

Microscopy Specialist / Imaging Scientist / Research Assistant

[6-month contract full time or 12-month part time]

We are looking for someone...

- interested in optical microscopy and spectroscopy;
- just as excited as we are about understanding tissue structures, how cells interact and the fundamental mechanisms behind several chronic diseases;
- wanting to be part of a new, innovative research facility called Tissue Engineering and Applied Materials (TEAM) Hub which is housed at Carleton University.

What are you going to do?

As a microscopy specialist/imaging scientist/research assistant within the TEAM Hub you will focus on supporting the operation of our imaging infrastructure including a newly acquired super-resolution optical microscope, training new users on the microscope, consulting on imaging experiments, and assisting with the maintenance of the equipment, and ensuring safe and reliable operation of the microscope according to standard operating procedures. Your activities will be embedded in the TEAM Hub platform that allows its users to discover and characterize bioengineered tissues, cells, and other complex biomedical samples. We invite applications for an initial 6-months contract (or a negotiable 1-year part-time) with the possibility of extending for extra years and/or converting it to a full-time position [pending budgetary approvals]. This challenging and interdisciplinary position is at the cross-roads of engineering of advanced materials and tissue models, optical systems for single-cell imaging, microfluidics, cellular biology and microbiology. Initially the position will directly support core TEAM Hub members. As we grow, it will also include work with collaborators and partners.

Your activities will include, among others:

- Manage and operate our imaging systems as well as oversee day-to-day activities in our imaging core;
- Operate in an interdisciplinary team of engineers, microbiologists, cell biologists, chemists, and physicists;
- Provide expertise and support to internal and external groups that are using the TEM Hub imaging facilities;
- Participate in our educational activities.

We ask

As a microscopy specialist/imaging scientist/research assistant, you are ambitious, enthusiastic and creative scientist. You are a team player devoted to research and education. You also have:

- a MSc or PhD degree in engineering, (bio-) physics, biological sciences, or related subject;
- Demonstrated working knowledge of standard optical microscopy techniques including transmitted light, widefield fluorescence, and confocal microscopy, and their application for imaging a range of sample types including live cells, bacteria, and primary tissue specimens.
- Knowledge of advanced microscopy techniques and their operation, including super-resolution imaging (Airyscan), total internal reflection microscopy, fluorescence correlation spectroscopy and two photon imaging.
- Knowledge of image analysis techniques and methods for image quantification.
- Knowledge of Raman spectroscopy and Atomic Force Microscopy is considered beneficial but not a requirement.
- General knowledge of life sciences research practises and sample preparation for microscopy is considered a plus (mammalian cell culture, immunohistochemistry, expression of fluorescent fusion proteins etc.);
- Excellent communication skills are a key requirement. The successful candidate will need to be able to consult on experiments with researchers from multiple disciplines including engineering, physics, and biology.
- A significant portion of the work will be hands-on training new users (who may have limited prior experience with microscopy) with safe and effective use of the equipment. The successful candidate should be able to demonstrate prior experience training students on experimental equipment.
- The ability to exercise sound judgment and provide competent and efficient maintenance of delicate equipment absolute requirement.

We offer

The TEAM Hub encourages internal advancement opportunities. There are plenty of options for personal initiative in a learning environment, and we provide excellent training opportunities. We are offering a unique position in an international environment with a pleasant and open working atmosphere. We offer a competitive gross annual salary, dependent of your expertise and expertise. You are going to work at one of the greenest and most innovative campus in Canada, and at a university that has been chosen as one of the <u>National Capital Region's Top Employer</u>.



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Do you want to apply?

You can apply by sending an email to contact@teamhubottawa.com. Please include a single PDF containing:

- A cover letter briefly stating why you are interested in working with us, and what you hope to gain from this experience (e.g. research experience, collaboration with industry or other departments, developing a particular skill, etc.). Please keep it to a maximum of 2 pages.
- Resume or CV showing academic and/or industry experience;

Applications will be reviewed as they are received. If this ad is still posted, it means we are still looking for our new team member. Although we are eager to have you starting with us as soon as possible, the target start date is flexible. We thank you in advance for applying; If you are selected for an interview you will be contacted.

Equal Opportunities

The TEAM Hub employs a large number of people with very different backgrounds and qualities, who inspire and motivate each other. We want every talent to feel at home in our group and be offered the same career opportunities. We strongly encourage applications from people who are underrepresented at Carleton University and at the TEAM Hub. For more information please visit the Carleton's <u>Equity</u>, <u>Diversity and Inclusion Action Plan page</u>.

The TEAM Hub together with Carleton University is committed to fostering diversity within its community as a source of excellence, cultural enrichment, and social strength. We welcome those who would contribute to the further diversification of our group including, but not limited to: women; visible minorities; First Nations, Inuit and Métis peoples; persons with disabilities; and persons of any sexual orientation, gender identity and/or expression. Furthermore, the TEAM Hub understands that career paths vary and interruptions will not prejudice the assessment process. We invite you to review Carleton's Equity, Diversity and Inclusion Action Plan page for information about our commitment to leadership in the areas of equity, diversity, and inclusion.

Accessibility is a university strategic priority and applicants selected for an interview who require accommodations are invited to contact the us as soon as possible to ensure that appropriate arrangements may be made.

More Information

The TEAM Hub brings together experts in engineering, biochemistry, statistics, cell- and pathobiology, optics, and image processing to elucidate the mechanisms underlying tissue remodeling, healing, and fibrosis. Our primary research focuses on developing tools to identify new therapeutic targets/biomarkers and to improve clinical outcomes for individuals suffering from chronic lung diseases, cardiovascular disease, cancer, and chronic wounds.

For more information about this position or more information about the TEAM Hub activities please contact Dr. Edana Cassol (EdanaCassol@cunet.carleton.ca) and/or Dr. Leila Mostaço-Guidolin (Leila@sce.carleton.ca)