



## Biomathematics and Statistics Scotland

### Senior Statistician for Animal Health and Welfare £38,442

BioSS seeks a motivated and innovative quantitative scientist to work in the critical and expanding application area of Animal Health and Welfare. We are seeking to fill a permanent senior postdoctoral post. The post represents an excellent long-term career opportunity for a suitably qualified statistician or quantitative scientist. We offer a stimulating mix of work including: collaboration with animal 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 continue to grow 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 and lead proposals as we seek to grow our portfolio of such projects. This position will be based at our Edinburgh site, on the Kings Buildings science campus of the University of Edinburgh. 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 Dr Iain McKendrick ([iain.mckendrick@bioss.ac.uk](mailto:iain.mckendrick@bioss.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 animal health and welfare across BioSS, with particular focus on the needs of the Moredun Research Institute and of Scotland's Rural College (SRUC);
- Develop a portfolio of personal research in applied statistics, mathematical modelling or bioinformatics motivated by quantitative problems encountered in collaborative projects;
- Generate additional income for BioSS by supporting and leading applications for funding and contributing to the resulting projects.
- Manage junior staff contributing to the Animal Health and Welfare portfolio.





## 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) animal health and welfare activities at the Moredun Research Institute and Scotland's Rural College.
- Deliver research on applied statistical, mathematical modelling or bioinformatics methods with clear relevance to the Scottish Government funded Strategic Research Programme.
- Take responsibility for the scientific relationship with the Moredun Research Institute, building strong collaborative links both as an individual and in support of others in BioSS; showing leadership in establishing new links and new areas of collaboration.
- Lead and contribute to applications for funding, including calls from UKRI, and contribute to management and 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.

## Qualifications/Skills/Knowledge

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

### Essential

- A PhD in statistics, biomathematics 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 strong track record of research and/or collaboration evidenced by scientific journal and conference papers in a methodological field relevant to animal health and welfare.
- Evidence of ability to initiate, manage and maintain scientific collaborations.
- The ability to work independently.
- Evidence of ability to lead projects and to manage people.
- 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.
- Excellent 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.





## Desirable

- Different skills sets would fit the remit of the post, any of which would be desirable. For example, experience in any of:
  - Experimental design;
  - Empirical spatial or spatio-temporal statistical models;
  - Pathogen phylogenetics and phylodynamics;
  - Mathematical modelling of livestock disease and husbandry systems;
  - Inference for mathematical models;
  - Advanced multivariate methods;
  - Integrated Population Models, including Hidden Markov Models and State-Space Models.

This list is explicitly not exhaustive; applicants with expertise in any relevant area of quantitative science will be welcome.

- Experience of communicating with government and commercial clients.
- Experience of developing and leading funding applications.

## How to Apply

Applications should be made using the [recruitment pages](#) operated by our parent organization, The James Hutton Institute.

## Other Notes

This is a permanent appointment.

Please quote reference number **BioSS 15-21** (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.

