Job Description

Imperial College
London

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Research Assistant/Associate</th>
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<tbody>
<tr>
<td>Department/Division/Faculty</td>
<td>Bioengineering</td>
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<tr>
<td>Campus location:</td>
<td>South Kensington</td>
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<tr>
<td>Job Family/Level:</td>
<td>Academic and Research, Level A/B</td>
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<tr>
<td>Responsible to:</td>
<td>Dr Huai-Ti Lin</td>
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<tr>
<td>Key Working Relationships (internal):</td>
<td>Undergraduate and postgraduate research students in the Sensorimotor Systems and Biology-Informed Technology group, the Departmental Laboratory Manager, other researchers and technical support staff in the Department of Bioengineering</td>
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<td>Contract type:</td>
<td>Full-time, fixed-term for 12 months</td>
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Purpose of the Post
The overall aim of the research is to reveal how directed gaze control in the dragonfly impacts the visual guidance during dynamic aerial interactions. This work requires performing high-speed 3D kinematics recordings of flying insects and formulate behaviour models to analyse the data. Please see the lab website for additional information (htlinlab.com).

Key Responsibilities

Main Duties:
- To take initiatives in the planning and execution of research
- To identify and develop suitable techniques and apparatus for the collection and analysis of data
- To conduct data analysis and to ensure the validity and reliability of data at all times
- To maintain highly organised and maintain an accurate record of experimental work
- To write reports for submission to research sponsors
- To publish in high quality journals and to present data at national and international meetings.
- To provide supervision of undergraduate and postgraduate research students and research assistants.
- To attend relevant workshops and conferences
- To direct the work of small research teams within the lab
- To assist in the day-to-day management of the laboratory
- To participate in Group research meetings and internal seminars
- To develop contacts and research collaborations within the College and the wider community
- To promote the reputation of the Group, the Department and the College
- To actively participate in the research programme of the Group
- To collaborate with scientists within Imperial College and elsewhere as appropriate
- To contribute to the smooth running of the Group’s laboratories and, facilities with technicians and students within the laboratories.
- To comply with the College and Division safety practices and to attend safety training when appropriate
- Any other duties as may be deemed reasonable by Head of group as well as Head of Division/Department/Section

Where Imperial or funder conditions necessitate, you will be required to complete timesheets for your work on projects in a timely manner.

Other Duties:
- To undertake any necessary training and/or development
- To undertake appropriate administration tasks
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- To observe and comply with all College policies and regulations, including the key policies and procedures on Confidentiality, Conflict of Interest, Business Continuity, Data Protection, Equal Opportunities, Ethics related, External Interests, Financial Regulations, Health and Safety, Imperial Expectations (for new leaders, managers and supervisors), Information Technology, and Smoking.
- To undertake specific safety responsibilities relevant to individual roles, as set out on the College Health and Safety Structure and Responsibilities web page: www.imperial.ac.uk/safety/policies/organisationandarrangements.
- To undertake Business Continuity responsibilities relevant to individual roles

Job descriptions cannot be exhaustive and the postholder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

Imperial College London is committed to equality and valuing diversity

Person Specification

<table>
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<tr>
<th>Requirements</th>
<th>Essential (E)/ Desirable (D)</th>
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<tr>
<td>Candidates/post holders will be expected to demonstrate the following</td>
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**Education and Qualifications**
- PhD (or equivalent) in neuroscience, neurobiology, biomechanics or a closely related discipline. (E)
- At least 3 years of post-graduate laboratory experience (D)

**Experience**
- Experience and expertise in fine-scale electrophysiology or compatible skills that demonstrate the ability to work with delicate insects (E)
- Practical experience within a similar research environment and publication in relevant refereed journals (E)
- Experience in high-speed kinematics tracking (E)
- Experience in managing/mentoring a research team (D)
- Experience in custom instrumentation (D)

**Knowledge**
- Knowledge on visual neuroscience (E)
- Knowledge on basic biomechanics (E)
- Knowledge on optomechanical systems (e.g. cameras, projectors) (D)

**Skills & Abilities**
- Scientific computing skills which enable the analyses of kinematics data (E)
- Proficiency in Matlab, Python, or C++ (E)
- Ability to conduct a detailed review of recent literature (E)
- Ability to develop and apply new concepts (E)
- Excellent verbal communication skills and the ability to deal with a wide audience (E)
- Excellent written communication skills and the ability to write succinctly for publication (E)
- Ability to direct the work of a small research team and motivate others to produce a high standard of work (E)
- Ability to organise/prioritise work in response to deadlines and resources (E)
- Scientific illustration skills such as Photoshop & Illustrator (D)

**Other**
- Willingness to work as part of a team and to be open-minded and cooperative (E)
- Discipline and regard for confidentiality and security at all times (E)
- Willingness to undertake any necessary training for the role (E)
- Willingness to travel both within the United Kingdom and abroad to conduct research and attend conferences (D)
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Please note that job descriptions cannot be exhaustive and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to follow the 7 Imperial Expectations detailed below:

1) Champion a positive approach to change and opportunity
2) Encourage inclusive participation and eliminate discrimination
3) Communicate regularly and effectively within and across teams
4) Consider the thoughts and expectations of others
5) Deliver positive outcomes
6) Develop and grow skills and expertise
7) Work in a planned and managed way

Employees are also required to comply with all College policies and regulations paying special attention to:

- Confidentiality
- Conflict of Interest
- Data Protection
- Equal Opportunities
- Financial Regulations
- Health and Safety
- Information Technology
- Smoking
- Private Engagements and Register of Interests

They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the College Website Health and Safety Structure and Responsibilities page.

The College is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see https://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/

The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College’s care are treated with full respect, and that all staff involved with this work show due consideration at every level. http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research/

Committed to equality and valuing diversity, we are an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Disability Confident Employer and work in partnership with GIRES to promote respect for trans people.