



**Trinity College Dublin**  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin

## Job Description

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<b>Comp ID:</b>	038571
<b>Job Title:</b>	Experimental Officer (Microscopy and Imaging)
<b>School/Department:</b>	School of Biochemistry and Immunology
<b>Job Category and Level:</b>	Professional, Administrative & Support;

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### The Purpose of the Role

The **Microscopy and Imaging Experimental Officer** will manage high-end microscopy systems, supporting research projects, and ensuring the facility remains at the forefront of imaging technologies. This role is part of **Trinity Cell Analysis Technologies** ([www.tcd.ie/Biochemistry/research/facilities/](http://www.tcd.ie/Biochemistry/research/facilities/)) in the School of Biochemistry and Immunology which supports researchers across academia and industry. These facilities are available to, and used by, researchers both within the School, the wider TCD community and those external to the College, so are a vital part of the TCD research infrastructure.

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### Context

Trinity College Dublin is Ireland's leading university, and the School of Biochemistry and Immunology contributes significantly to the reputation of the university due to the School's recognized record of world-class teaching and research. The school has been successful in obtaining funding from a wide range of national and international grant agencies, and has a culture of successful research collaboration, entrepreneurship and research-based teaching. Reporting to the Head of School, the appointee will be a key member of staff, ensuring the continued success of the School. The School is entirely housed in the Trinity Biomedical Sciences Institute (TBSI) ([www.tcd.ie/biosciences](http://www.tcd.ie/biosciences)). We currently have a bronze award for Athena Swan and are committed to equality, diversity and inclusion. We particularly welcome applications from female candidates. Our School is willing to discuss particular requirements or issues that may be important for individual applicants.

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### Main Responsibilities

The successful candidate will manage the Microscopy and Imaging Facility in the School of Biochemistry and Immunology. They will oversee daily operations, provide expert training, and

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contribute to the research and teaching mission of the School. Oversight and support will be provided through the Facility's Academic Director. Duties of the post will include the following:

#### **Facility Management**

- Oversee the operation, maintenance, and calibration of advanced microscopy and imaging systems, such as fluorescent and confocal microscopes, as well as some histology instrumentation.
- Manage facility access, including data management, booking systems, equipment usage and tracking.
- Manage the facility budget, including procurement, service contracts, and consumables.
- Ensure compliance with health, safety, and quality assurance standards.
- Provide occasional support for allied technologies (e.g., TEM, cytometry, metabolomics).

#### **Research Support**

- Collaborate with researchers to design and execute imaging experiments, including sample preparation, data acquisition, and analysis.
- Develop and optimize protocols tailored to specific research needs.
- Contribute to grant applications and project planning by advising on imaging technologies and methodologies.

#### **Training and Education**

- Deliver hands-on training for facility users, ensuring they can operate equipment and analysis platforms independently and responsibly.
- Provide seminars or workshops on imaging techniques and applications.
- Supervise, train and mentor users of the microscopy and imaging equipment.
- Interact with the imaging community: attending conferences and disseminating knowledge.

#### **Strategic Development**

- Stay updated on emerging microscopy and imaging technologies and recommend upgrades or new acquisitions to maintain state-of-the-art capabilities.
  - Foster collaborations within and beyond the institute to enhance the facility's reputation and usage.
  - Contribute to research projects involving advanced imaging techniques, co-authoring publications where appropriate.
  - Any other duties that arise from time to time as directed by the line manager or nominee.
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## Person Requirements

The role-holder will require the following knowledge, skills and attributes for successful performance in the role.

## Qualifications

- A PhD in a relevant field (e.g., biology, biomedical sciences, physics).

## Knowledge

- An understanding of the principles, application and limitations of advanced optical microscopy.
- An understanding of the basis and application of super resolution microscopy with specific application to biological samples.

## Essential Experience

- Extensive hands-on experience with advanced microscopy and/or histology techniques.
- Proficiency in imaging software and data analysis tools (e.g., ImageJ, Imaris, or similar).
- A proven track record in training and mentoring.

## Desirable Experience

- Demonstrated ability to manage a research facility, including budgeting and operational oversight.
- A strong publication record demonstrating the application of imaging techniques to scientific research.
- Experience in grant writing and securing funding.
- Familiarity with software for 3D reconstruction, AI or machine learning based image analysis.
- Hands-on experience with histology techniques.
- Experience in Visium CytAssist spatial transcriptomics.
- Experience with emerging imaging modalities, such as spatial biology, super-resolution microscopy or light-sheet microscopy.
- Experience in allied technologies within the college (e.g., TEM, cytometry, sequencing, proteomics, metabolomics).

## Skills

- Excellent written and verbal communication skills.
- Strong organisational and project management skills.
- Ability to work collaboratively in a multidisciplinary environment.
- Analytical thinking and problem-solving skills, particularly in experimental troubleshooting.
- Dedication to accessing, and providing, learning opportunities in imaging technologies.

### Personal attributes

- Self-Starter.
- Highly organized.
- Strong work ethic. Reliable, Flexible and Effective.
- Strong attention to detail.
- Team player, committed to collaboratively working to fulfill the School's mission.

### Trinity Competencies

In Trinity there are 6 Core Competencies that are applicable to all roles across a range of professional, administrative and support jobs, unlike specialist or technical skills which may be job specific. They provide a common language for describing performance and the abilities/attributes displayed by individuals. They focus on 'how' tasks are achieved, not 'what' is achieved.

Below is a summary definition of the 6 Core Competencies.

	Competency	Summary Definition
1	<b>Agile Leader</b>	Sees the big picture and harnesses opportunities to achieve the University's goals. Creates clear direction for the future and how to get there.
2	<b>Unlocks Potential</b>	Energised, capable and confident to take ownership and responsibility for their development and goals. Motivates, supports and develops people to perform to the best of their ability.
3	<b>Service Ethos</b>	Finds ways to increase stakeholder and customer satisfaction. Builds relationships, is proactive and delivery focused in order to anticipate, meet & exceed expectations.
4	<b>Builds Trusted Relationships</b>	Communicates in a clear and respectful manner building trust and commitment for mutually beneficial outcomes.
5	<b>Decision-making</b>	Confidently makes timely decisions based on knowledge, evidence and sound judgement.
6	<b>Achieves Results</b>	Delivers results by setting direction, planning, executing and evaluating impact.

Candidates that are shortlisted for interview should prepare to be asked questions at interview on all the above competencies as candidates will be assessed on 3 or more of the Trinity competencies including technical competency for the role where relevant to the post.

### **Application Information**

Applicants should submit a Curriculum Vitae and Cover Letter (2 x A4 pages max.). The cover letter should document how the applicant's qualifications and experience address the requirements for the role.

### **Further Information**

Informal enquiries about this post should be made to Prof Derek Nolan (Academic Lead, [denolan@tcd.ie](mailto:denolan@tcd.ie)) or to Dr Barry Moran (Director of Research Technology, [barry.moran@tcd.ie](mailto:barry.moran@tcd.ie)).