Research Associate
for the H2020 project 653409 TOXI-triage.
Integrated and adaptive responses to toxic emergencies for rapid triage:
engineering the roadmap from casualty to patient to survivor
Job Ref: REQ17235

As part of the University’s ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

TOXI-triage is a large multi-disciplinary project with a budget of €12M that runs until September 2019. The project has eighteen partners across seven countries who will deliver 120 working years in nine work packages. The project involves: concepts of operation for emergency responses to crises, CBRN issues, clinical studies, advanced detection and IT systems, enterprise and impact activities alongside ethical and communication challenges. The underpinning detection and analytical science is a central element of the whole endeavour and will be this roles focus.

This post will be hosted in the Department of Chemistry working with Professor Paul Thomas, and represents an opportunity to be involved in a strategically important project. The core duties will involve supporting end-users and clinical researchers across all work packages involved with the use of ion mobility spectrometry and gas chromatography mass spectrometry with non-invasive breath, skin and saliva sampling. The post will require working and liaison with a range of partners across Europe.

Job Description

Job Grade: Specialist and Supporting Academic, Grade 6

Job Purpose
- Provide close and expert technical support to clinical researchers and users of gas chromatography mass spectrometry (GC-MS) and ion mobility (GC-IMS) systems in clinical and emergency medicine applications.
- Evaluate, and implement quality systems for breath analysis with GC-IMS and GC-MS.
- Study, evaluate and develop data processing and procedures for GC-IMS data.

Job Duties

Research and organisation
- Use rigorous statistical process control for research instruments deployed to clinics and other research centres.
- Liaise with clinical partners to design and enact in-clinic experimental studies to optimise recovery of diagnostic molecular markers of toxicity injury from either skin, saliva or breath samples for in-situ analysis by GC-IMS.
- Design and implement volatile metabolite data processing and data modelling of breath, skin and saliva analyses.
Reporting and communication
- Work as part of a team, whilst delivering independent and self-directed activity.
- Work as part of the project team to assist in the writing of project reports, research papers, conference presentations, and operational protocols.
- Organise and distribute large and complicated portfolios of data.
- Build rapport with the project partners and act as a conduit to project partners across the EU.
- Publish research in peer reviewed journals.

Monitoring and Compliance
- Work with project partners to ensure instruments and technical systems are maintained and operated within specifications and calibrations.
- Monitor proficiency testing and statistical-process-control data and lead pre-emptive interventions to minimise and suppress project disruption from validation and/or instrument failures.
- Advise research partners on technical operational matters, and if required travel to their location to provide close support.

Other activities
- Complete an agreed programme of professional development.
- Assist in the management and operation of the laboratories and research systems in which this project is based.
- Engage in training programmes in the University (e.g. through Staff Development) which are consistent with your needs and aspirations and those of Chemistry and Loughborough Design School.
- Undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Points to Note
The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions
All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University’s Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University’s Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University’s mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

Organisational Responsibility
Reports to the Principal Investigator, Prof. C. L. Paul Thomas
Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

1 – Application
2 – Test/Assessment Centre/Presentation
3 – Interview

Essential Criteria

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<th>Area</th>
<th>Criteria</th>
<th>Stage</th>
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<tr>
<td>Experience</td>
<td>Gas chromatography-mass spectrometry</td>
<td>1, 3</td>
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<td></td>
<td>Management of large and complicated data sets</td>
<td>1, 3</td>
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<td></td>
<td>Preparation of Scientific data, reports, papers and communications</td>
<td>1, 3</td>
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<td>Working to fixed deadlines</td>
<td>1, 3</td>
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<tr>
<td>Skills and Abilities</td>
<td>Demonstrated ability to prepare cogent and well written reports and/or papers</td>
<td>1, 3</td>
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<td>A record of accomplishment in delivering presentations to a range of different audiences clearly and effectively</td>
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<td>Flexible, methodical and conscientious approach to work</td>
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<td>Ability to work both independently and as a team member</td>
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<td>Excellent IT skills</td>
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<td>Training</td>
<td>Willingness to undertake appropriate further training and to adopt new procedures as and when required</td>
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<td>Qualifications</td>
<td>Relevant postgraduate qualification</td>
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<td>Relevant PhD</td>
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<td>Other</td>
<td>Commitment to observing the University’s Equal Opportunities policy at all times</td>
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<td>Evidence a good working knowledge of equal opportunities and understanding of diversity in the workplace</td>
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Desirable Criteria

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<th>Area</th>
<th>Criteria</th>
<th>Stage</th>
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<tr>
<td>Skills and Abilities</td>
<td>Sensor development</td>
<td>1, 3</td>
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<td>Experience of running independent project work</td>
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Conditions of Service

The position is full-time and fixed-term until September 2019. Salary will be on Specialist and Supporting Academic Grade 6, £29,301 to £31,076 per annum, at a starting salary to be confirmed on offer of appointment.

The appointment will be subject to the University’s normal Terms and Conditions of Employment for Academic and Related staff, details of which can be found [here](http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html).

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at [http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html](http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html).
We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see http://www.lboro.ac.uk/services/hr/athena-swan/

**Informal Enquiries**

Informal enquiries should be made to Professor Paul Thomas by email at c.l.p.thomas@lboro.ac.uk or by telephone on +44 (0)1509 222549

**Application**

The closing date for receipt of applications is **18 April 2017**.