The Delaware Biotechnology Institute is an interdisciplinary research unit at the University of Delaware. The vision is to create a better future through leadership in life science research at the University of Delaware. Most, but not all, of the Institute’s activities involve molecular and cellular studies of living systems and most, but not all, of the activities involve partnerships with other institutions in the region. The Delaware Biotechnology Institute’s mission is to promote research, education, and technology transfer for biotechnology applications to the benefit of the environment, agriculture, and human health. Towards this end, the Institute has several goals: 1) to help the University recruit, retain, and enable a diverse community of exceptional life science faculty, students, and staff; 2) to establish and maintain world-leading life science core facilities and physical infrastructure that support the vision and mission and our partner institutions; 3) to be nationally recognized as a leading biotechnology institute; 4) to create an endowment that will support cross disciplinary life science research activities; and 5) to support the community by promoting entrepreneurship and science communication. Delaware Biotechnology Institute fosters a collaborative and cutting–edge research environment, encourages innovation and technology transfer, and supports ground-breaking discoveries to benefit the environment, agriculture, and human health. The supporting values at DBI are 1) to treat all individuals with respect and dignity; 2) to value differences and recognize that diverse perspectives enhance creativity and scholarship; 3) to aspire to greatness; 4) to embrace innovation and change including a willingness to persist in the face of challenges; and 5) to be worthy of the trust and respect that the Institute has earned. DBI staff will be committed to being proactive in solving problems, serving the needs of the faculty and research groups that rely on the Institute and performing all duties efficiently, with careful attention to detail, and with priority on issues that support the Institute's mission and the team.

Under the limited direction of the Director of Bioimaging, the Associate Scientist provides research support and expertise for confocal microscopy experiments in a multi-user environment. This includes, but is not limited to, training users and/or performing all steps of experimental design, sample preparation, data acquisition and analysis of confocal microscopy experiments.

MAJOR RESPONSIBILITIES:

• Provide consultation, oversight, training and supervision of graduate students, post-doctoral fellows, staff and faculty in the design, implementation, and analysis of microscopy-related projects with special emphasis on confocal microscopy and image analysis.

• Manage confocal data quality control, compliance and integrity, and conduct migration of data to a backup storage system.

• Provide assistance and guidance on advanced live-cell microscopy techniques and sample preparation, including overseeing mammalian tissue cell culture facilities.

• Provide advanced training on confocal and multiphoton microscopy techniques, including spectral unmixing and second harmonic generation imaging.

• Develop or adopt new light microscopy techniques or instrumentation.

• Maintain a broad knowledge of confocal microscopy technology, equipment and/or systems.

• Instruct and annually update a portion of the laboratory section of BISC 850 confocal microscopy course.

• Act as the liaison with the microscope vendor service technicians to ensure that all confocal microscopes are fully functional and meet safety guidelines.

• Evaluate, select and apply standard scientific techniques, procedures and criteria to accomplish a variety of research assignments. Develop competitive research and instrumentation proposals to successfully acquire external funding.

• Collaborate with users and principal investigators on design, analysis, application, and reporting of research projects; teach and advise on techniques.

• Perform research assignments involving a number of variables; apply diversified knowledge of scientific research principles, practices, and protocols in research projects; make recommendations and conclusions which serve as the basis for decision making.

QUALIFICATIONS:

• Master’s degree in biology or other related field and three years related experience, or equivalent combination of education and experience.

• Experience with confocal microscopy and other advanced light microscopy, such as superresolution microscopy.

• Expertise in Zeiss LSM710, LSM780 and LSM880 confocal microscopes is preferred.

• Knowledge of the general principles and theories of molecular and cell biology.

• General understanding of laboratory procedures and protocols.

• Ability to adhere to and enforce safety procedures.

• General understanding of research objectives and proper lab notebook maintenance.

• Computer proficiency and willingness to conduct data management is essential.

• Knowledge of image analysis software with preferred experience using ImageJ, Volocity and Amira.

• Ability to work independently as well as a member of a team.

• Motivation to learn new techniques, flexibility, and ability to interact with a diverse group of research personnel.

• Ability to follow and/or optimize research methodologies and protocols.

• Effective analytical and organizational skills.

• Ability to train and instruct others, and communicate effectively and interact well with people of all ages and diverse backgrounds

For a complete list of requirements and job duties and to apply online, please visit the UDJOBS website at www.udel.edu/udjobs Job ID 104858 .

Equal Employment Opportunity

The University of Delaware is an Equal Opportunity Employer which encourages applications from minority group members, women, individuals with a disability and veterans. The University's Notice of Non-Discrimination can be found at <http://www.udel.edu/aboutus/legalnotices.html>. Employment offers will be conditioned upon successful completion of a criminal background check. A conviction will not necessarily exclude you from employment.