Technical Director, Mass Spectrometry
Biological Sciences
Job Description

Job Summary
Direct technical operations of the Center for Mass Spectrometry, currently centered around our Thermo Scientific Q Exactive HF-X Hybrid Quadrupole-Orbitrap Mass Spectrometer, including teaching, training, outreach, experimental design, budget and staff management, and technical consultation and support.

Take appropriate actions to support a diverse workforce and participates in the College's efforts to create a respectful, inclusive, and welcoming work environment.

Please attach both a current resume and cover letter, combined into a single PDF or Word document.

Essential Functions
Center Operations (25%)
Provide daily management and strategic planning for the Center for Mass Spectrometry (CMS). Develop and maintain relationships with faculty constituents to ensure the CMS remains relevant to research and curricula. Schedule CMS workflow in coordination with course schedules and research projects. Manage the CMS staff and budget. Develop and enforce environmental health and safety guidelines within the CMS. Track and report on equipment usage. With associated faculty, collaborate on long-term planning and acquisition of equipment to keep the CMS current with progressing technologies. Perform other duties as required.

Curriculum Development & Training (20%):
Supervise and teach students from STEM and other academic disciplines in the design and execution of course projects including the selection of techniques, materials and tools, and the safe and appropriate operation of equipment. Develop and present lectures, tutorials and/or short courses in the use and application of the instrumentation, as well as in the analysis and interpretation of proteomic, metabolomic, and other data. These courses, intended for both faculty and students, will offer hands-on instruction in the use of the instrumentation, the dedicated analysis software packages, and related experimental procedures. These offerings will serve as a foundation for the ongoing technical assistance to student/faculty research projects within the Center. In addition, the Technical Director may be involved in outreach activities with K-12 students.

Scientific Instrumentation Operation and Maintenance (30%):
Operate, maintain, and coordinate the use of the Thermo Scientific Q Exactive HF-X Hybrid Quadrupole-Orbitrap Mass Spectrometer and other center instrumentation, as well as the computer software packages related to instrumental operations and the ones dedicated to proteomic data analysis. Monitor equipment performance on a day to day basis. Pursue appropriate training to remain current with instrumentation best practices and protocols.
Consulting (25%):
Serve as a campus-wide consultant to faculty, staff and students for advice on projects not related to standard courses, including Honors projects, Special Studies, SURF projects and faculty research. Collaborate on experimental design and the selection of materials, techniques and tools. Support individual faculty, academic departments and programs, Clark Science Center and the Development Office with technical advice in grant development and fundraising.
All employees are expected to participate in the College's efforts to create a respectful, inclusive, and welcoming work environment.

Minimum Qualifications (knowledge, skills, education, experience, certifications, licenses)
Ph.D. in Biochemistry or related discipline and experience with mass spectrometry is required. Experience working with diverse backgrounds.

Skills
Technical expertise in the safe and effective operation of LC-coupled mass spectrometrometers and experience with complex mixtures analysis, such as in proteomics, metabolomics, or environmental sample analysis, including the use of analytical software packages, are required. Expertise in spectrophotometry and spectrofluorimetry is desirable. Additional requirements: demonstrated ability to teach instrumentation use and techniques to individuals and small groups, demonstrated ability to design research experiments, protocols and methodologies, and demonstrated ability to think creatively to solve problems.

Please attach/upload a current resume and cover letter in order for your application to be considered for this position.

Review of applications will begin
January 4, 2021

About Smith College
Located in Northampton, MA, Smith College is one of the largest women's colleges in the country and is dedicated to excellence in teaching and research across the liberal arts. A faculty of outstanding scholars interact with students in small classes, as advisors, and through student-faculty research projects. The College is a member of the Five College Consortium with Amherst, Hampshire and Mt. Holyoke Colleges, and the University of Massachusetts Amherst. Students cross-enroll and faculty cross-teach across the Five Colleges.
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