

Annex

Post title: Research Fellow in In Vitro Lung Models

Grade: UH7 (UH07AC, F30)

School/Department: School of Health, Medicine and Life Sciences

Responsible to: Principal Investigator

Responsible for: Delivery of project research activities and work packages

MAIN PURPOSE OF THE JOB

The Research Fellow will undertake original research within the Centre for Research in Advanced Therapeutics & Drug Safety (CRATDS) to develop and validate human-relevant in vitro lung and immune-cell models. The models will be used to investigate neutrophil migration across respiratory epithelial barriers and responses to chemical and biological stimuli. The postholder will deliver the project research with substantial day-to-day autonomy under the supervision of the Principal Investigator.

RESPONSIBILITIES AND DUTIES

1. Develop and validate human-relevant respiratory epithelial and immune-cell models, including co-culture or differentiation approaches where appropriate.
2. Design and conduct studies of cell migration or recruitment, epithelial barrier function and inflammatory responses to chemical and biological stimuli.
3. Select and apply appropriate cell-exposure and analytical methods, which may include liquid or aerosol exposure, microscopy, flow cytometry, high-content imaging and plate-based assays.
4. Plan experiments; analyse and interpret quantitative data; maintain accurate research records; monitor consumables and research risks; and report progress against project objectives.
5. Contribute to manuscripts, conferences, project meetings and funding applications; collaborate with academic, technical and external partners; and support relevant teaching or student research projects where appropriate.
6. Work effectively with academic, technical, professional and external colleagues, and support relevant undergraduate or postgraduate research projects.
7. Maintain data integrity and confidentiality, and follow applicable research-governance, health and safety requirements.

This Annex should be read with the generic Research Fellow job description and person specification. It records only the project-specific duties and selection criteria.

SUPERVISION RECEIVED

The Research Fellow in In Vitro Lung Models will work with substantial day-to-day autonomy under the overall direction of the Principal Investigator. They will provide regular progress reports and discuss research risks, priorities and mitigation.

SUPERVISION GIVEN

The Research Fellow in In Vitro Lung Models may provide day-to-day guidance to undergraduate or postgraduate students and junior researchers working on related projects. Formal line management is not part of the role.

RESPONSIBILITY FOR BUDGETS

Responsibility for the project budget rests with the Principal Investigator. The postholder may be required to monitor work-package consumables and expenditure.

RELATIONSHIPS AND CONTACTS

Internal: Principal Investigator; academic, technical and professional staff within CRATDS and the School; undergraduate and postgraduate students.

External: Researchers, co-investigators and professional staff in project collaborations; conference and research-network contacts, as appropriate.

WORKING HOURS AND ANNUAL LEAVE

The hours of work are 37 per week. Any occasional variation required by time-sensitive experimental work will be agreed in advance and managed in accordance with University policy. Annual leave is 35 days plus standard public holidays and four University closure days.

This document outlines the duties required, for the time being, of the post entitled Research Fellow in In Vitro Lung Models to indicate the level of responsibility. It is not intended to be a comprehensive or exhaustive list, and the Principal Investigator may vary duties from time to time where this does not change the general character of the job or the level of responsibility entailed.

PERSON SPECIFICATION

Post title: Research Fellow in In Vitro Lung Models

QUALIFICATIONS & MEMBERSHIPS

Educated with an undergraduate degree, or equivalent level 6 qualification, in a relevant discipline.	Essential
Obtained a PhD or equivalent research experience, in cell biology, immunology, respiratory biology, toxicology, pharmacology, biomedical science or a closely related discipline.	Essential

EXPERIENCE

Practical experience of mammalian cell culture, including handling and maintaining human or mammalian cell lines.	Essential
Relevant experimental research experience in cell biology, respiratory biology, immunology, toxicology, pharmacology, biomedical science or a related discipline.	Essential
Experience of respiratory epithelial or immune-cell models, including co-culture or differentiation approaches.	Desirable
Experience of functional cell assays relevant to migration or recruitment, barrier function or inflammatory responses.	Desirable
Experience of microscopy, flow cytometry, high-content imaging or plate-based methods.	Desirable
Experience of liquid, aerosol or other cell-exposure systems.	Desirable
Experience of image-analysis or statistical software relevant to cell-based research.	Desirable

KNOWLEDGE AND ABILITY

Knowledge of data integrity, reproducibility and safe laboratory practice relevant to the role.	Essential
Ability to plan and manage work independently and meet work-package objectives.	Essential
Ability to collaborate within a multidisciplinary team and communicate findings clearly in written and oral forms.	Essential
Ability to use image-analysis or statistical software such as ImageJ, CellProfiler, GraphPad Prism, R, MATLAB or equivalent.	Desirable

BEHAVIOURS AND ATTRIBUTES

Self-motivated and able to work with substantial day-to-day autonomy.	Essential
Collaborative, respectful and inclusive when working with colleagues, students and partners.	Essential
Committed to safe, responsible and reproducible research practice.	Essential

We are a values-led organisation. These values inform and sustain all our activities and reflect who we are as people. They tell everyone what is important to us and what drives us. We value:

Friendliness	Ensuring we act in a respectful and inclusive manner
Ambition	Supporting those determined to achieve
Collaboration	Encouraging working together for positive, shared outcomes
Enterprise	Being impact led and placing enterprise at our core
Student success	Working in partnership with our students and empowering them to reach their potential.

Shared Responsibilities

The University of Hertfordshire's vision is to transform lives, whether that's our students or staff. This means whoever you are, we will support you to reach your full potential to succeed during your career with us. Our staff community comprises innovative individuals who want to develop, excel and add value by doing their very best. We each embody the University values to be friendly, ambitious, collegiate, enterprising and student focused. We are passionate about promoting and working in a diverse and inclusive staff community. Everyone who works for the University is encouraged to share in that sense of belonging, entitled to feel they are managed fairly, are valued and accepted, and understand they are being supported to succeed.

The University of Hertfordshire adheres to the principles of the San Francisco Declaration on Research Assessment (DORA). We will evaluate applicants on the quality of their research contributions (where requested or provided as part of the recruitment and selection process), rather than where the research is published, and use any publication metrics responsibly.