

Post Details		Last Updated:	
Faculty/Administrative/Service Department:	Faculty of Health and Medical Sciences		
Job Title:	Bioinformatics Scientist		
Job Family & Job Level	Technical and Experimental	Level 4	
Responsible to:	The Academic Lead for Bioinformatics		
Responsible for:	n/a		
<u>Job Purpose Statement</u> As part of a team, the post holder will provide bioinformatics expertise to Faculty researchers. The post holder will advise users on the most appropriate data analysis approach to respond to their research problem and is involved in training users in the use of relevant specialist software. The post will contribute to an increase in research activities and grant bidding in highly funded areas involving computational biology, bioinformatics, genomics and metagenomics. The role will place particular emphasis on supporting DNA analysis workflows, including genome assembly, GWAS, long-read sequencing, variant calling, or other DNA-based analyses such as structural variant detection, alignment, and phylogenetics. In addition, the post holder will support students and researchers by troubleshooting R scripts for general bioinformatics analyses, offering both scheduled and ad hoc support.			
<u>Main Responsibilities/Activities</u> <u>Problem Solving, Accountability and Dimensions of the role</u> • Provide guidance and support to researchers conducting genomics and DNA-based studies • Support students (undergraduate and postgraduate) and staff in the use of R for data analysis • Deliver training or documentation as needed to build local capacity in bioinformatics • Work collaboratively with academic, technical, and research staff to enhance bioinformatics workflows • Contribute to the evolution and accessibility of bioinformatics resources within the Faculty <u>Background Information/Relationships</u> During the last four years the FHMS has been committed to the development of interdisciplinary research integrating mathematical modelling and bioinformatics with state-of-the-art experimental methods of functional genomics. This resulted in the emergence of new research projects which have been recently affiliated under the Systems Biology Cross Cutting Theme. The Systems Biology activities have already resulted in numerous successful grant applications. Bioinformatics suite infrastructure has been established in the framework of these developments and is essential for further extension of Systems Biology activities. The post-holder will interact with the Leads of Multi-User facilities. They will also liaise with other staff, including the respective Academic Leads, involved with genomics, microarrays, proteomics and metabolomics. This job purpose reflects the core activities of the post. As the Department/Faculty and the post-holder develop, there will inevitably be some changes to the duties for which the post is responsible, and possibly to the emphasis of the post itself. The University expects that the post-holder will recognise this and will adopt a flexible approach to work. This could include undertaking relevant training where necessary.			
Person Specification This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role.			
Qualifications and Professional Memberships			Essential/

		Desirable
PhD/MSc in biostatistics, bioinformatics, data science, machine learning, statistics, mathematics, computer science, or a PhD in Biological Sciences subject with relevant experience		E
Technical Competencies (Experience and Knowledge) This section contains the level of competency required to carry out the role (please refer to the competency framework for clarification where needed and the Job Families Booklet).	Essential/ Desirable	Level 1-3
Competent in implementation of RNA-Seq data analysis	E	3
Competent in next generation sequencing data analysis	E	3
Competent in programming in one or several of the commonly used programming languages (R, Python, C/C++, Java, Perl)	E	3
Solid understanding of the application of statistical methods to biological / clinical data	E	3
Experience in statistical analysis of high throughput data	E	3
Experience in software package development and delivery of software in containers	D	1
Experience in single-cell omics data analysis	D	1
Experience in Causality Analysis	D	1
Experience in the implementation of molecular interaction network analysis programs	D	1
Special Requirements:	Essential/ Desirable	Level 1-3
n/a		
Core Competencies This section contains the level of competency required to carry out this role. (Please refer to the competency framework for clarification where needed). N/A (not applicable) should be placed, where the competency is not a requirement of the grade.		Level 1-3
Communication		2
Adaptability / Flexibility		2
Customer/Client service and support		2
Planning and Organising		2
Teamwork		2
Continuous Improvement		2
Problem Solving and Decision-Making Skills		2
Leadership / Management		2
Creative and Analytical Thinking		2
Influencing, Persuasion and Negotiation Skills		1
Strategic Thinking		1

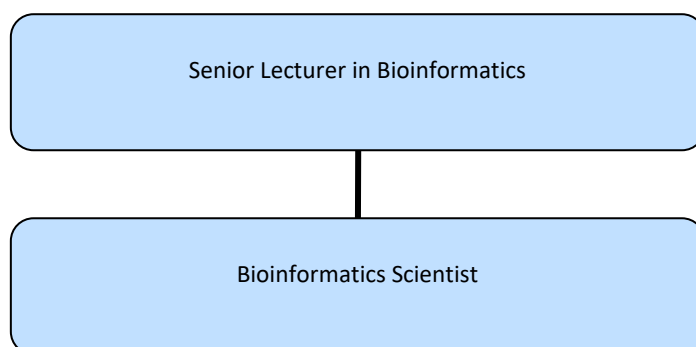
Organisational Information

All staff are expected to:

Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities Policy.

Help maintain a safe working environment by:

- Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand.
- Following local codes of safe working practices and the University of Surrey Health and Safety Policy.
- Excellent environmental performance is a strategic objective for the University of Surrey. All staff are encouraged to work to achieve the aims of our Environmental Policy and promote awareness to colleagues and students.
- Undertake such other duties within the scope of the post as may be requested by your Manager.



Key Responsibilities

This document is not designed to be a list of all tasks undertaken but an outline record of the main responsibilities (5 to 8 maximum) and should be read in conjunction with the accompanying Job Purpose.

- Collaborate with researchers to provide bioinformatics support for genomics and DNA sequencing projects.
- Provide hands-on support to students and staff, including troubleshooting R code and offering both ad hoc advice and scheduled drop-in sessions for undergraduate and postgraduate students.
- Contribute to training sessions, workshops, and the development of user-friendly documentation to support bioinformatics learning and best practices.
- Assist in the design, implementation, and optimization of bioinformatics workflows, including quality control, alignment, variant calling, and genome assembly.
- Stay informed of new tools, technologies, and methodologies in sequencing and genomic data analysis, and apply them where relevant to support research activities.

N.B. The above list is not exhaustive.