Candidate Information

Position:	Head of Mass Spectrometry
School/Department:	Institute for Global Food Security
Reference:	22/109805
Closing Date:	Tuesday 31 May 2022
Salary:	£42,149 - £51,799 per annum
Anticipated Interview Date:	Monday 13 June 2022
Duration:	Available until 30 June 2024

JOB PURPOSE:

The post holder will play a major leadership role in the operations and expansion of the Mass-Spectrometry Unit within the ASSET Centre. The unit has a wide range of platforms to perform targeted and untargeted analysis for small molecules. The post holder will support a large and dynamic group of researchers in terms of fostering collaborations and provide scientific and technical support. The post holder will ensure the success and sustained resourcing of the Mass-Spectrometry Unit by developing its ability to support the generation of grant income and contribute to high profile publications and societal impacts. The development of proposals to support the ASSET Centre to becoming national and internationally recngised centre of excellence will also be a key role as will the fostering of strategic relationships with key technology providers. It is anticipated that the Unit will, in the medium to long term, be financially sustainable. The Head of Unit will contribute to strategic planning to ensure the long term maintenance and expansion of the unit. They will provide relevant scientific expertise with sufficient research experience to help researchers obtain the maximum benefit from the equipment available.

MAJOR DUTIES:

1. Develop and manage the Mass Spec Unit within the context of a broad, faculty-based research strategy by managing and undertaking high level scientific activities appropriate to the remit of the unit which maximise the capability for mass-spectroscopy-related research and related activities, thereby, raising the research output and grant income profile for a range of programmes within the field of food security.
2. Work with key stakeholders to implement and maintain new Mass Spectroscopy technologies in the unit and contribute to the development of novel applications. Liaise closely with informatics experts to ensure streamlined workflows integrated for data analysis.
3. Support researchers in setting research objectives, experimental planning, devising and implementing experimental protocols and data acquisition, analysis and presentation. This will also include supporting the development of research proposals and publication submissions.
4. Responsible for all aspects of purchasing and management of the budget of the Unit. Responsibility for creating new external opportunities to support income generation. Ensure that Unit objectives and associated research projects are completed on time and within budget.
5. Direct, mentor and develop research and technical staff in methodologies and research strategies employed within the unit.
6. Develop strategic relationships with external technology providers aligned with the strategy of the ASSET Centre. Engage with external stakeholders to develop revenue generating streams.
7. As a member of the ASSET Centre Steering Group determine strategy and innovative approaches to research work with the responsibility of evaluating and introducing new technologies and methodologies and reporting the progress and status of the unit to the Steering Group.
8. Contribute to the work of the Institute for Global Food Security and School of Biological Sciences through limited teaching and associated tasks within the areas of expertise of the unit. This will include assistance with the supervision of research projects of undergraduate and post-graduate students and advising staff and students on techniques.

9. Organise educational events related to the unit e.g. user forums, lectures, training courses, seminars, outreach events. This will include development and delivery of mass spectrometry -specific courses to ensure researchers are kept up-to-date with new developments in the field.
10. Contribute to the ASSET Centre's development by establishing strong links with appropriate internal and external stakeholders and help to establish an international reputation through presentations, webinars, open source contributions and demonstrations to visiting companies and researchers from around the world.
11. Proactively engage and develop links with relevant research groups, industries and external bodies to encourage technology transfer opportunities and create opportunities for future research projects.

ESSENTIAL CRITERIA:

1. A relevant degree and PhD.
2. Substantial relevant research experience in Mass Spectroscopy that will enable development of the unit and contribute to the faculty strategy.
3. Experience of developing new research methodologies for small molecule analysis with the aim of implementing new approaches, techniques and methods which are appropriate for the Mass Spectroscopy unit.
4. A high level of scientific attainment, such as high quality publications (Q1 journals) commensurate with experience and technical know-how in an area appropriate for the unit
5. Experience, achievement in the discipline, reflected in relevant involvement in academic or industry research programmes.
6. Research interests and skills that will enable development of the unit and contribute to the ASSET Centre strategy.
7. Research interests and skills that will enable development of the unit and contribute to the faculty strategy.
8. Experience of and ability to manage a unit budget.
9. Ability to interact with key stakeholders independently or as a leader of a defined section in a project.
10. Experience, achievement in the discipline, reflected in relevant involvement in research programmes.
11. Experience of developing research methodologies and devising models, approaches, critiques and methods.
12. Experience training users in mass-spec techniques.
13. Ability to communicate complex information effectively.
14. Skills in managing and motivating staff.
15. Ability to manage resources.
16. Demonstrable intellectual ability and excellent scientific skills.
17. Ability to supervise work of others in research team.
18. Must be prepared to work outside of normal working hours when required.
19. Must be prepared to travel to engage with external stakeholders.

DESIRABLE CRITERIA:

1. Management qualifications or commercial/industrial experience commensurate to AC3 standing.
2. Involvement in successful applications for competitive external research funding and /or contract research.
3. Teaching experience using a wide range of teaching methods at UG and PG level.
4. Track-record of research-led interactions with UG and PG students.
5. Experience in organising and delivering workshops, seminars and publicity events.
6. Experience on university committees or related professional/community organisations.
7. Commercial and/or commercialisation experience.
8. Familiarity with bioinformatics analysis of metabolomics data.
9. Demonstrated ability to deliver work to agreed deadlines.
10. Experience with mass-spec service provision in an academic and/or commercial setting.
11. Ability to manage a complex budget.
12. Experience in managing a small team, including responsibilities such as performance review.
13. Knowledge of safety protocols and experience writing standard operating procedures to ensure a safe working environment.
14. Ability to communicate with a diverse range of people, individually or in groups.
15. Background interests that are compatible with the post.