Curriculum Vitae

Sarah EJ Bowman
Associate Professor, Department of Biochemistry
Director, National Crystallization Center
Jacobs School of Medicine and Biomedical Sciences
University at Buffalo, State University of New York

ADDRESS

WORK
UB HWI Building
700 Ellicott Street
Buffalo, NY 14203

CONTACT

E1: sebowman@buffalo.edu
E2: sejb.ny@gmail.com
P: +1 716 881 7509
C: +1 585 397 4709

EDUCATION

2010	PhD Chemistry, University of Rochester, Rochester, NY Thesis Advisor: Professor Kara L Bren Thesis Title: *Development of Spectroscopic Probes of Second-sphere Interactions in Cytochromes c*
2006	MS Chemistry, University of Rochester, Rochester, NY
2005	BS Chemistry, Metropolitan State University of Denver, Denver, CO
1996	Bachelor of Special Studies English Literature & Women's Studies, Cornell College, Mt Vernon, IA

PROFESSIONAL APPOINTMENTS

2025 – Present	**Associate Professor** Department of Biochemistry, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, Buffalo, NY
2017 – Present	**Director** National Crystallization Center, UB HWI (previously Hauptman-Woodward Medical Research Institute), Buffalo, NY
2024 – 2025	**Research Associate Professor (Volunteer Appointment)** Department of Structural Biology, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, Buffalo, NY
2022 – 2025	**Associate Investigator** Hauptman-Woodward Medical Research Institute, Buffalo, NY
2018 – 2025	**Research Associate Professor (Volunteer Appointment)** Department of Biochemistry, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, Buffalo, NY
2017 – 2022	**Assistant Investigator** Hauptman-Woodward Medical Research Institute, Buffalo, NY
2016 – 2017	**Postdoctoral Research Associate** Advisors: Robert Williams and Michelle Espy, Bioscience: Bioenergy and Biome Science Division, Los Alamos National Laboratory, Los Alamos, NM

2013 – 2016 **HHMI Postdoctoral Research Associate**
Advisors: Catherine L Drennan and Collin M Stultz, Departments of Chemistry and Biology, Computational Biophysics Group in the Research Lab for Electronics, Massachusetts Institute of Technology, Boston, MA

2012 – 2013 **Assistant Professor**
Chemistry and Biochemistry Department, University of Minnesota Duluth, Duluth, MN

2011 – 2012 **NIH F32 National Research Service Award Postdoctoral Fellow**
Advisors: Catherine L Drennan and Collin M Stultz, Departments of Chemistry and Biology, Computational Biophysics Group in the Research Lab for Electronics, Massachusetts Institute of Technology, Boston, MA

AWARDS & HONORS

Awards & Honors since beginning my independent career

2025 **Elected Chair Stanford Synchrotron Radiation Lightsource User Executive Committee (SSRL UEC)**

2024 **Elected Fellow of the American Crystallographic Association (ACA)**; The ACA Fellows program recognizes the excellence of ACA Members whose efforts on behalf of the advancement of crystallography or its applications are scientifically or socially distinguished. ACA Fellows serve as scientific ambassadors to the broader scientific community and the general public to advance science education, research, knowledge, interaction, and collaboration

2024 **Elected to Membership of the United States National Committee for Crystallography (USNC/Cr)**; The USNC/Cr represents U.S. crystallographers in the International Union of Crystallography (IUCr) through The National Academy of Sciences. The IUCr strives to promote international cooperation and publication in crystallography, to facilitate standardization of methods, units, nomenclatures and symbols, and to form a focus for the relations of crystallography to other sciences

2024 **Elected to American Crystallographic Association (ACA) Meeting Committee**

2024 **Elected Vice-Chair SSRL UEC**

2023 **Outstanding Scientist Award from Association of Biomolecular Resource Facilities (ABRF)**; Awarded to scientists who have made significant contributions to their institutional shared resource facility or to the ABRF

2023 **University of Arkansas Department of Biology Graduate Student Association;** Graduate Student Invited Seminar Speaker

2022 **Elected Chair ACA Biological Macromolecules Special Interest Group**

2022 **Elected to Membership of the Stanford Synchrotron Radiation Lightsource User Executive Committee (SSRL UEC)**; Represent macromolecular crystallography users at SSRL

2021 **Elected Vice-Chair ACA Biological Macromolecules Special Interest Group**

Awards & Honors before beginning my independent career

2011 **Ruth L Kirschstein National Research Service Award Postdoctoral F32 Fellowship**

2009	**United States Delegate to the 59th Lindau Meeting of Nobel Laureates and Young Researchers**; International delegate, sponsored by National Institutes of Health; selected as the Young Researcher to give closing remarks at the meeting
2009	**Agnes M and George Messersmith Fellow**, University of Rochester
2008	**Division of Inorganic Chemistry Student Travel Award**, American Chemical Society
2008	**Elon Huntington Hooker Fellow**, University of Rochester
2008	**Graduate Women in Science Travel Award**, University of Rochester
2007	**Samuel Allen and Ellen Francis Lattimore Fellow**, Department of Chemistry, University of Rochester
2007	**Edward Peck Curtis Teaching Award**, University of Rochester
2006	**GAANN Fellow**, Department of Chemistry, University of Rochester
2006	**WD Walters Teaching Award**, Department of Chemistry, University of Rochester
2005	**Ewart Fellow**, Department of Chemistry, University of Rochester
2005	**Hypercube Scholar for Excellence in Chemistry**, Metropolitan State University of Denver
2004	**Cancer Research Fellow**, University of Colorado at Denver Health Science Center

PROFESSIONAL ORGANIZATIONS

2005 –	American Chemical Society (Biological and Inorganic Divisions)
2014 –	American Society for Biochemistry and Molecular Biology
2017 –	American Crystallographic Association – The Structural Science Society
2017 –	American Association for the Advancement of Science
2023 –	Pittsburgh Diffraction Society
2024 –	Society of Biological Inorganic Chemistry
2025 –	Biophysical Society

INVITED PRESENTATIONS

Spring 2026	Invited Speaker, Dartmouth College, *upcoming*, Hannover, NH
Jan 2026	Invited Speaker, Canisius University, *upcoming*, Buffalo, NY
Dec 2025	Invited Speaker, Metropolitan State University of Denver Department of Chemistry Seminar, *upcoming*, Denver, CO
Nov 2025	Invited Speaker, University of Georgia, *Investigating metal identity and active site details in metalloproteins using combined*, Athens, GA
Oct 2025	Invited Speaker, Center for Structural Dynamics in Biology P41 Meeting, Linac Coherent Light Source, Menlo Park, CA
Oct 2025	Invited Speaker, Brookhaven National Laboratory Workshop #8 on Future Lightsource Capabilities, Whither Metals in Biology at NSLS-II: Spectroscopy Informed by Structural Biology/Bioimaging and Vice Versa, National Synchrotron Light Source-II, *Ironing out the details of metalloprotein structure and function*, Upton, NY

Oct 2025	Invited Speaker, Pittsburgh Diffraction Conference, Metals Matter Session, National Synchrotron Light Source-II, *The iron-y of spectroscopy coupled crystal-based metalloprotein structural methods*, Upton, NY
Sept 2025	Invited Speaker, SSRL/LCLS Annual Users Meeting, High Repetition Rate Sample Environment and Delivery for LCLS II HE Workshop: Heroic Experiments: Pushing the Boundary of the Experimental Envelope Session*, Tricks and tips to generate nano- & microcrystals*, Menlo Park, CA
Sept 2025	Invited Speaker, SSRL/LCLS Annual Users Meeting, The Evolving Role of Macromolecular Crystallography (MX) in Structural Biology Workshop: Computational Advances and AI Integration Session, *AI in MX*, Menlo Park, CA
Sept 2025	Invited Speaker, Department of Biochemistry, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, *Ironing out the details of metalloprotein structure and function*, Buffalo, NY
Jul 2025	Invited Speaker, 21st International Conference on Biological Inorganic Chemistry *Structure and function in oxidative stress response proteins from emerging pathogens*, Long Beach, CA
Jul 2025	Invited Speaker, 75th Annual Meeting American Crystallographic Association, *Pipe(line) dreams for MicroED/3DED sample preparation*, Lombard, IL
May 2025	Invited Speaker, Stanford Synchrotron Radiation Lightsource, *RapiData Road Trip: Scenic postcards & peeks under the hood*, Menlo Park, CA
Apr 2025	Invited Speaker, Buffalo Protein Science Group, *Shining a spotlight on metalloproteins: Multiple methods tell the story*, Buffalo, NY
Mar 2025	Invited Speaker, Brookhaven National Laboratory, Center for BioMolecular Structures Lecture Series, *Shining light on metalloproteins: Multiple methods tell the story*, virtual
Mar 2025	Invited Speaker, Rochester Institute of Technology Department of Chemistry Seminar Series, *Charting new territory in structural biology with crystal based methods*, Rochester, NY
Nov 2024	Invited **Keynote Speaker** 18th International Conference on Crystallization of Biological Macromolecules, *Taking the High(-throughput) Road: Empowering Crystallization on the Path to Structure Determination*, Phoenix, AZ
Oct 2024	Invited Speaker, 2024 Challenges in Structural Biology Summit, *Challenges & Opportunities in Crystal-Based Structural Biology* (invitation only meeting), Lake Arrowhead, CA
Sept 2024	Invited Speaker, Pittsburgh Diffraction Conference, *Structural and spectroscopic investigations of metal-binding protein rubrerythrin from B. pseudomallei*, Ithaca, NY
Jul 2024	Invited Speaker, 74th Annual Meeting American Crystallographic Association, *Don't Panic! Navigating Scientific Peer Review*, Denver, CO
Jul 2024	Invited Speaker, Department of Biochemistry, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, *Sleuthing Protein Mysteries with Spectroscopy and Structure*, Buffalo, NY
Apr 2024	Invited Speaker, Expression, Purification & Analysis of Proteins & Protein Complexes Course, Cold Spring Harbor Laboratory, *High-throughput nano-crystallization*, Cold Spring Labor, NY
Nov 2023	Invited Speaker, MicroED Symposium and Short Course, New York Structural Biology Center, *Electron diffraction of biomacromolecules*, Manhattan, NY
Nov 2023	Invited Speaker, Department of Biology, University at Buffalo, *Adventures and challenges in diffraction-based structural biology*, Buffalo, NY

Jul 2023	Invited Speaker, Meharry Medical College Summer Study Program, *Protein Crystallization*, virtual
Jul 2023	Invited Speaker, X-Ray Science Gordon Research Conference, *Challenges in Metalloprotein X-Ray Science*, Easton, MA
Apr 2023	Invited Speaker, University of Arkansas, Department of Biology Graduate Student Association, *At the Edge of the Map: Adventures in Structural Biology*, Fayetteville, AK
Mar 2023	Invited Spotlight Seminar Speaker, American Society for Biochemistry and Molecular Biology Annual Meeting, *Structural investigations of rubrerythrin from B. pseudomallei: Metals, domain swapping, and other interesting features of this ferritin-like superfamily protein*, Seattle, WA
Mar 2023	Invited **Expert Speaker**, Thermo Fisher Ask the Experts Webinar Series, *Leveraging the integration of cryo-EM and X-ray based methods for a comprehensive approach to structural biology*, virtual
Nov 2022	Invited Speaker, New England Biolabs Seminar Series, *At the Edge of the Map in Structural Exploration*, Ipswich, MA
Sept 2022	Invited Speaker, SSRL/LCLS Annual Users Meeting, Metals in Structural Biology Workshop, *Metals in bacterial pathogens*, Menlo Park, CA
Jul 2022	Invited Speaker, Diffraction Methods in Structural Biology Gordon Research Conference, *Growing Good Crystals*, Lewiston, ME
Jul 2022	Invited Speaker, 73th Annual Meeting American Crystallographic Association, *Advances using machine learning and computational tools for crystal growth and detection*, Portland, OR
Jul 2022	Invited Speaker, 73th Annual Meeting American Crystallographic Association, *The National High-Throughput Crystallization Center and coming hands-on workshops*, Portland, OR
Feb 2022	Invited Speaker, 9th International BioXFEL Conference, Invited, *What can imaging tell you about how your crystals grow? Advances using machine learning*, virtual
Jan 2022	Invited Speaker, COVID Information Commons, *Crystallization Center at HWI: RAPID Enhanced SARS-CoV-2 High-Throughput Crystallization for Structural Studies*, virtual
Nov 2021	Invited Speaker, Formulatrix Automation Webinar, *A Laser Focus on Crystallization Success,* virtual
Apr 2021	Invited Speaker, Buffalo Protein Science Group, *Metal Detectors: Using EDX to Identify Metals in Biomolecular Samples*, virtual
Feb 2021	Invited Speaker, National Institutes of Health TransNIH Project 5, virtual
Aug 2020	Invited Speaker, 73rd Annual Meeting American Crystallographic Association, *Remote Opener: Breaking Barriers to Crystallization Using Remote Crystal Growth Screening and Imaging*, virtual
Mar 2019	Invited **Keynote Speaker**, Australia CSIRO Collaborative Crystallisation Centre Annual Meeting, *High-Throughput Crystallization Screening*, Parkville, Australia
Oct 2018	Invited Speaker, Formulatrix Protein Crystallization Automation Webinar *High-Throughput Crystallization Screening and Detection: A View from The Cutting Edge*, virtual
Feb 2018	Invited Speaker, Department of Biochemistry, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, *Structural investigation of metal tug-of-war protein calprotectin*, Buffalo, NY

Dec 2016	Invited Speaker, Los Alamos National Laboratory Colloquium Series, *Spectroscopic and crystallographic investigation of redox modulation and metal tug-of-war proteins*, Los Alamos, NM
Jul 2016	Invited Speaker, Diffraction Methods in Structural Biology Gordon Research Conference, *What Can Spectroscopic Techniques Tell You About Your Crystal?* Lewiston, ME
Apr 2013	Invited Speaker, Department of Chemistry, St. Cloud State University, *What can biophysical techniques tell us about protein structure and function?* St. Cloud, MN
Jan 2009	Invited Speaker, Gordon Research Seminar in Bioinorganic Chemistry, *NMR Analysis of the His-Fe(III) Interaction and Porphyrin Conformation in Cytochromes c*, Ventura, CA

CONTRIBUTED PRESENTATIONS

Jan 2025	*Structural and spectroscopic investigations of metal-binding proteins from bacterial pathogens*, Poster, Metals in Biology Gordon Research Conference, Ventura, CA
Jul 2023	*Structural and spectroscopic investigations of metal-bound rubrerythrin from B. pseudomallei*. Speaker, ACA Annual Meeting, Baltimore, MD
May 2023	*Enabling Access to Biomolecular Crystallization Capabilities with Robotics and Advanced Imaging*, Poster, ABRF Meeting, Boston, MA
Dec 2021	*RAPID Enhanced SARS-CoV-2 High-Throughput Crystallization for Structural Studies*, Speaker, NSF PREPARE RAPID PI Meeting, virtual
Aug 2021	*Pushing the Boundaries in Crystallization Screening: Making Automated, User-accessible Crystallization Work*. Speaker, ACA Annual Meeting, virtual
Jul 2018	*Enhancing high-throughput detection of protein nanocrystals*, Speaker, ACA Annual Meeting, Toronto, Canada
Jan 2016	*Leveraging the unique features of transition metals in metalloprotein crystallography.* Poster, International BioXFEL Conference, San Juan, Puerto Rico
Aug 2015	*Crystallographic studies of the immune-response, metal chelating protein calprotectin*, Speaker, ACS National Meeting, Boston, MA
Feb 2015	*Getting a handle on metal binding in the EF-hand domains in calprotectin*, Speaker, MIT Protein Structure-Function Supergroup, Cambridge, MA
Feb 2012	*Investigating the structural stability of H. pylori NikR using MD simulations*, Poster, Biophysical Society Annual Meeting, San Diego, CA
Oct 2009	*Investigation of axial histidine character and heme planarity in cytochromes c.* Poster, 11th Upstate NY NMR Symposium, Buffalo, NY, Oct 2009.
Aug 2008	*Spectroscopic investigation of the iron-histidine interaction in cytochromes c*, Speaker, ACS National Meeting, Philadelphia, PA

SERVICE TO THE PROFESSION

2026 – 2028	Editorial Board Member, Biophysical Journal
2023 – 2027	Permanent Member, NIH MSFB Study Section

2024 – 2027	Elected Member, American Crystallographic Association Meeting Committee Duties: Program chair for the Annual ACA Meeting (4 year term), including arranging the program, collecting session proposals, leading the opening/closing ceremonies, proposing meeting themes, and making recommendations to ACA Council
2024 – 2026	Elected Member, United States National Committee for Crystallography (National Academy of Sciences) Board Member, American Union of Crystallography Duties: Represent US crystallographers in the International Union of Crystallography, appointed through the National Academy of Sciences; Chair of the Research Infrastructure Subcommittee
2023 – 2028	Elected Member, Stanford Synchrotron Radiation Lightsource (SSRL) User Executive Committee (UEC) Duties: Represent macromolecular crystallography users at SSRL
2025 – 2026	Elected Chair, Stanford Synchrotron Radiation Lightsource UEC Duties: Represent SSRL User Community as a member of the SSRL Scientific Advisory Council, coordinate activities with representatives from national labs to increase awareness and support for basic sciences and the role of user facilities, and serve on LCLS UEC as an ex-officio member
2024 – 2025	Member, NIH Mature Synchrotron Resources Working Group for NIGMS Council
2024 – 2025	Elected Vice-Chair, Stanford Synchrotron Radiation Lightsource UEC Duties: SSRL UEC representative for planning the 2025 User Meeting, including arranging the six-day program and chairing the plenary session
2018 – 2025	Organizer, *Metals in Structural Biology Workshop* at the SSRL/LCLS Users Meeting Duties: Organize an annual full-day workshop focused on tools to investigate metals in biological systems
2026	Invited Session Co-Chair, *X-ray and Electron Crystallography: from Single Crystal to Serial Diffraction*, 27th Congress and General Assembly of the International Union of Crystallography (IUCr) Triennial Congress
2026	Workshop Organizer, *Biomolecular Crystallization*, 27th IUCr Congress
2026	Editorial Board Member, Protein Section, Biophysical Journal
2025	Reviewer, 2026 Cottrell Scholar Award, Research Corporation for Science Advancement
2025	Alternate Chair, NIH MSFB Study Section June Meeting
2025	Meeting Co-Organizer, SSRL/LCLS Users Meeting, Menlo Park, CA
2025	Tenure review evaluation, Howard University College of Medicine
2025	Guest Editor, Frontiers in Chemical Biology, Bioinorganic Chemistry Research Topics Special Issue on Zinc-binding proteins: New perspectives on their roles in health and disease and in biotechnological applications
2025	Reviewer, United States Department of Energy, Office of Science, Basic Energy Science, 2025 National Synchrotron Light Source II (NSLS-II) Quadrennial Operations Review at Brookhaven National Laboratory
2025	Reviewer, Oak Ridge National Laboratory, Science Review Committee
2025	Member, Phenix R24 National Resource Scientific Advisory Committee
2024	Organizer, National Academies of Sciences, Engineering and Medicine, Advancing Drug Discovery Webinar Series
2024	Member, EWALD Advisory Team for Neutrons in Structural Biology
2024	Session Chair, *Metallobiomolecules*, Pittsburgh Diffraction Conference

2024	Session Chair, *Structural Biology of Metallobiomolecules*, 74th Annual Meeting American Crystallographic Association
2024	Session Chair, *Structural Biology Eco-system*, Workshop on Neutrons in Structural Biology, Challenges and Opportunities
2023	Reviewer, Diamond Light Source Macromolecular Crystallography Beamline Review, United Kingdom
2023	Session Chair, *Microcrystal Electron Diffraction,* 73rd Annual Meeting American Crystallographic Association
2023	Organizer, *Sample Attributes for Multiple-techniques and Principal Requirements for Experiments in Pan-structural biology (SAMPREP),* 73rd Annual Meeting American Crystallographic Association
2023	Reviewer, SLAC National Accelerator Laboratory, Laboratory Directed Research And Development Award
2023	Discussion Leader, Metals in Biology Gordon Research Conference
2023	Organizer, Metals in Biology Gordon Research Conference Power Hour
2023	Tenure review evaluation, Brigham Young University
2022	Organizer, SciArt Show at the 72nd American Crystallographic Association
2022	Chair, American Crystallographic Association Biological Macromolecules (BioMac) Special Interest Group (SIG) Duties: Organize sessions for BioMac SIG for 2023 Annual ACA Meeting, including finding session chairs, and present annual report to ACA Council
2022	Temporary Member, NIH MSFB Study Section
2022	Member, NSF Bio Review Panel
2022	Temporary Member, NIH ZRF1 and ZGM1 Special Emphasis Panel
2021	Vice-Chair, American Crystallographic Association Biological Macromolecules Special Interest Group
2021	Session Chair, *Getting the First Crystal,* 71st Annual Meeting American Crystallographic Association
2021	Session Chair, *Structural Biology against Coronavirus* International Union of Crystallography 25th Congress
2021	Temporary Member, NIH MSFA and MSFB Study Section
2020	Early Career Reviewer, NIH MSFB Study Section
2012 – present	Ad hoc reviewer: Acta Cryst Sections D & F, Biochemistry, Crystals, Inorganic Chemistry, iScience, IUCrJ, Journal of the American Chemical Society, Journal of Applied Crystallography, Journal of Biological Inorganic Chemistry, Journal of Chemical Education, Journal of Structural Biology X, Nature Communications, Nature Methods

SERVICE TO THE UNIVERSITY/INSTITUTE

2025 –	Member, Biomedical Research Advisory Panel, Office of Biomedical Research, Jacobs School of Medicine and Biomedical Sciences
2023 – 2025	Chair, Scientific Governance Council, HWI (now UB HWI)
2023 – 2025	Member, HWI Board of Directors, HWI (now UB HWI)
2020 – 2024	Member, HWI/IMCA-CAT Science Seminar Series, HWI (now UB HWI)
2020 – 2024	Member, Marketing and Communication Committee HWI Board of Directors, HWI (now UB HWI)

2018 – 2024	Member, Development Committee HWI Board of Directors, HWI (now UB HWI)
2019 – 2024	Member, IMCA-CAT New Technologies Working Group
2021 – 2023	Vice-Chair, Scientific Governance Council, HWI (now UB HWI)
2021 – 2022	Member, Science Safety Committee, HWI (now UB HWI)
2021	Member, Search Committee, CryoEM Center Director, HWI (now UB HWI)
2020	Member, Search Committee, Business Development Director, HWI (now UB HWI)

SERVICE TO UB DEPARTMENT OF BIOCHEMISTRY

Aug 2025 –	Member, Biochemistry Graduate Affairs Committee
May 2025	Poster Judge, Biochemistry Department Research Day
Jan 2025 –	Member, Biochemistry IFR Committee
Jan 2025 –	Director, National Crystallization Center, UB-HWI While I have been Director of the National Crystallization Center since joining HWI in 2017, with the merger between HWI and UB, as of January 2025 the Center is now part of the Biochemistry Department in the Jacobs School of Medicine and Biomedical Sciences. It is one of only 20 NIGMS supported National Resources in the US.

SERVICE TO THE COMMUNITY & OUTREACH

2017 –	Tours of the National Crystallization Center
2025	Judge, United States Crystal Growing Competition, Buffalo, NY
2024	Organizer, American Crystallographic Association Outreach Event at the Buffalo Museum of Science
2024	Science Expert, Buffalo Museum of Science SciNight: Snowflake Studies, Volunteer Outreach with American Crystallographic Association
2024	Poster Judge, 18th International Conference on Crystallization of Biological Macromolecules, Phoenix, AZ
2024	Moderator, NASEM, Advancing Drug Discovery Webinar, *Protein Data Bank: From two epidemics and the global pandemic to mRNA vaccines and Paxlovid* presented by Stephen Burley, Virtual
2024	Poster Judge, SSRL/LCLS User Meeting, SLAC National Accelerator Lab at Stanford, Menlo Park, CA
2023	SBGrid Member Tale *The Crystal Whisperer* https://sbgrid.org/members/tale/the-crystal-whisperer
2023	Nerdy Jobs Pilot Episode with Dr. Raven the Science Maven Baxter https://www.youtube.com/watch?v=siFfzoFv61I
2023	Crystallization Center Outreach Video https://www.youtube.com/watch?v=_Xo8E5Wqv04
2023	Poster Judge, SSRL/LCLS User Meeting, SLAC National Accelerator Lab at Stanford, Menlo Park, CA
2021	Crystal Clear Red Magazine Article https://red.msudenver.edu/2021/crystal-clear/
2021	Photograph 51 Panelist. Jewish Repertory Theater, Buffalo, NY
2021	Crystallizing Coronavirus with Sarah Bowman. Point of Learning Podcast https://hornedconsulting.org/pointoflearningpodcast/crystals

2021	Buffalo News Front Page Article 2/7/2021 *A crystallization lab in Buffalo is at center of global war against coronavirus*
2021	Presentation at the Buffalo Sunrise Rotary Club
2021	Presentation at the BNMC Rotary Club
2020	Crystal Clear. Buffalo-Niagara Invest Bell Ringer Podcast https://investbuffaloniagara.podbean.com/e/crystal-clear-1597858264/
2020	Science Panel Discussion. Bunker Hill Community College, Virtual
2018	Poster Judge, SSRL/LCLS User Meeting, SLAC National Accelerator Lab at Stanford, Menlo Park, CA
2013	Behind the Scenes at MIT Video Series *Targeting Ulcer-causing H. pylori Bacteria and Personal Story* http://chemvideos.mit.edu

COURSES TAUGHT & OTHER EDUCATIONAL ACTIVITIES

University at Buffalo

Summer 2026	Biomolecular Crystallization Workshop, 27th Congress and General Assembly of the International Union of Crystallography (IUCr) Triennial Congress, **Course Director**, Course Organizer, Lecturer, Calgary, Canada
Spring 2026	BCH507 Protein Structure and Function, Graduate Biochemistry Course
Spring 2026	BCH498 Undergraduate Research, Biochemistry Undergraduate Research Laboratory Research in the Bowman Lab (1-3 BCH undergraduates)
Spring 2026	Applied Crystallization Workshop, National Crystallization Center, **Course Director**, Course Organizer, Lecturer, Lab Instructor (two on-site workshops), Buffalo, NY
Fall 2025	BCH498 Undergraduate Research, Biochemistry Undergraduate Research Laboratory Research in the Bowman Lab
Fall 2025	BCH405 Research Topics in Biochemistry, **Course Coordinator**, Undergraduate Biochemistry Course
Spring 2025	BCH507 Protein Structure and Function, Graduate Biochemistry Course
Spring 2025	BCH498 Undergraduate Research, Biochemistry Undergraduate Research Laboratory Research in the Bowman Lab (1 BCH undergraduate)
Fall 2024	BCH405 Research Topics in Biochemistry, Undergraduate Biochemistry Course (Volunteer Instructor)
Fall 2022	BCH405 Research Topics in Biochemistry, Undergraduate Biochemistry Course (Volunteer Instructor)
Fall 2019	BCH405 Research Topics in Biochemistry, Undergraduate Biochemistry Course (Volunteer Instructor)

Hauptman-Woodward Medical Research Institute

Fall 2024	Macromolecular Crystallization Satellite Workshop at the Pittsburgh Diffraction Conference, **Course Director**, Course Organizer, Lecturer, Lab Instructor, Ithaca, NY
Summer 2024	Applied Crystallization Workshop, National Crystallization Center, **Course Director**, Course Organizer, Lecturer, Lab Instructor (two on-site workshops), Buffalo, NY
Spring 2024	Applied Crystallization Workshop, National Crystallization Center, **Course Director**, Course Organizer, Lecturer, virtual

Spring 2024	Expression, Purification, & Analysis of Proteins & Protein Complexes, Lecturer, Cold Spring Harbor Laboratory Course, Cold Spring Harbor, NY
Spring 2024	Breakthrough Capabilities for Neutron Macromolecular Crystallography, Workshop on Neutrons in Structural Biology, Panelist, Arlington, VA
Summer 2023	Sample Attributes for Multiple-techniques and Principal Requirements for Experiments in Pan-structural biology (SAMPREP) Workshop at the American Crystallographic Association Meeting, **Course Director**, Course Organizer, Lecturer, Baltimore, MD
Summer 2021	Structural Biology Workshop, HWI (now UB HWI), Lecturer, virtual
Summer 2019	Structural Biology Workshop, HWI (now UB HWI), Lecturer, Buffalo, NY
Summer 2018	Structural Biology Workshop, HWI (now UB HWI), Lecturer, Buffalo, NY
Summer 2018	Bioinorganic Workshop, Nuclear Magnetic Resonance Section, Penn State University Bioinorganic Workshop, Lecturer, State College, PA

RESEARCH SUPERVISION & MENTORING

Mentoring since beginning my independent career

Undergraduate Research Mentoring

1/2026 – present	Tanmayi Kapalli, Biochemistry undergraduate (UB), expected graduation 2027
1/2025 – present	Samantha Arnone, Biochemistry undergraduate (UB), expected graduation 2026
Summer 2021	Luz Alfaro, BioXFEL Summer Intern (HWI)
Summer 2020	Ethan Holleman, BioXFEL Summer Intern (HWI) Current: Graduate student at UC Davis **Recognition: Poster Award at the 2020 SSRL/LCLS User Meeting**
Summer 2019	Kailey Ferger, HWI Summer Intern (HWI) Current: Graduate student at UC Berkeley
Summer 2018	Max Dudek, HWI Summer Intern (HWI) Current: Graduate student at UPenn **Recognition: NSF Graduate Fellowship**

Graduate Research Mentoring

Feb 2025 – Apr 2025	Cole Masuga, PPBS PhD Rotation (UB)
Fall 2024	Sean Johnson, Biochemistry Masters Rotation (UB)
Fall 2023	William Dowdle, visiting graduate student from Bridwell-Rabb Lab, University of Michigan Department of Chemistry (HWI)
2020 – 2021	Yana Shimanovich, Materials Design and Innovation Masters Student (HWI)

Postdoctoral Fellow Supervised and Mentored

8/2023 – present	Dr. Christopher Campomizzi **Recognition: 2025 Travel Award, American Crystallographic Association Annual Conference** **Recognition: 2025 Structural Dynamics Poster Award, American Crystallographic Association Annual Conference**

Research Supervision and Mentoring

11/2022 – present	Tiffany Wright, Research Associate **Recognition: 2024 Travel Award, Pittsburgh Diffraction Conference**

9/2022 – present	Dr. Gabrielle Budziszewski, Research Scientist **Recognition: 2024 Outstanding Scientist Award, ABRF** **Recognition: 2024 Travel Award, Pittsburgh Diffraction Conference** **Recognition: NIH Loan Repayment Program Award**
2/2022 – present	M Elizabeth Snell, Research Associate **Recognition: 2024 Travel Award, Pittsburgh Diffraction Conference**
2017 – Jul 2022	Angela Lauricella, Research Associate (HWI)

Mentoring prior to beginning my independent career

Undergraduate Research Mentoring

Summer 2014	Lindsey Richelle Fernandez Backman, PhD MIT (MIT MSRP Summer Intern) Current: Whitehead Institute Fellow
Summer 2014	Alessio Caruso, PhD Princeton (MIT MSRP Summer Intern) Current: Postdoc Harvard University
Summer 2011	Tsehai Grell, PhD MIT (MIT MSRP Summer Intern) Current: Research Scientist at Janssen
Summer 2011	Abdulquadri Olawin, MD (MIT MSRP Summer Intern) Current: MD
Spring 2011	Andrew Van Benschoten, PhD UCSF (MIT Undergraduate Researcher) Current: Director of Advanced Analytics at Land O'Lakes, Minneapolis, MN
2008 – 2009	Ferdous Zannat, MD (University of Rochester Undergraduate Researcher) Current: MD
2007 – 2008	Breanne Holmes, PhD (University of Rochester Undergraduate Researcher) Current: Scientist at Ecotox Centre, Switzerland
Summer 2007	Erin Kleingardner, RN (University of Rochester Summer Intern) Current: RN
2006 – 2007	Benjamin Levin, PhD (University of Rochester Undergraduate Researcher) Current: Scientist at Stablix, Boston, MA
2006	Yelena Lerman, PhD (University of Rochester Summer Intern)

GRANTS & RESEARCH AWARDS

Grants & Research Awards – Active

9/2022 – 8/2026	Funding Agency: NIH NIGMS (Federal) R01GM141273 Title: New techniques for detecting and handling nanocrystals for cutting edge structural biology methods PI name: Bowman; Role: MPI/Contact PI Total Costs: $1,570,000
7/2021 – 6/2026	Funding Agency: NIH NIGMS (Federal) R24GM141256 Title: National HTX Center: Enabling Access to State-of-the-Art Crystallization Capabilities PI name: Bowman; Role: PI Total Costs: $4,910,000

8/2025 – 7/2026 Funding Agency: NIH NIGMS (Federal) R24GM141256-06S1 Admin Supplement
Title: Acquisition of an SPT Labtech Mosquito Administrative Supplement – National HTX Center: Enabling Access to State-of-the-Art Crystallization Capabilities
PI name: Bowman; Role: PI
Total Costs: $167,746

11/2025 – 8/2026 Funding Agency: University at Buffalo Bridge Funding Opportunity-UB LAUNCH & Department of Biochemistry
Title: Probing evolutionary pathways in metalloprotein structure and function from emerging bacterial pathogens
PI name: Bowman; Role: PI
Total Costs: $50,000

11/2025 – 12/2026 Funding Agency: University at Buffalo Undergraduate Research and Creative Activities Program
Title**:** Studying structure and function of bacterial proteins using structural biology and enzymatic assays
PI name: Bowman; Role: PI and undergraduate student mentor
Total Costs: $15,500

Grants & Research Awards – Pending

Submitted 10/2025 Funding Agency: Mathers Foundation
Title: Probing structure and function in metalloproteins from emerging bacterial pathogens
PI name: Bowman; Role: PI
Total Costs: $699,676

Submitted 9/2025 Funding Agency: NIH NIGMS (Federal) R24GM141256 Renewal
Title: National Crystallization Center: Enabling Access to State-of-the-Art Crystallization Capabilities
PI name: Bowman; Role: PI
Total Costs: $7,020,490

Submitted 4/2025 Funding Agency: NIH NIAID (Federal) 1R01AI186387-01A1
Title: Structure, function, and mechanism of pathogen defenses against oxidative damage in emerging pathogens
PI name: Bowman; Role: PI
Total Costs: $3,742,851

Grants & Research Awards – Completed

7/2023 – 12/2024 Funding Agency: James H Cummings Foundation (Private Foundation)
Title: Supporting successful researchers at HWI – expanding capabilities for new discoveries
PI name: Bowman; Role: PI
Total Costs: $100,000

1/2023 – 12/2024 Funding Agency: Australian Research Council Linkage Infrastructure, Equipment, and Facilities
Title: Integrated Crystallisation Facility (Australia)
PI name: C Bond, University of Western Australia; Role: Expert International Consultant
Total Costs: A$410,195

7/2023 – 6/2024 Funding Agency: NIH NIGMS (Federal) R24GM141256-03S1
Title: Acquisition of a Rock Imager 1000 with SONICC Administrative Supplement – National HTX Center: Enabling Access to State-of-the-Art Crystallization Capabilities
PI name: Bowman; Role: PI
Total Costs: $200,000

7/2023 – 6/2024 Funding Agency: Empire State Development Matching Grant Leverage Program (New York State)
Title: Acquisition of a Rock Imager 1000 with SONICC Matching Grant Fund
PI name: Bowman; Role: PI
Total Costs: $100,000

4/2022 – 5/2024 Funding Agency: Dr. Louis Skarlow Memorial Fund (Private Foundation)
Title: New Tools to Develop New Drugs: An Application to Antibiotics
PI name: Bowman; Role: PI
Total Costs: $25,000

5/2020 – 4/2022 Funding Agency: NSF (Federal) BIO DBI 2029943
Title: RAPID Enhanced SARS-CoV-2 High-throughput Crystallization for Structural Studies
PI name: Bowman; Role: PI
Total Costs: $200,000

9/2017 – 8/2021 Funding Agency: NIH NIGMS (Federal) R24GM124135
Title: Community Crystallization Resource for Biological Macromolecules
PI name: Snell; Role: Co-Investigator
Total Costs: $1,276,000

9/2019 – 8/2021 Funding Agency: NIH NIGMS (Federal) R24GM124135-02S1
Title: COVID Administrative Supplement Community Crystallization Resource for Biological Macromolecules
PI name: Snell; Role: Co-Investigator
Total Costs: $246,000

9/2018 – 8/2019 Funding Agency: NIH NIGMS (Federal) R24GM124135-01S1
Title: Acquisition of a Rock Imager 54 Administrative Supplement Community Crystallization Resource for Biological Macromolecules
PI name: Snell; Role: Co-Investigator
Total Costs: $149,000

1/2018 – 12/2019 Funding Agency: Dr. Louis Skarlow Memorial Fund (Private Foundation)
Title: The Structure of the EML4-ALK Fusion Protein: Shaping a Solution in Non-small Cell Lung Cancer
PI name: Bowman; Role: PI
Total Costs: $20,000

11/2017 – 10/2019 Funding Agency: Seymour Knox Foundation (Private Foundation)
Title: Enhancing the Impact of Buffalo's High-throughput Crystallization Screening Center and Accelerating Pharmaceutical Development Nationwide
PI name: Bowman; Role: PI
Total Costs: $20,000

8/2011 – 8/2012 Funding Agency: NIH NIGMS (Federal) F32GM099257
Title: Structural investigation of *Helicobacter pylori* Transcription Regulator NikR;
PI name: Bowman; Role: PI, Postdoctoral fellowship at MIT, Total Costs: $46,000

PUBLICATIONS – PEER REVIEWED

orcid.org/0000-0002-7426-7328
Google Scholar link

Annotations: Direct Mentee [U]Undergraduate [G]Graduate [P]Postdoc [#]Mentee (Other) *Corresponding Author

Peer reviewed journal publications since beginning my independent career

1. Budziszewski, GR[#], Stojanoff, V, **Bowman, SEJ***. (2025) Preparing for successful protein crystallization experiments. Acta Crystallographica Section F, Structural Biology Communications, 81(7):272-280-doi.org/10.1107/S2053230X25004650

   Recognition: Featured on journal cover
   Recognition: Author interview: https://www.youtube.com/watch?v=m34RI500OFU

2. **Bowman, SEJ**, Byrnes, J, Russi, S, Zimanyi, CM*. (2024) Preparing research samples for safe arrival at centers and facilities: recipes for successful experiments. Acta Crystallographica Section F, Structural Biology Communications, 80(8): 165-172. doi:10.1107/S2053230X24006174

   All authors equal and listed alphabetically

3. Aragon, M, **Bowman, SEJ**, Chen, CH, Cruz, MJ, Decato, DA*, Eng, ET, Flatt, KM, Gulati, S, Li, Y, Lomba, CJ[G], Mercado, B, Miller, J, Palatinus, L, Rice, WJ, Waterman, D, Zimanyi, CM. (2024) Applying 3D ED/MicroED workflows toward the next frontiers. Acta Crystallographica Section C, Structural Chemistry, 6(80): 179-189. doi.org/10.1107/S2053229624004078

   All authors equal and listed alphabetically

4. Acehan, D, Spoth, KA, Budziszewski, GR[#], Snell, ME[#], Campomizzi, CS[P], Lynch, ML, **Bowman, SEJ***. (2024) Reaching the potential of electron diffraction. Cell Reports Physical Science, 6(5): 102007. doi.org/10.1016/j.xcrp.2024.102007

5. Lynch, ML, Snell, ME[#], Potter, SA, Snell, EH, **Bowman, SEJ***. (2023) 20 years of crystal hits: progress and promise in ultrahigh-throughput crystallization screening. Acta crystallographica. Section D, Structural Biology, 79(3): 198-205. doi:10.1107/S2059798323001274

   Recognition: Featured on journal cover
   Recognition: Wiley Top Cited Article published in 2023
   Recognition: Wiley Top Read Article published in 2023

6. Budziszewski, GR[#], Snell, ME[#], Wright, TR[#], Lynch, ML, **Bowman, SEJ***. (2023) High-Throughput Screening to Obtain Crystal Hits for Protein Crystallography. Journal of Visualized Experiments: JoVE, (193):e65211. doi:10.3791/65211

7. Miller, RD[G], Iinishi, A, Modaresi, SM, Yoo, BK[P], Curtis, TD, Lariviere, PJ, Liang, L, Son, S, Nicolau, S, Bargabos, R, Morrissette, M, Gates, MF, Pitt, N, Jakob, RP, Rath, P, Maier, T, Malyutin, AG, Kaiser, JT, Niles, S, Karavas, B, Ghiglieri, M, **Bowman, SEJ**, Rees, DC, Hiller, S*, Lewis, K*. (2022) Computational identification of a systemic antibiotic for gram-negative bacteria. Nature Microbiology, 7(10): 1661-1672. doi:10.1038/s41564-022-01227-4

   Top 5% of all research outputs ever scored by Altmetric

8. Chattopadhyay, S, Mukherjee, M, Kandemir, B, **Bowman, SEJ**, Bren, KL*, Dey, A*. (2021) Contributions to cytochrome c inner- and outer-sphere reorganization energy. Chemical Science, 12(35): 11894-11913. doi:10.1039/d1sc02865k

9. Lynch, ML, Snell, EH, **Bowman, SEJ***. (2021) Structural biology in the time of COVID-19: perspectives on methods and milestones. IUCrJ, 8(3): 335-341. doi:10.1107/S2052252521003948

   Top 5% of all research outputs ever scored by Altmetric

10. Holleman ET[U], Duguid E, Keefe LJ, **Bowman SEJ***. (2021) Polo: an open-source graphical user interface for crystallization screening. Journal of Applied Crystallography, 54(2): 673-679. doi:10.1107/S1600576721000108

11. Westerman, EL*, **Bowman, SEJ**, Davidson, B, Davis, MC, Larson, ER, Sanford, CPJ. (2020) Deploying Big Data to Crack the Genotype to Phenotype Code. Integrative and comparative biology, 60(2): 385-396. doi.org/10.1093/icb/icaa055

    All authors equal

12. Lynch, ML, Dudek, MF[U], **Bowman, SEJ***. (2020) A Searchable Database of Crystallization Cocktails in the PDB: Analyzing the Chemical Condition Space. Patterns, 1(4): 100024. doi:10.1016/j.patter.2020.100024

    Recognition: Featured on journal cover

    Associated database available online at Zenodo: DOI 10.5281/zenodo.3931012*
    *downloaded 459 times as of Oct 2025

13. **Bowman, SEJ**, Backman, LRF[U/G], Bjork, RE, Andorfer, MC[P], Yori, S[U], Caruso, A[U], Stultz, CM, Drennan, CL*. (2019) Solution structure and biochemical characterization of a spare part protein that restores activity to an oxygen-damaged glycyl radical enzyme. Journal of Biological Inorganic Chemistry, 24(6): 817-829. doi:10.1007/s00775-019-01681-2

Peer reviewed journal publications prior to beginning my independent career

14. Nakashige, TG[G], **Bowman, SEJ**, Zygiel, EM[G], Drennan, CL*, Nolan, EM*. (2018) Biophysical Examination of the Calcium-Modulated Nickel-Binding Properties of Human Calprotectin Reveals Conformational Change in the EF-Hand Domains and His3Asp Site. Biochemistry, 57(28): 4155-4164. doi:10.1021/acs.biochem.8b00415

15. Gagnon, DM, Brophy, MB, **Bowman, SEJ**, Stich, TA, Drennan, CL, Britt, RD*, Nolan, EM*. (2015) Manganese binding properties of human calprotectin under conditions of high and low calcium: X-ray crystallographic and advanced electron paramagnetic resonance spectroscopic analysis. Journal of the American Chemical Society, 137(8): 3004-16. doi:10.1021/ja512204s

16. Galinato, MG, **Bowman, SEJ**, Kleingardner, JG, Martin, S, Zhao, J, Sturhahn, W, Alp, EE, Bren, KL*, Lehnert, N*. (2015) Effects of protein structure on iron-polypeptide vibrational dynamic coupling in cytochrome c. Biochemistry, 54(4): 1064-76. doi:10.1021/bi501430z

17. Kleingardner, JG, **Bowman, SEJ**, Bren, KL*. (2013) The influence of heme ruffling on spin densities in ferricytochromes c probed by heme core 13C NMR. Inorganic Chemistry, 52(22): 12933-46. doi:10.1021/ic401250d

18. Galinato, MG, Kleingardner, JG, **Bowman, SEJ**, Alp, EE, Zhao, J, Bren, KL*, Lehnert, N*. (2012) Heme-protein vibrational couplings in cytochrome c provide a dynamic link that connects the heme-iron and the protein surface. Proceedings of the National Academy of Sciences of the United States of America, 109(23): 8896-900. doi:10.1073/pnas.1200345109

19. Levin, BD, Can, M, **Bowman, SEJ**, Bren, KL, Elliott, SJ*. (2011) Methionine ligand lability in bacterial monoheme cytochromes c: an electrochemical study. The Journal of Physical Chemistry B, 115(40): 11718-26. doi:10.1021/jp203292h

20. Chung, JK, Thielges, MC, **Bowman, SEJ**, Bren, KL, Fayer, MD*. (2011) Temperature dependent equilibrium native to unfolded protein dynamics and properties observed with IR absorption and 2D IR vibrational echo experiments. Journal of the American Chemical Society, 133(17): 6681-91. doi:10.1021/ja111009s

21. **Bowman SEJ**, Bren KL*. (2010) Variation and analysis of second-sphere interactions and axial histidinate character in c-type cytochromes. Inorganic Chemistry, 49(17): 7890-7. doi:10.1021/ic100899k

22. Kim S, Chung JK, Kwak K, **Bowman SEJ**, Bren KL, Bagchi B, Fayer MD*. (2008) Native and unfolded cytochrome c--comparison of dynamics using 2D-IR vibrational echo spectroscopy. The Journal of Physical Chemistry B, 112(32): 10054-63. doi:10.1021/jp802246h

23. Michel, LV, Ye, T, **Bowman, SEJ**, Levin, BD, Hahn, MA, Russell, BS, Elliott, SJ, Bren, KL*. (2007) Heme attachment motif mobility tunes cytochrome c redox potential. Biochemistry, 46(42): 11753-60. doi:10.1021/bi701177j

Peer reviewed journal articles submitted and pending submission

24. Saha, S[G], Chen, Y[G], Budziszewski, GR[#], Koprek, S, Seifert, K, Cohen, A, Russi, S, **Bowman, SEJ**, Perry, SL*. (2025) LEGO-Inspired Electrically-Actuated Microfluidics For On-Chip Protein Crystallization and In-Situ X-Ray Crystallography.

    Submitted and in review at Lab on a Chip August 2025

25. Budziszewski, GR[#], Snell, ME[#], Lynch, ML, Monteiro, DCF*, **Bowman, SEJ***. (2025) *Burkholderia pseudomallei* Rubrerythrin promiscuously binds metals in a structurally pre-formed bimetallic binding site. *Submitted and in revision*

    Posted to bioRxiv: doi: https://doi.org/10.1101/2025.06.01.657255

26. Campomizzi, CS[P], Snell, ME[#], Mikolajek, H, Sandy, J, Sanchez-Weatherby, J, Budziszewski, GR[#], Russi, S, Cohen, AE, Hough, MA, **Bowman, SEJ***. (2025) Does crossing the pond affect crystal quality? The effect of international shipment on protein crystals for *in-situ* room-temperature X-ray diffraction. *Submitted and in revision*

    Posted to bioRxiv: doi: https://doi.org/10.1101/2025.06.12.659325

27. Lynch, ML, Campomizzi, CS[P], Budziszewski, GR[#], **Bowman, SEJ*.** (2025) Data processing *in crystallo* spectroscopy for assessing crystal damage and oxidation state changes in metalloprotein X-ray crystallography: Tools for learning as you go. *in preparation*

28. Henthorn, CL[G], Bruchs, AT[G], O'Steen, M[G], Dowdle, W[G], Wang, E[G], Wang, H[G], Knapp, M[G], Budziszewski, GR[#], **Bowman, SEJ**, Keane, SC, Bridwell-Rabb, J*. (2025) Structure-function Relationships in the Chlorophyll Catabolic Enzyme Pheophytinase *in preparation*

Non-peer reviewed journal for a professional audience (prior to beginning my independent lab)

29. **Bowman, SEJ**, Bren, KL*. (2006) Condensation Article: Direct-Detected 13C NMR to Investigate the Iron(III) Hemophore HasA. Chemtracts - Inorganic Chemistry, 19, 344-349.

    Role: Wrote and edited condensation article *during graduate work*

PUBLICATIONS – SCHOLARLY REVIEWS

30. **Bowman, SEJ**, Bridwell-Rabb, J, Drennan, CL*. (2016) Metalloprotein Crystallography: More than a Structure. Accounts of Chemical Research, 49(4): 695-702. doi:10.1021/acs.accounts.5b00538

    Recognition: Featured on journal cover
    Recognition: ACS Editors' Choice

31. **Bowman, SEJ**, Bren, KL. (2008) The chemistry and biochemistry of heme c: functional bases for covalent attachment. Natural Product Reports, 25(6): 1118-30. doi:10.1039/b717196j

PUBLICATIONS – BOOK CHAPTER

32. Lynch, ML and **Bowman, SEJ***. (2025) Chapter 3: Contributions from Structural Biology to the Pandemic Response During the SARS-CoV-2 Pandemic: Lessons Learned for the Future. In: The COVID Information Commons – Research Insights from the Coronavirus. Springer Nature, *in press*

    Book due out Feb 2026, ISBN 978-3-032-06124-9