Job Description

Position / Job Title:	**Post-Doctoral Research Fellow in LCMS**
Location/Building:	**Christchurch House - Talbot Campus**
Faculty/Professional Service:	**Faculty of Science and Technology**
Group/Section:	**Life and Environmental Sciences**
Duration if Temporary:	**Fixed Term Until 28/02/2026**
Normal Hours per Week:	**37 hours**
(Some flexibility will be required in order to ensure that key time scales and deadlines are met).	
Number of Annual Scheduled Hours:	[If Annualised Hours Contract]
Number of Annual Unscheduled Hours:	[If Annualised Hours Contract]
Number of Working Weeks if Term-Time Only:	[If Term Time Only Contract]
Grade:	**6**
Accountable to:	**Robert Britton, Professor**
Special conditions:	If applicable, eg travel, DBS check or security clearance

Job Purpose

To manage and co-ordinate the analytical chemistry (applied to animal physiological stress responses) component of the project 'Resolving the extinction crisis: sustainable and technological solutions for biodiversity and society' (supported by the Research Capacity Transformation Scheme (RCATS)), as directed by the Principal Investigator and the wider project team. The project will develop and the apply protocols for quantifying the chronic physiological stress responses of animals using appropriate methods in analytical chemistry, where the measured responses are appropriate for identifying how chronic stress levels influence animal behaviour and ecology. The role of the Post Doctoral Research Fellow is to contribute to its delivery planning, designing and conducting research to produce published outputs.

Main Responsibilities

1. Deliver research objectives of proposed work within the timeframes of the project and ensuring the achievement of project outcomes.

2. Develop and validate analytical protocols, and plan, design and conduct research using appropriate analytical methods for measuring chronic physiological stress responses of animals using a range of tissues appropriate for the species concerned (e.g. hair/ fur, scales, feathers).

3. Write up research work for publication, to include research outputs and reports.

4. Conduct maintenance of relevant analytical instrumentation and ensure data and records are maintained as appropriate for the work completed, contributing to data sharing initiatives where

appropriate.

5. Present findings at national/international conferences and other dissemination and knowledge exchange activities, including public engagement.

6. Identify opportunities and support on preparing proposals for research grant funding.

7. Continue to develop a body of published work and/or artefacts relevant to own discipline both in terms of type and volume.

8. Ensure the development of best practice guidelines and the design and delivery of education and/or professional practice activities in animal physiological stress responses

9. Build relationships with internal and external contacts to exchange information, publish outputs, develop future collaborations and identify potential sources of research funding / opportunities to collaborate.

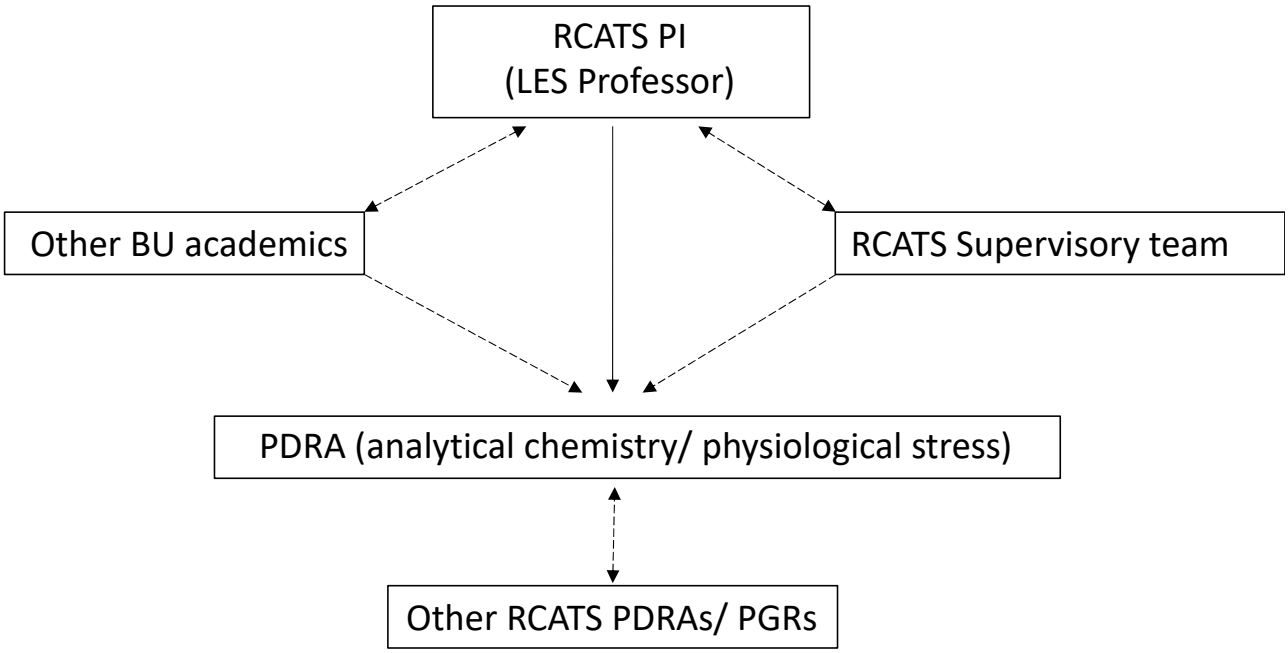
10. Contribute to the design and delivery of education activities in analytical chemistry

11. Supervise under/postgraduate students' projects, fieldwork, lab work, placements as appropriate

12. Lead team meetings and committees as appropriate and provide support and guidance to other staff as appropriate.

13. Undertake personal and professional development activities in line with agreed appraisal and development programme to enhance personal knowledge and contribution to relevant activities. This may include gaining a Doctoral qualification if not already achieved.

Organisation Chart (In the chart below: RCATS: Research Capacity Transformation Scheme), LES: Department of Life and Environmental Sciences, BU: Bournemouth University, PDRF: post-doctoral research fellow, PGR: postgraduate researcher. Solid line: line management, dashed line: collaborative relationship



Dimensions

This PDRF post is part of the project 'Resolving the extinction crisis: sustainable and technological solutions for biodiversity and society', funded by the Research Capacity Transformation Scheme. The project team comprises of four PDRAs (including this post), five PhD studentships, a project management team coordinated by the PI, and a wider network of academics within Bournemouth University and external partners - all working on contemporary issues relating to reversing biodiversity loss.

Contacts:

Internal: RCATs project team, LES/ BU academic collaborators, technical and support staff within the university

External: Environment Agency, Lotek

Challenges What are the most difficult, complex or challenging parts of the job

The most complex part of the job relates to the technical challenges of the development and validation of analytical assays for the quantitative measurement of chronic physiological stress responses of animals. The role will require a variety of sample preparation techniques as dictated by the various matrices (which may include hair/fur, scales, feather in addition to biological fluids. Experience in targeted and untargeted mass spectrometry for trace level analytes is required, and the ability to analyse complex data sets to enable meaningful interpretation is likely to be a challenging aspect of this role.

Information Governance Responsibilities

Data User

i. Comply with the associated data protection, information security, information management and information technology regulations, policies, processes and procedures.

Additional Information

The purpose of the job description is to indicate the general level of responsibility and location of the position. The duties may vary from time to time without changing their general character or level of responsibility.

BU is an equal opportunities employer which values a diverse workforce. The post holder must at all times carry out their responsibilities with due regard to the University's Dignity, Diversity and Equality Policy Statement.

Our highly skilled and creative workforce is comprised of individuals drawn from a broad cross section of the globe, and who reflect a variety of backgrounds, talents, perspectives and experiences to build our global learning community. Through fused activity, the post holder must have an understanding of and commitment to promoting a global outlook.

All employees have an obligation to be aware of the University's Sustainability Policy, Climate and Ecological Crisis Action Plan, Travel Plan and associated documents, and to ensure that they carry out their day-to-day activities in an environmentally responsible manner and inspire students to do the same.

September 2024

Person Specification

Position / Job Title: Post-Doctoral Research Fellow in LCMS Position No: POSN105400	Faculty / Service: Sci-Tech/ Life and Environmental Sciences Date: September 2024

SELECTION CRITERIA	**E**ssential / **D**esirable
Knowledge (including experience & qualifications)	
Expertise in analytical chemistry, with specialism in LCMS (and ideally LC-QTOF) for quantitative analysis – achieve a doctoral qualification (or close to completion)	**E**
Expertise in measurement of chronic physiological stress responses of animals using analytical instrumentation	**D**
Experience of a range of sample preparation techniques as relevant to the project	**E**
Experience of designing and conducting validation experiments	**E**
Expertise in maintenance and calibration of LCMS systems	**E**
Experience of publishing research outputs	**E**
Experience of presenting research within and beyond academia	**D**
Experience in collaboration with researchers from other disciplines	**D**
Familiar with current developments in research and scholarship with ability to identify appropriate research options, methods and theoretical perspectives	**E**
Skills	
Ability to design and execute validated LCMS methods for quantitative targeted analysis and analyse the resulting data.	**E**
Ability to perform untargeted HRMS analysis using LC-QTOF systems	**D**
Excellent communication skills, both orally and in writing, and the ability to communicate research findings to different audiences.	**E**
Strong organisational skills	**E**
Strong writing abilities	**E**
Effective team working skills	**E**
Ability to reason accurately and quickly and handle complex situations.	**E**
Attributes	
Analytical	**E**
Collegiate	**E**
Commitment to high quality research	**E**
Initiative	**E**
High level of attention to detail	**E**
Motivated to succeed	**E**