



John-Paul Bacik, Ph.D.

IMCA-CAT

Beamline 17-ID

Advanced Photon Source

Argonne National Laboratory

Current Position

- Macromolecular crystallographer (July 2022 – Present) for the Industrial Macromolecular Crystallography Association Collaborative Access Team (IMCA-CAT) contributing to beamline operations, data collection and support as a resident user.

Education

- Ph.D. Macromolecular Crystallography (2008)
University of Alberta, Department of Medical Microbiology & Immunology, Edmonton, AB
- B.Sc. Hons. Biology (2003)
University of Winnipeg, Winnipeg, MB

Employment History

- Research Associate (July 2018 – June 30, 2022)
Cornell University, Department of Chemistry & Chemical Biology, Ithaca, NY
- Associate Research Scholar (January 2016 - June 2018)
Princeton University, Department of Chemistry, Princeton, NJ
- Postdoctoral Research Associate (January 2013 - December 2015)
Los Alamos National Laboratory, Bioscience Division, Los Alamos, NM
- Manitoba Health Research Council Postdoctoral Fellow (October 2009 - December 2012)
University of Manitoba, Department of Microbiology, Winnipeg, MB
- Visiting Scientist (May 2008 – October 2009)
Structural Genomics Consortium, University of Toronto, Toronto, ON

Honors & Activities

- Elected member of the Canadian Light Source Users Executive Committee (3-year term January 2024 – 2027) representing Health & Industry.

- Canadian Light Source Annual Users Meeting (October 25, 2024). Co-chair with Erika Bergen for “Strategic Science: Industrial Applications” virtual session representing Health & Industry.
- Advanced Photon Source Users Meeting (May 6 -10, 2024). Advancing Techniques in Structure-Based Drug Discovery and Development at the IMCA-CAT Beamline (Poster Presentation).
- Argonne National Laboratory Open House (May 20, 2023). IMCA-CAT demonstration on Structure-Based Medicine (Lead organizer and demonstrator).
- Guest Editor for the Journal of Visualized Experiments (JoVE) Methods Collection, “Methods and Innovations in Macromolecular Crystallography” (2022-2023).
- SSRL/LCLS Users Meeting. Invited Panelist for “Metals in Structural Biology” Workshop (2020).
- Project judge for Los Alamos National Laboratory “Championing Scientific Careers” Student Symposium (2015).
- Project judge for the Los Alamos County Science Fair (2014).
- Manitoba Health Research Council Postdoctoral Fellowship Award (2010-2012).
- University of Alberta Provost Doctoral Entrance Award (2003).
- University of Winnipeg Dean’s Honour List Student of Highest Distinction Award (2003).

Interests

- Structure-based drug discovery and development.
- Protein crystallography.
- Life sciences.

Ideas for Advocacy for the User Community

1. Facilitating user access to APS facilities and promoting training or workshops for all researchers including academic, government, industry and foreign nationals.
2. Advocating for APS research in the life sciences that benefit health and well-being through public outreach activities led by users.
3. Establishment of a mechanism to promote partnerships between APS beamlines including collaborative agreements for users with successful proposals.
4. Establishment of regular seminar series for APS beamline users, researchers and staff involved in life sciences.
5. Establishment of quarterly APS user led newsletter highlighting research, user activities, outreach and other contributions.