4. Significant experience managing, integrating and analysing different data sources.
5. Publication record in a relevant field commensurate to experience.
6. Proficiency with a modern high-level programming language.
7. Experience creating, querying and maintaining databases, particularly MySQL or PostgreSQL.
8. Experience with suitable analysis and plotting languages, particularly R, Python.
9. Knowledge of high-performance computing systems and job scheduling.
10. Excellent verbal and written communicational skills.
11. Excellent organisational and inter-personal skills.
12. Ability to plan, organise & prioritise work and meet deadlines.
13. Excellent attention to detail.
14. Ability to communicate complex information clearly and efficiently.
15. Team worker, highly motivated, supportive of colleagues within the group.
16. Ability to show initiative and work independently when required.
17. Ability to work with clinical specimens and in a clinical environment, conforming to regulatory requirements.
18. Must be willing to work irregular hours when necessary for the progress of the research project.
19. Must be willing and able to travel nationally and internationally.

DESIRABLE CRITERIA:

1. 1st Class or 2.1 undergraduate degree.
2. Experience in big data technologies.
3. Experience of working in healthcare informatics.
4. Track record of publications in big data analysis or software development including first authored publications in high-impact journals.
5. Experience contributing to applications for peer reviewed research funding from national or international granting bodies.
6. Excellent project management skills.
7. Outstanding IT skills.
8. Experience of delivering tutorials on informatics based approaches.
9. Understanding of cancer datasets.