

	Grade:	
Research Assistant		AC1
Pharmaceutical, Chemical	Date of Job	November
& Environmental Sciences	Evaluation:	2018
Academic Professor		
None		
None		
Co-PI, UCL, Post-doctoral researcher at UCL		
	Pharmaceutical, Chemical & Environmental Sciences Academic Professor None None	Research Assistant  Pharmaceutical, Chemical & Environmental Sciences  Academic Professor  None  None

This role profile is non-contractual and provided for guidance. It will be updated and amended from time to time in accordance with the changing needs of the University and the requirements of the job.

### **PURPOSE OF ROLE:**

We are seeking a post-doctoral worker to join a team responsible for the design and work-up of *in vitro* and *in vivo* mouse study evaluations of novel therapeutics for improved cholesterol, glucose and weight gain. This is a cross-functional role that will involve collaboration with the UCL. This post is funded by the University of Greenwich Concepts Fund for 6 months.

The person appointed will be expected to:

- Engage in research and enterprise in the area of metabolic profiling and in so doing contribute to the research profile of the Department/School and to the 2021 REF submission of the Medway Metabonomics Research Group
- Contribute to the delivery of some high quality, innovative and effective education and training in the specialist areas of research and enterprise
- Contribute to the effective operation of the Medway Metabonomics Research Group and any associated facilities

#### **KEY ACCOUNTABILITIES:**

# Team Specific:

- A team player who can work independently when necessary
- Identify and utilise sources of expertise; internal or external, where appropriate
- Coordinate with other groups and individuals, especially at UCL and Imperial College, to achieve research aims
- Work with technical lab staff, scientists and professors to ensure high quality, high



- integrity and timely scientific and technical data is generated and input into research projects
- Engage in subject specific research leading to the publication and/or dissemination of original work
- Contribute to the research profile of the academic unit and to the REF submission of metabolic profiling research group
- Undertake defined research and/or enterprise activities under the leadership of a principal investigator
- Support the development of funding bids which contribute to the acquisition of internal and external resources to fund research and/or enterprise
- Support the disseminate research and enterprise findings at national conferences and symposia.
- Engage with the national or regional public/cultural sectors/business, industry/professional bodies in relation to research or enterprise
- Support the supervision of PGR students
- Contribute (under the guidance of an experienced lecturer) to the delivery of some high quality, innovative and effective education and training in specialist areas of research and enterprise,
- Supervise undergraduate and masters research projects if requested.
- Proactive contribution to research group/department/school plans, activities and efficient working practices
- Promote your work and represent your discipline and the work of the University internally and externally.
- Contribute to the continuous improvement of the student experience
- Effective cross working with Professional Services to support students
- Support relationship management and engagement with key national or regional public/cultural sectors/business, industry/professional bodies in relation to research and/or enterprise
- Contribute to the general academic administrative work of the Department/School and Faculty

## Generic:

- Assist the Medway Metabonomics Research Group in achieving the Department/School's KPIs
- Contribute to department/school plans, activities and efficient working practices
- Demonstrate a commitment to equality, diversity and inclusion through engagement with University initiatives
- Promote your work and represent your discipline and the work of the University internally and externally, and take a proactive approach to ethical, good practice



# Managing Self

- Highly motivated
- Demonstrates advanced problem solving abilities
- Has strong influencing skills
- A highly effective communicator, both orally and in writing
- Keep abreast of developments within the field and seek continuous improvement of own professional practice
- Actively participate in established professional development framework activities
- Behave in a manner which reflects the University values and creates a positive environment for work and study

# **Core Requirements**

- Maintain strict confidentiality of the work of the project
- Ensure compliance with Health & Safety regulations
- Adhere to and promote the University's Equality and Diversity policies
- Support and promote the University's Sustainability policies, including the Carbon Management Plan, and carry out duties in a resource efficient way, recognising the shared responsibility of minimising the university's negative environmental impacts wherever possible

# **Additional Requirements:**

- A flexible approach to working in a dynamic project environment
- The ability to multi-task and prioritise work as required
- Any other duties commensurate with the post and grade as agreed with the Head of Department/School and the PVC of the Faculty

## **KEY PERFORMANCE INDICATORS:**

Performance Indicators will be established in consultation with the Head of Department/School as part of the post-holder's annual Appraisal and Professional Development Review but will include:

- produces high quality scientific results in a timely manner
- analyses results using appropriate univariate and multivariate statistics in a timely fashion
- good knowledge of chemistry, biochemistry and biology used to inform interpretation of results
- high quality, timely and comprehensive record-keeping
- frequent and high quality communications with all team members and supervisors

# **KEY RELATIONSHIPS (Internal & External):**

- Supervisor/Professor, University of Greenwich
- Co-leader of the research collaboration, UCL
- Work closely with postdoctoral research associate at UCL
- Work closely with NMR staff at the University of Greenwich for some NMR facilities
- Work closely with academic staff at Imperial College London for core NMR studies



## PERSON SPECIFICATION

#### Essential

#### **Experience**

- Subject specific research experience
- Awareness of external funding for research
- Specialist knowledge in the disciple to support the research area and to deliver some specialist teaching or training programmes.
- Previous successful design, execution and analysis of research projects in NMR-based metabonomics
- Good understanding of genetics, cellular metabolism, metabolic pathways, and molecular structures
- Good understanding of modern analytical technologies for molecular structure elucidation especially nuclear magnetic resonance spectroscopy
- Expertise in the use of NMR spectroscopy-based methods for biomarker identification, including 2D NMR methods such as COSY, TOCSY, HSQC, HMBC and STOCSY
- Good understanding of and experience in the use of multivariate statistics to analyse NMR-based metabonomics datasets in order to classify subjects and to discover novel biomarkers
- Good ability in the use of Microsoft Office tools including Word, Excel and PowerPoint, or related programmes

## Skills

- Specialist research skills appropriate to the appointment
- Effective communication skills including good written and verbal communication skills

#### Desirable

## **Experience**

- Experience of programming and relevant software to support research
- Expertise in the use of multivariate statistics to analyse NMR-based metabonomics datasets in order to classify subjects and to discover novel biomarkers
- Demonstrated ability to understand and interpret the significance of biomarkers from a biochemical and physiological perspective
- Author or co-author of research published in peer reviewed journals or conference proceedings
- Supervision of student research activities
- Supervision of postgraduate research students
- Student care and pastoral provision
- Dissemination of research and/or enterprise findings at conferences or symposia
- Engagement with national or regional public/cultural sectors/business/industry/professional bodies in respect of research

#### Skills

 Ability to write scientific papers in a clear, coherent and concise style



- Good numerical skills and a good understanding of basic statistical methods
- Able to work successfully independently, under guidance
- Able to work effectively as part of a team spanning academic members across two or more institutions
- A completer/finisher approach with an ability to deliver results of good quality on time
- Ability to manage several tasks concurrently, work in an organised fashion, and to prioritise work effectively
- A desire to learn and to understand
- Good understanding of and compliance with safe working procedures in the University with respect to chemical, biological and physical hazards
- Outstanding organisational, IT communication and interpersonal skills

#### Qualifications

- A relevant degree, and a PhD (or working towards a PhD) in a relevant subject eg Chemistry, Biochemistry, Toxicology or Pharmacology
- English and/or if from a country where English is not the first language (as recognised by the UKBA), a language proficiency score of at least IELTS 6.5 (in all elements of the test) or TOEFL 100 ibt (600 pbt) is required, unless the degree above was taught in English and obtained in a majority English speaking country, e.g. UK, USA, Australia, New Zealand, etc, as

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# recognised by the UKBA

# Personal attributes

- We are looking for people who can help us deliver the <u>values</u> of the University of Greenwich: Excellence, Determination, Inclusivity, Ambition and Creativity
- This studentship may require
   Academic Technology Approval
   Scheme approval for the successful
   candidate if from outside of the
   EU/EEA
- Ability to travel between the University of Greenwich's Medway campus (base for this fellowship), the collaborator's campus at UCL and also the Imperial College campus (NMR spectroscopy).

#### Personal attributes

N/A