Kara L. Bren

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EDUCATION:

Carleton College, Northfield, Minnesota (1987 – 1991) B.A., Chemistry (1991)
Research: NMR investigation of dynamics of carbohydrates
Research Advisor: Prof. Lynn Buffington

California Institute of Technology, Pasadena, California (1991 – 1995) Ph.D., Chemistry (1996)
Thesis: Structurally Engineered Cytochromes *c* with Novel Ligand-Binding Properties
Research Advisor: Harry B. Gray

University of Florence, Florence, Italy (4/94 – 8/94; 4/95 – 5/95), visiting student
Research: NMR solution structures of paramagnetic heme proteins
Research Advisor: Ivano Bertini

PROFESSIONAL EXPERIENCE:

Chair, Department of Chemistry, University of Rochester	2022 – present
Richard S. Eisenberg Professor in Chemistry, University of Rochester	2021 – present
Professor of Chemistry, University of Rochester	2008 – present
Associate Professor of Chemistry, University of Rochester	2003 – 2008
Assistant Professor of Chemistry, University of Rochester	1997 – 2003
Member of UR Biophysics Structural and Computational Biology Program	1998 – present
NIH Postdoctoral Fellow, University of California at Davis, Gerd La Mar lab	1996 – 1997

AWARDS AND HONORS:

Elected to the American Academy of Arts and Sciences	2023
American Institute of Chemists Chemical Pioneer Award	2023
Ewha Global Fellow, Ewha Womans University, Seoul	2023 – 2026
Fellow, American Institute of Chemists	2023
Silliman Lecturer, Yale University	2022
Inaugural holder of the Richard S. Eisenberg Professorship in Chemistry	2021
Featured in Women at the Forefront of Energy Research, *ACS Energy Letters*	2020
Distinguished Women in Chemistry Lecturer, Princeton University	2019
Distinguished Lecturer, City University of Hong Kong	2019
Elected Fellow, American Association for the Advancement of Science	2018
KAIST Chemistry Distinguished Lectureship Award	2018
Humphrey Lecturer, University of Vermont	2017
Kavli Fellow, National Academy of Sciences	2017
Edward Peck Curtis Award for Excellence in Undergraduate Teaching	2017
Visiting Lecturer, Chemistry Promotion Center, Taiwan	2016
Visiting Scholar, Kaohsiung Medical University, Taiwan	2016
Guest Professor of Biochemistry, Lund University, Sweden	2014
Salzberg Lecturer, City College of New York	2014
American Chemical Society PROGRESS/Dreyfus Lectureship Award	2006
Alfred P. Sloan Research Fellow	2003 – 2005
Paul Saltman Memorial Lecturer	2004
National Research Service Award (NIH Post-doctoral Fellow)	1996 – 1997
Eastman/Kodak Graduate Fellow	1992 – 1995
Special Institute Fellow, Caltech	1991 – 1992
Nominated to Phi Beta Kappa	1991

Nominated to Sigma Xi	1991
Franz Exner Award for Excellence in Chemistry	1991
Technology Policy Studies Fellow (Carleton College; sponsored by Sloan Foundation)	1990

LEADERSHIP IN SCIENTIFIC FIELD:

International Advisory Committee, Int'l Symposium on Applied Bioinorganic Chem	2025 – present
Secretary, Society of Biological Inorganic Chemistry	2023 – 2027
International Advisory Board, School of Science, Woxsen University, Hyderabad, India	2023 – present
Associate Editor, *Journal of the American Chemical Society*	2014 – 2024
ACS National Award Selection Committee (Chair)	2022 – 2024
Host of GRC Connects: Visions of Inorganic Chemistry	2022
Chair, Metals in Biology Gordon Research Conference	2023
Deputy Director, Training Program in the Chemistry Biology Interface, U of R 2022 – present	
Advisory Board, Center for Catalysis in Biomimetic Confinement, DOE EFRC	2022 – present
International Advisory Board Member, *Bulletin of the Korean Chemical Society*	2020 – 2023
External Advisory Board Member, University of Kansas NIH CBI T32	2020 – present
External Advisory Board Member, Cornell University NIH CBI T32	2020 – present
Panel Leader, Solar Fuels Roundtable, Office of Science, Department of Energy	2019 – 2020
Program Director, UR Chemistry-Biology Interface Training Program (NIH T32)	2017 – 2022
Member, Editorial Advisory Board, *Comments on Inorganic Chemistry*	2014 – present
Member, Editorial Advisory Board, *Accounts of Chemical Research*	2011 – 2020
Guest Editor, *Proceedings of the National Academy of Sciences*	2016, 2017
Member, DOE Panel on Nitrogen Activation	2016
Council Member, Society for Biological Inorganic Chemistry	2014 – 2018
ACS National Award Selection Committee	2013 – 2015
Alternate Councilor, Division of Inorganic Chemistry, American Chemical Society	2013 – 2015
Member, Editorial Advisory Board, *Journal of Inorganic Biochemistry*	2012 – 2016
Chair, ACS Division of Inorganic Chemistry, Bioinorganic Subdivision	2010
Director, University of Rochester Biological Chemistry Cluster	2010 – present
Chair-elect, ACS Division of Inorganic Chemistry, Bioinorganic Subdivision	2009
Member, Editorial Advisory Board, *Inorganic Chemistry*	2009 – 2012
Thesis Opponent, University of Bergen, Norway	2008
Member, Editorial Advisory Board, *Journal of Biological Inorganic Chemistry*	2007 – 2011
Guest Editor, *Inorganic Chemistry* Forum on Metalloprotein Folding	2004
Invited Expert Analyst, *ChemTracts Inorganic Chemistry*	2000 – 2009

REVIEWING ACTIVITIES and RECOGNITIONS (SELECTED):

Outstanding Reviewer, *Chemical Science*	2024
Jury Member, Merck KGaA Future Insight Prize	2019 – present
Member, Advisory Board, Merck KGaA	2017 – 2018
Examination Board, PhD Thesis, University of Naples (Italy)	2017
Reviewer, DOE EFRC Programs	2016, 2018
Panel Reviewer, NSF-CHE (five times)	2008 – 2019
Member, NIH Fellowship Panel	2015, 2019
Member, External Committee, Johns Hopkins Chemistry Department Evaluation	2015
Member, NSF CAREER Panel, NSF-CHE	2015
Member, NIH Macromolecular Structure and Function A Study Section (MSFA)	2005 – 2008
Member, DOE Review Panel on Basic Research for Hydrogen Fuel Initiative	2005
Ad hoc Member, NIH Physical Biochemistry Special Emphasis Panel	2004
Ad hoc Member, NIH Metallobiochemistry Study Section (twice)	2003
Ad hoc Member, NIH Biochemistry Study Section	2003
Ad hoc Member, NIH Biochemistry Special Emphasis Panel	2003

LEADERSHIP ACTIVITIES IN SCIENTIFIC MEETINGS (SELECTED Recent):

Discussion Leader, Bioinorganic Gordon Research Seminar	2026
Chair, Metals in Biology Gordon Research Conference	2023
Panelist, U.S. – German Workshop on Artificial Photosynthesis	2021
Plenary Lecturer, eBIC	2021
Vice Chair, Metals in Biology Gordon Research Conference	2020
Discussion Leader, Inorganic Reaction Mechanisms Gordon Research Conference	2019
Organizer, Power Hour, Metals in Biology Gordon Research Conference	2018
Organizer, Symposium on Solar Fuels, ACS National Meeting, Boston	2018
Discussion Leader, Bioinorganic Chemistry Graduate Research Seminar	2018
Organizer, Power Hour on Women in Science, Metals in Biology Gordon Conference	2018
Discussion Leader, Metals in Biology Gordon Research Conference	2015, 2017
Session Organizer and Chair, Tetrapyrroles Gordon Research Conference	2016

PROFESSIONAL AFFILIATIONS:

American Academy of Arts and Sciences
American Association for the Advancement of Science
American Chemical Society (Inorganic, Biological, and Physical subdivisions)
National Academy of Sciences, Kavli Fellow
New York Academy of Science
Phi Beta Kappa
Sigma Xi
Iota Sigma Pi
Society of Biological Inorganic Chemistry

PROFESSIONAL DEVELOPMENT ACTIVITIES:

Career and Occupational Mentoring for the Professional Advancement of Science Students (COMPASS) workshop	2021
Center for Improvement of Mentored Experiences in Research (CIMER) workshop	2021
Cottrell Scholars Collaborative Academic Leadership Training workshop.	2020

CURRENT FUNDING:

“CAS: Metallopeptide Artificial Enzymes,” NSF CHE-2108219, 08/1/21 – 07/31/24, $494,440. Role: PI. On NSF: it is 9/2/2023 to 8/31/2024

“Living Bio-Nano Systems for Solar Hydrogen Production,” Department of Energy, DE-SC0023354, 9/1/22 – 8/31/25. Role: PI. $1,986,800

"NIH Training Grant in the Chemistry-Biology Interface," National Institutes of Health, 7/1/22 – 6/30/27, $1,040,745. Role: PI (multi-PI grant)

“SISGR: Modular Nanoscale and Biomimetic Assemblies for Photocatalytic Hydrogen Generation,” Department of Energy, DE-SC0002106; DE-FG02-09ER16121, 7/15/24 – 7/14/27, $1,330,000, Role: PI. Co-PIs: Todd Krauss and Ellen Matson.

INVITED LECTURES (last five years):

2020: University of Pennsylvania
ACS National Meeting, Philadelphia, PA (cancelled)
CBI Training Program Retreat, Cornell University, Ithaca, NY (cancelled)
Phelps Colloquium, University of Rochester (cancelled)
Guanxi Normal University, Guilin, China (cancelled)

Metallocofactors Gordon Research Conference (cancelled)
ACS National Meeting, San Francisco, CA (cancelled)
International Bioinorganic Virtual Symposium, Korean Chemical Society (online)
Indiana University NOx Interest Group (online)

2021: Seoul National University (online)
Rochester Institute of Technology (online)
ACS DIC Periodic Table Talk – Coordination Chemistry Subdivision (online)
Nazareth College (online)
ACS National Meeting, Fresenius Award Symposium (online)
Gordon Research Conference Connects, Innovation by Inorganic Chemistry (online)
NIH CBI Symposium, Cornell University (online)
UC Santa Barbara (online)
International Conference on Porphyrins and Phthalocyanines (online)
Eastern US ACS YCC Partnership (online)
eBIC (online International Bioinorganic Chemistry meeting)
ACS National Meeting, Atlanta, GA
University of Virginia (online)
TIMB3 Training School, University of Florence (online)
Universidad ICESI, Cali, Colombia (online)
Oxford University (online)

2022: ACS National Meeting, San Diego, CA
University of Michigan
Fusion Conference on Small Molecule Activation, Cancun, Mexico
Solar Photochemistry PI Meeting (online)
Nobel Symposium, “Visions of Bio-Inorganic Chemistry: Metals and the Molecules of Life,” Stockholm, Sweden
Bulletin of the Korean Chemical Society Meeting, Seoul, Korea
Bioinorganic Chemistry Symposium, KAIST, Daejeon, Korea
International Conference on Porphyrins and Phthalocyanines (ICPP), Madrid, Spain
Yale University
California Institute of Technology
Southeast Regional Meeting of the ACS, San Juan, Puerto Rico
10^{th} Asian Biological Inorganic Chemistry (AsBIC) meeting, Kobe, Japan

2023: ACS National Meeting, Indianapolis, IN
Latin American Meeting on Biological Inorganic Chemistry (LABIC), Viña del Mar, Chile
American Institute of Chemists Chemical Pioneer Symposium, Philadelphia, PA (online)
Georgian Bay Conference on Bioinorganic Chemistry, Parry Sound, Ontario, Canada
Telluride Science Research Center Workshop on Molecule Transformation through Proton-Coupled Electron Transfer for Energy Storage and Conversion
ACS National Meeting, San Francisco, CA
International Symposium on Molecular Sciences, Jeonju, Korea
Bulletin of the Korean Chemical Society Symposium, Korean Chemical Society Meeting, Gwangju, Korea
Southwest Regional Meeting of the ACS, Oklahoma City, OK
Birla Institute of Technology and Science, Goa, India

2024: St. Xavier’s College, Kolkata, India
Symposium for Advanced Bioinorganic Chemistry, Kolkata, India
Renewable Energy: Solar Fuels Gordon Research Conference, Ventura, CA
ACS National Meeting, New Orleans, LA
Hamilton College, Clinton, NY
NSLS II Workshop, Brookhaven National Lab
DOE Solar Photochemistry PI Meeting
Metallocofactors Gordon Research Conference, Stonehill College, MA
Susquehanna Regional ACS Meeting, PA

University of Illinois Champaign – Urbana, Urbana, IL
Taiwan Biological Inorganic Chemistry Symposium, Kaohsiung, Taiwan
National Tsing Hua University, Taipei, Taiwan
National Taiwan Normal University, Taipei, Taiwan
Ewha Womans University, Seoul, Korea
POSTECH, Pohang, Korea
UNIST, Ulsan, Korea

2025: Metals in Biology Gordon Research Conference, Ventura, CA
CANBIC, Parry Sound, Ontario
DOE Solar Photochemistry PI Meeting, Bethesda, MD
International Symposium on Applied Bioinorganic Chemistry, Uppsala, Sweden
International Conference on Biological Inorganic Chemistry, Long Beach, CA
ACS National Meeting, Inorganic Chemistry Lectureship Symposium, Washington, DC
Wayne State University Chemistry
International Solar Fuels Conference, Newcastle, UK
University of Maryland, Baltimore ??
Pacifichem, Honolulu, HI (Session talk and Plenary talk)

2026: Bioinorganic Gordon Research Seminar (Session Leader)
International Conference on Porphyrins and Phthalocyanines, Kyoto, Japan

PLENARY AND NAMED LECTURES:

2007: ACS PROGRESS/Dreyfus Lecture, Department of Chemistry, Purdue University
2014: Salzberg Lecture, City College of New York, New York, NY
2016: Plenary, The Girona Seminar on Transition Metal Reactivity by Design, Girona, Spain
2017: Humphrey Lecturer, University of Vermont
2018: Plenary, Dalton 2018, Coventry, UK
KAIST Lectureship Award, Daejeon, Korea
2019: Distinguished Lecturer, City University of Hong Kong
Plenary, Latin American Symposium on Coordination and Organometallic Chemistry, Cartagena, Columbia
Distinguished Women in Chemistry Lecturer, Princeton University
2021: Plenary Lecturer, eBIC
2025: Plenary, International Solar Fuels Conference
2025: Plenary, Pacifichem

COURSES TAUGHT:

Advanced Inorganic Chemistry I (graduate level) (CHM 411)
Advanced Inorganic Chemistry II (graduate level; physical inorganic chemistry) (CHM 412)
Biochemistry (Lecturer on NMR of biomolecules) (IND 408)
Biochemistry (Undergraduate and graduate level) (CHM 250/450)
Bioinorganic Chemistry (graduate level) (CHM 414)
Chemical Concepts, Systems, and Practices II (CHM 132)
Chemistry-Biology Interface (CHM 406)
Group Theory (CHM 415)
Inorganic Chemistry (undergraduate level) (CHM 211)
Methods in Structural Biology (Lecturer on NMR of proteins) (CHM 402/BPH 411)
Nuclear Magnetic Resonance Spectroscopy (CHM 422)
Physical Methods in Inorganic Chemistry (CHM 424)
Principles of Chemistry (lab) (CHM 105L)