Atomic Force Microscopist Opening at Memorial Sloan-Kettering Cancer Center's Molecular Cytology Core Facility

The Molecular Cytology Core Facility (MCCF) at the Memorial Sloan-Kettering Cancer Center is seeking a Digital Microscopy Technician to support our daily operation through planning and execution of Atomic Force Microscope (AFM) experiments with members of research and clinical laboratories at MSKCC and the Tri-Institute. The MCCF owns and maintains an Asylum Research MFP-3D-BIO atomic force microscope in addition to state of the art optical imaging systems, including Leica SP5 and SP8 confocal microscopes, Zeiss LSM880 with Airy Scan technology, several widefield microscopes, and digital slide scanners.

AFM is experiencing increased attention from biologists as a uniquely useful tool for interrogating various biological systems at optically unattainable spatial resolution. Since its inception three years ago, the AFM facility at MCCF has experienced rapid growth, with collaborations on over 80 projects to date. To meet this high demand, we plan to acquire additional microscopes and staff to operate them. The atomic force microscopist is expected to work as a member of a team at MCCF, focusing specifically on AFM with the goal of continuing the expansion of AFM use and developing new methods and techniques for the scientists at MSKCC and the Tri-Institute. While his/her role would entail a great deal of AFM work, s/he is required to understand and work with optical systems to facilitate and catalyze projects and cross-collaboration.

Please read more about AFM at MCCF here: <u>https://www.mskcc.org/research-advantage/core-facilities/molecular-cytology/atomic-force-microscopy</u>

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Responsibilities:

- Plan and execute AFM experiments for scientists at MSKCC and the Tri-Institute
- Maintain, calibrate, and monitor the performance of the AFM
- Assist in post-acquisition processing and analysis of the data, writing macros and scripts for
- image acquisition, processing and analysis in software such as, MATLAB, FIJI/ImageJ, Imaris, etc.
- Actively market and seek new users for AFM
- Develop and test new methods and techniques for AFM with specific biological applications
- Stay informed with the hardware and software advances in AFM and optical microscopy
- Work in a collaborative settings

Qualifications and Skills:

- Bachelor's or Master's degree in Biomedical Engineering or a related field with very strong computational background and strong technical expertise
- Experience with advanced Atomic Force Microscopy imaging and sample preparation is highly preferred, but training will be provided
- Prior experience with image analysis of both optical microscopy and AFM images would be a significant plus

- Excellent communication skills and ability to work in a team environment are very important
- Strong organizational skills, flexibility in working hours and ability to multi-task. Scientific maturity that enables the individual to understand the purpose of their work and how AFM can help answer biological questions

• Ability to work on several projects simultaneously interest in biomedical research and working with students, post-doctoral and clinical fellows, and faculty performing research requiring generation of 'high end' and state- of-the-art AFM and light microscopy imaging data

Memorial Sloan-Kettering Cancer Center is one of the top ranked leading cancer research and teaching centers, located in Upper East Side of Manhattan. We offer a competitive salary, comprehensive benefits and an excellent working environment.

Please e-mail your CV and cover letter to Madeline Leung,

<u>leungm@mskcc.org</u><<u>http://lists.umn.edu/cgi-bin/leungm@mskcc.org</u>> along with PDFs of any publications that you are author, co-author, or acknowledged</u>