



Biomathematics and Statistics Scotland

Statistician/Senior Statistician for Plant and Crop Sciences **£31,522/38,422** depending on seniority of appointment

BioSS seeks a motivated and innovative quantitative scientist to work in the critical and expanding application area of Plant and Crop Sciences. The post represents an excellent long-term career opportunity for a suitably qualified statistician or quantitative scientist, offering a stimulating mix of work including: collaboration with plant and crop 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 quantitative methodological research; and the opportunity to advance your career in BioSS as we grow our strengths as a centre of quantitative applied research and consultancy. BioSS is eligible to apply for UKRI funding, and we will be keen for the successful applicant to contribute to, develop or lead proposals (depending on experience) as we seek to grow our portfolio of such projects. This position will be based at the Invergowrie site of the James Hutton Institute, near Dundee. We will consider applications at either the postdoctoral or the senior postdoctoral grade, depending on experience.

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 Dr Iain McKendrick (iain.mckendrick@bioass.ac.uk) or Dr Katharine Preedy (Katharine.Preedy@hutton.ac.uk) to discuss this position.

Main Purpose of Job

The successful candidate will:

- Deliver collaborative research and statistical consultancy in the application area of plant and crop science across BioSS, with particular focus on the needs of the James Hutton Institute.
- Develop a portfolio of personal research in applied statistics or bioinformatics motivated by quantitative problems encountered in collaborative projects.
- Generate additional income for BioSS by supporting applications for funding and contributing to the resulting projects.
- *In the more senior role, 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 more leadership, and in particular to lead applications for funding.*



Athena
SWAN
Bronze Award





Main Duties of Postholder

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

- Contribute quantitative expertise to collaborative research projects across BioSS, focussed on (but not limited to) plant and crop science activities at the James Hutton Institute.
- Deliver research on applied statistical or bioinformatics methods with clear relevance to the Scottish Government funded [Strategic Research Programme](#).
- Develop strong collaborative links with specific James Hutton Institute Departments and Science Groups.
- Contribute to applications for funding, including calls from UKRI, and contribute to delivery of resulting projects as appropriate.
- Represent BioSS externally at meetings with stakeholders from scientific and non-scientific backgrounds.
- Extend collaborative links with government agencies, NGOs, universities, research institutes and commercial organisations.
- Contribute to the development and delivery of BioSS training courses for scientists.
- *In the more senior role, applicants would be expected to lead and manage funding applications; take personal responsibility for building, managing and maintaining relationships with specific groups of scientists, external organisations and stakeholders; establish new links and new areas of collaboration; and in all such activities explicitly seek to generate benefit across the entirety of BioSS by acting in support of other staff.*

Qualifications/Skills/Knowledge

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

Essential

- A PhD in statistics or another very closely related discipline, or an MSc with commensurate post-qualification development and work experience.
- Experience of development and use of modern quantitative methods applied to real-world examples. No specific area of experience is 'essential', but examples of desirable areas are listed below.
- A track record of research and/or collaboration evidenced by scientific journal and conference papers in a methodological field relevant to plant and crop science; experience in statistical genetics would be particularly welcome.
- Evidence of ability to develop and maintain scientific collaborations.
- The ability to work independently.
- Enthusiasm for development and application of quantitative methods, and for collaborating with applied scientists in a range of scientific areas.
- Strong general statistical skills, including an understanding of relevant areas such as: experimental design, mixed models, generalised linear models, generalised additive models.
- Good statistical programming ability in R, Python or another high-level statistical or mathematical programming platform.
- 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

- Different skills sets would fit the remit of the post, any of which would be desirable. For example, experience in:
 - statistical genetics relevant to plant and crop genetics and breeding, such as linkage analysis, QTL mapping, genome-wide association studies or genomic prediction;
 - use of empirical spatial or spatio-temporal statistical models;
 - haplotype construction from next generation sequencing data especially for polyploids;
 - image analysis, such as statistical analysis of hyper-spectral data or high-throughput phenotyping, potentially involving clustering, normalisation, image segmentation and classification, spectral modelling, or deep learning.
- Experience of communicating with government and commercial clients.
- 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 organization, 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 quote reference number **BioSS 14-21** (Statistician) or **BioSS 14-21_1** (Senior Statistician) 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.



Athena
SWAN
Bronze Award

