Pacific Northwest NATIONAL LABORATORY

Proudly Operated by Battelle Since 1965

National Institute of General Medical Sciences

Request for Applications

Proteomics Collaborative Research Projects with the PNNL P41 Biomedical Technology Research Resource

The NIH NIGMS P41 Biomedical Technology Research Resource (BTRR) at Pacific Northwest National Laboratory (PNNL) develops new technologies and informatics software tools for mass spectrometry-based proteome measurements. Through the years these advances, driven by the research needs of collaborating biomedical investigators, have contributed to both the field of proteomics as well as advancing measurement platforms.

The P41 BTRR at PNNL is now accepting white papers to apply for proteomics pilot project collaborations in the context of its Driving Biomedical Projects (DBPs) and Collaborative and Service projects (C&S). DBPs and C&S projects involve collaborations between the Resource and other researchers that provide the stimulus for advances in proteomics technology and software tools at the P41 BTRR, while providing key proteomics support for the collaborator's research. Often the resulting data will provide the basis for the submission of new grant applications and/or collaborative publications.

In addition to driving technology or software development in the P41 BTRR, the review criteria for new projects includes an evaluation of its scientific excellence, applicability to biomedical or clinical or translational research, innovation, suitability for the Resource, and a likelihood of meeting successful benchmarks (e.g., subsequent grant submission and/or publication). Please note that no financial support will be provided by the P41 BTRR to the collaborator or collaborating institution; the intent is that the P41 BTRR will fully cover the proteomics research costs of the Proteomics Resource's support for the collaboration. The white paper should outline the scientific focus, how the proposed collaboration would work, its scope, and how the proposed research would draw upon the unique capabilities of the PNNL P41 BTRR Proteomics Research Resource.

The PNNL Proteomics Resource technologies available and being developed will be particularly beneficial for collaborative projects requiring:

- Characterization of very small sample sizes that preclude conventional proteomics approaches
- Multiplexed activity based proteomics measurements
- Quantitative top-down proteomics for characterizing post-translational modifications/isoforms
- Ultra-sensitive antibody-free targeted quantification
- Large-scale proteomics translational applications

The PNNL P41 BTRR plans to accept new DBPs and C&S projects during the current application period. Investigators of approved DBPs are expected to: 1) contribute a short progress report annually for the P41 BTRR annual report; and 2) submit a manuscript to a peer-reviewed, scientific journal and/or submit a grant application to one or more external agencies as part of the successful execution of the approved DBP. The PNNL P41 BTRR should be informed of submitted manuscripts and/or grant applications.

The PNNL P41 BTRR will only review submissions that meet the requirements outlined below. Final decisions will be made on a quarterly basis. The BTRR review committee will evaluate proposals based on the quality of the science, the scientific impact, the technology match to the Resource's strengths, whether the scope of the research is reasonable given the resources of the Resource.

***White papers**: White papers should be submitted via email to Dave.Camp@pnnl.gov. *The white paper will be used to determine which applicants will be invited during the current application period to submit a full application.* The PNNL P41 BTRR will review the white papers to ensure the proposed research meets the basic requirements for eligibility.

White paper (1 page maximum) should include the following elements:

- Name, affiliation and role of the Principal Investigator, Co-Investigators, and mentor(s) (as applicable)
- Abstract: brief description of the proposed project
- How the proposed project will utilize the unique capabilities of the PNNL P41 BTRR
- A description of the potential impacts of the project

Please direct all questions to Dr. Jon Jacobs (509-371-6570), Jon.Jacobs@pnnl.gov)