

Director of Metabolomics
Roy J. Carver Biotechnology Center
Office of the Vice Chancellor for Research & Innovation
University of Illinois Urbana-Champaign

The Roy J. Carver Biotechnology Center (CBC) provides a state-of-the-art research infrastructure to investigators. Our portfolio includes core research facilities supporting genomics, proteomics, metabolomics, flow cytometry, microscopy-to-omics, and bioinformatics.

CBC has an opening for a Director of Metabolomics to direct and oversee the daily operations and continued development of the Roy J. Carver Biotechnology Center (CBC) Metabolomics Facility that supports the campus medical, life, natural, and agricultural sciences community in detection, quantitation, and characterization of metabolites. This includes dedication to serving and collaborating with the entire Illinois campus community, as well as off campus institutions, companies, and philanthropic organizations across the United States and around the world.

The University of Illinois is an Equal Opportunity, Affirmative Action employer that recruits and hires qualified candidates without regard to race, color, religion, sex, sexual orientation, gender identity, age, national origin, disability or veteran status. For more information, visit <http://go.illinois.edu/EEO>.

DUTIES AND RESPONSIBILITIES:

Support operation and services of the CBC Metabolomics Facility

- Enable the facility to provide cutting-edge GC/MS and LC/MS assays to measure metabolites from a wide variety of sample types (cells, cell medium, biological fluids, plant, or animal tissues, etc.). This will involve intensive effort in assay development and validation.
- Operate and oversee operation of the Facility's analytical equipment. Key instrumentation currently includes the following LC/MS instruments: Thermo Altis triple Quadrupole, Thermo Q-Exactive, a Sciex 5500 QTrap, and a Sciex 6500+ QTrap. As well as the Agilent 689M, 7890A, and 7890B GC/MS instruments.
- Develop, optimize, and trouble shoot raw sample extraction and preparation for downstream instrument analysis, data mining, and statistical analysis.
- Keep up with new technologies and protocols useful for the operation of the facility. This includes determining the need and efficacy for new instruments and writing proposals to obtain internal and external funding for acquisition.
- Identify and lead efforts to apply for and solicit internal and external funding opportunities, in collaboration with PIs to update and/or expand the Metabolomics facility technologies.
- Respond to requests from PIs to develop concepts for new projects and provide consultation on technical and scientific aspects of research projects, protocols, and grant proposals and upon request provide letters of support and technical descriptions for research proposals and publications.
- Actively collaborate with researchers both on and off campus on a wide range of projects and applications, which advance and facilitate cutting-edge applications of Metabolomics facility analyses.
- Provide expertise on experimental design, develop, and implement advanced analytical protocols, as well as provide data processing and analysis solutions.

- Communicate closely with Metabolomics facility users to ensure, at a minimum, that the facility and its staff are included in publication acknowledgements. Wherever possible and appropriate, contribute to publications as a co-author, as well as look for opportunities where the Metabolomics facility staff themselves can lead and complete publication efforts.

Manage and direct operations and resources of the CBC Metabolomics Facility

- Prioritizing, scheduling, and overseeing work projects.
- Direct and supervise the Metabolomics facility research staff, which includes task assignment scheduling, ongoing and annual performance monitoring and evaluation, career development, and leave/travel approval.
- Maintain all major research equipment in the facility in peak operational condition and minimize instrument down time.
- Work closely with Division of Research Safety in maintaining and documenting safe laboratory work environment. This includes Biosafety level 2 protocol.
- Manage timely and accurate billing of users for services provided by the Metabolomics facility and maintain accurate records.
- Provide reports to CBC Administration as requested.
- Oversee and update as necessary facility webpage.
- Maintain a detailed balanced budget for the Metabolomics facility and assist the CBC Associate Director in determining and updating the CBC's user fee structure to ensure that it adequately covers annual operating expenses and instrument service contracts.
- Collaborate closely and conduct research with the CBC Proteomics, Cytometry and Microscopy to Omics, DNA Services, Functional Genomics, and HPCBio facilities and their staff to promote synergism between CBC facilities.

MINIMUM QUALIFICATIONS

- Ph.D. in Science. Chemistry, Physics, Biology, Molecular Biology, Agriculture, or related fields.
- 3 years of experience in metabolomic research using applicable analytical instrumentation with GC/MS and LC/MS.

PREFERRED QUALIFICATIONS

- Ph.D. in Chemistry.
- 5 years of experience in metabolomic research using applicable analytical instrumentation, with preference for practical experience among the following LC/MS instruments: Thermo Altis triple Quadrupole, Thermo Q-Exactive, a Sciex 5500 QTrap, Sciex 6500+ QTrap; as well as Agilent 689M, 7890A, and 7890B GC/MS.
- Experience with informatics analysis of metabolomic data.
- A strong record of related publications especially with LC/MS.
- Experience supervising scientists or technician on research projects.

KNOWLEDGE, SKILLS, AND ABILITIES: Advanced practical and theoretical working knowledge of chemistry, metabolomics, and instrumentation used in metabolomic research. Possess excellent managerial and leadership skill and be able to effectively communicate with staff, colleagues, and facility users. Demonstrated ability to effectively work independently with minimal supervision. Must be able to perform effectively as a team leader

and team member, as well as be able to work independently in a fast-paced environment consisting of multiple and changing priorities, under stringent deadlines. The candidate must also have sound judgment, pay close attention to detail and be completely dependable, reliable, and trustworthy. Preferred: Direct experience in and/or the capacity to quickly proficiently use applicable analytical instrumentation, particularly LC/MS.

SALARY AND APPOINTMENT INFORMATION:

The Director of Metabolomics position is full time, benefits eligible. Salary is commensurate with experience and qualifications. The expected start date is as soon as possible after the closing date. Applicants may be interviewed before the closing date; however, no hiring decision will be made until after that date.

APPLICATION PROCEDURES AND DEADLINE INFORMATION:

To apply for this position, please create a candidate profile at <https://jobs.illinois.edu>, directly apply to our position and upload cover letter, resume, and names/contact information for three references by April 15, 2022. Online application will require names and contact information including email addresses for three professional references. Full consideration will be given to complete applications received by the closing date.

For questions regarding the application process, please call Illinois Human Resources at 217-333-2137. For further information on this specific position, please contact Leslie Lewin Reinhart at lewin@illinois.edu.

The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer. Convictions are not a bar to employment. The University of Illinois System requires candidates selected for hire to disclose any documented finding of sexual misconduct or sexual harassment and to authorize inquiries to current and former employers regarding findings of sexual misconduct or sexual harassment. For more information, visit [Policy on Consideration of Sexual Misconduct in Prior Employment](#).

As a qualifying federal contractor, the University of Illinois System [uses E-Verify](#) to verify [employment eligibility](#). The University of Illinois must also comply with applicable federal export control laws and regulations and, as such, reserves the right to employ restricted party screening procedures for applicants.

University of Illinois faculty, staff and students are required to be fully vaccinated against COVID-19. If you are not able to receive the vaccine for medical or religious reasons, you may seek approval for an exemption in accordance with applicable University processes.