



Job Title: Biomolecular Research Technician

Grade: 5

Salary: £26,707 to £31,236 per annum, pro-rata

Hours/Contract: Part-time, (0.6 fte, 22.5 hours per week) fixed term contract for up to 2 years

Department: School of Archaeology and Ancient History

Job Family: Technical and Experimental

Reference: 13012

Role Purpose

This role is part of the UKRI-FLF funded Bioarchaeology and Tuberculosis Evolution project. You will prepare samples of bone and calculus for genetics, metabolomics and proteomics. You will work closely with the palaeopathologist and metabolomics PDRAs and communicate with external project collaborators. You will contribute to and support additional projects which are ongoing in the Biomolecular Laboratory. You will plan and prioritise your own time.

Main Duties and Responsibilities

Laboratory and Facility Management

- Ensure laboratory facilities and equipment are maintained to a high standard.
- Ensure that general stocks and consumables are maintained in line with ongoing research projects.
- Adhere to and advise others relating to SOPs (Standard Operating Procedures) used by the Biomolecular Laboratory Group.
- Oversee sample management, storage procedures, and database management for studies both within the laboratory and incoming samples from collaborative projects. Sample preparation of human skeletal remains for metabolomics, mice bones for metabolomics.
- Liaise with curators of external collections and materials, working to agreed activity and loan schedules.
- Maintain and update risk assessments, COSHH and protocol documentation, and HTA compliance in partnership with the academic lead.

Research Support

- Undertake directed sampling and macroscopic analyses as directed by the Principal Investigator (PI) on Medieval and Post-Medieval archaeological human skeletal remains from the UK, particularly the Northamptonshire region.
- Analyse and interpret data/test results and present findings accurately.
- Organisation and archiving of skeletal material, documentation, and database.
- Receive and check or propose and agree a specification for the work to be done.





- To facilitate the sample collection, storage and management of research studies from collaborative projects undertaken in the Biomolecular Laboratory.
- To assist in supporting research students in the use of specific methods or approaches under the direction of their supervisor.

Training

- Provide guidance and support to junior colleagues through on-the-job training/coaching in own area, in the use of equipment and techniques.
- To be engaged in an ongoing process of personal development from a technical and laboratory management standpoint and attend the appropriate training.

Internal and External Relationships

- Communicate and liaise with colleagues and collaborators involved in the above-mentioned research programme and other projects the team is undertaking based at Leicester (School of Heritage and Culture, HYPIR, Sociology, Respiratory Medicine and the Leicester Precision Medical Institute), on a regular basis to review and plan research activities.
- Work closely with other members of the project team
- Work with external collaborators including Northamptonshire Archaeological Resource Centre, academic institutions and museums.
- Communicate with the PI, Technical Service Manager and core staff on a regular basis to discuss ongoing lab issues and health and safety matters.
- Communicate and liaise with external research collaborators including curators of skeletal material, academic institutions, and museums as directed by the PI.

Planning and Organising

- With guidance from the PI, or Technical Services Manager, plan own work and prioritise research and project/laboratory activities on a regular basis, including co-ordinating resources and maintenance of samples and equipment.
- Planning sampling workflow for human skeletal remains and mice remains. Recording and organising materials coming in and out of the lab in designated database. Organising return of skeletal material to curators, or arranging destruction.
- You will be required to effectively manage your own time to deliver on the priorities of the research programme with the support of your line manager.
- Attend suitable training courses or equivalent and be proactive in terms of continued professional development.

Qualifications, Knowledge and Experience

Essential

- Technical or scientific education to ONC or NVQ3 level (or equivalent experience)*.





- Experience in large scale sample preparation, labelling, and distribution in a biomolecular laboratory*.
- Knowledge of human skeletal anatomy.
- Knowledge of relevant Health and Safety procedures for a category 2 biological lab.
- Practical experience and knowledge of applying research skills and techniques to deliver outputs on time and to the required quality.
- Experience in sample preparation for mass spectrometry, especially LC-MS*.

Desirable

- Honours degree and/or relevant experience in the field of a Biology based discipline, Biological Anthropology, Osteoarchaeology or Archaeological Science*.
- Experience of complying with the Human Tissue Act*.
- Experience with microbalances, microscopes, chemicals, and homogenisation equipment.
- Experience of preparation of large scale samples (organic and inorganic) preparation, labelling, and distribution.
- Experience working in a category 2 or 3 laboratory.
- Demonstrable experience in interdisciplinary working.
- Experience working in an academic environment.
- Experience working with osteological collections and/or in metabolomics.
- Experience in the handling and processing of biological tissues and samples.

Skills, Abilities and Competencies

Essential

- Ability to demonstrate research potential and enthusiasm for the subject area and contribute to delivering high quality research*.
- Excellent analytical and problem-solving skills.
- Evidence of continued personal development of subject expertise*.
- Ability to work as part of a team and support the broader research group.
- Excellent communication skills – written* and verbal.
- Ability to prioritise tasks within agreed work schedules.
- Commitment to continuous professional development (CPD).
- Willingness to participate in workshops and conferences to support the dissemination of results and findings

****Criteria to be used in shortlisting candidates for interview***





Reason for Fixed Term Contract

The reason for the fixed term contract is stated in section 1.9 in the summary of contractual terms in your contract of employment.

Criminal Declaration

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

Supporting University Activities

As a University of Leicester citizen, you are encouraged to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We encourage all staff as citizens to work flexibly across the University if required. If supporting these activities is likely to affect your workload, please speak to your line manager in the first instance

University Values

Inclusive - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

Inspiring - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

Impactful - As Citizens of Change we will generate new ideas which deliver impact and empower our community

Freedom of Speech

The University is committed to upholding freedom of speech and academic freedom within the law throughout our recruitment processes. We ensure that all candidates are considered based on merit and suitability for the role, without regard to their lawful viewpoints or the expression of challenging or controversial ideas. Our recruitment policies and practices are designed to protect applicants from discrimination or adverse treatment on the basis of their opinions, and to foster an environment where open debate and diverse perspectives are valued as essential to our academic mission.

Equity and Diversity

We believe that equity, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.

