Biomathematics and Statistics Scotland

Bioinformatician/Senior Bioinformatician for Method Development
£31,522/£38,442 depending on seniority of appointment

Biomathematics and Statistics Scotland (BioSS) seeks a motivated and innovative quantitative scientist to work in the critical and expanding methodological area of statistical genomics and bioinformatics. The post represents an excellent long-term career opportunity for a suitably qualified bioinformatician or quantitative scientist. We offer a stimulating mix of work including: collaboration with applied scientists at leading UK research institutions; interactions with other quantitative experts within and beyond BioSS; a generous time allocation within which to develop your own area of methodological bioinformatics research; and the opportunity to advance your career in BioSS as we continue to grow as a centre of quantitative applied research and consultancy. This post is simultaneously being advertised at both a senior and more junior grade, depending on experience; BioSS is eligible to apply for UKRI funding, and we will be keen for the successful applicant to contribute to, develop and lead proposals as we seek to grow our portfolio of such projects. This position can be based any of the BioSS sites in Edinburgh, Dundee or Aberdeen. BioSS is formally part of The James Hutton Institute.

BioSS is a member of the SEFARI (Scottish Environment, Food and Agriculture Research Institutes) collective (https://sefari.scot/); we have an international reputation for research, consultancy and training in statistics, mathematical modelling and bioinformatics. BioSS offers a stimulating working environment, with over 40 staff and students at four locations, collaborating on applications in plant science, animal health & welfare, ecology & environmental science, and human health and nutrition.

Potential applicants may contact Professor Glenn Marion (glenn.marion@bioss.ac.uk) or Dr Paolo Ribeca (paolo.ribeca@bioss.ac.uk) to discuss this position.

Main Purpose of Job

The post-holder will:

- develop, maintain and apply methodology for the analysis of bioinformatics data;
- engage with bioinformatics activities and scientists within research programs and with our main collaborators (SEFARI institutes and elsewhere), including the delivery of novel quantitative methods applicable to high-throughput bioinformatics;
- generate income for BioSS by supporting applications for funding and contributing to research projects;
- contribute to the H2020 CLOUDBUTTON project on serverless cloud architectures for existing bioinformatic analysis workflows.

In the more senior role (Band E), candidates would be expected to deliver at a higher level, consistent with a longer or stronger track record of achievement; they would be expected to show more independent initiative and leadership, and in particular to lead applications for funding.

Main Duties of Postholder

In carrying out the job, the successful candidate will be expected to:

- develop an area of personal research in methodology for analysis of bioinformatics data, including high-throughput and computationally intensive methods;
- develop, support and maintain software for application of these methods;
- support the science of partner institutes through development and application of these methods;
- create and maintain a robust, reproducible code development environment for projects;
- develop and facilitate collaborations with partner organisations, helping to identify and exploit resulting funding opportunities;
- support applications for external funding, including from UKRI, and help deliver resulting projects.
- Within CloudButton:
  - port existing workflows for analysis of RNA-sequencing data to serverless architectures;
  - collaborate with project partners in order to fulfil the project goals;
  - to implement the use case for genomics as specified by the project.

In the senior role, applicants are expected to: lead and manage funding applications; take personal responsibility for building, managing and maintaining relationships with specific groups of scientists, organisations and stakeholders; establish new links and areas of collaboration.

Qualifications/Skills/Knowledge

We will be looking for the following 'Essential' and 'Desirable' attributes in candidates:

Essential

- A PhD in a quantitative discipline with a substantial bioinformatics component, or an MSc with additional work experience.
- Experience of development of statistical bioinformatics methods applied to real-world examples, and of collaborating with biological scientists.
- Scientific journal and conference papers in a methodological field relevant to statistical genomics and bioinformatics.
- Understanding of data types and quantitative issues relevant to general and high-throughput bioinformatics, sequencing in particular.
- Ability to work independently.
- Good computer programming ability to handle large data sets and deploy algorithmic, computational and statistical bioinformatics techniques.
- Evidence of good written communication.
- Ability to give effective spoken presentations, to both quantitative and wider scientific audiences.

For the more senior role, applicants should demonstrate a stronger past track record across most of these attributes. In addition, evidence of ability to initiate and manage collaborations, lead projects and to manage people are essential for the more senior role.

Desirable

- Understanding of experimental design and sequencing protocols, and implications for downstream data processing.
- Experience of:
  - o cloud computing and serverless cloud computing;
  - o functional programming languages, especially OCaml;
  - o data analysis of high-throughput sequencing experiments.
- Broad knowledge of biological topics relevant to bioinformatics, especially regarding data and data generation.
- Experience of developing funding applications.

For the more senior role, experience of leading funding applications is also highly desirable.

How to Apply

We will consider applications at either the postdoctoral or the senior postdoctoral grade, depending on experience: note our higher expectations of candidates for the more senior grading. Applications should be made using the recruitment pages operated by our parent organisation, The James Hutton Institute. Please note that the senior postdoctoral and postdoctoral posts are listed separately on these pages: please apply at whatever grade you feel is most appropriate for your situation.

Other Notes

This is a permanent appointment.

Please specify whether you are applying for the Band D Bioinformatician position or the Band E Senior Bioinformatician position in all correspondence.

We will not consider the use of 3rd party recruitment agencies for the sourcing of candidates for this position.

BioSS is formally part of, and administered by, The James Hutton Institute, a Scottish charity No. SC041796.

BioSS has been awarded Investors in People Gold Status.

The James Hutton Institute is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees. We encourage applications from underrepresented groups in STEM, particularly women, BAME and LGBTQ+.

The James Hutton Institute is 'happy to talk flexible working'.

The James Hutton Institute is a: Stonewall Diversity Champion; Athena SWAN Bronze Status Holder; Disability Confident Committed Employer and a Living Wage Employer.