Timothy E. Elgren

EDUCATION:

University of Minnesota Minneapolis, Minnesota — Postdoctoral Fellowship 1990-92
Mentor: Professor Lawrence Que, Jr.

Dartmouth College Hanover, New Hampshire — Ph.D. Bioinorganic Chemistry, December 1989
Advisor: Professor Dean E. Wilcox

Hamline University St. Paul, Minnesota — B.A. Chemistry, June 1984

LEADERSHIP POSITIONS HELD:

Chief Research Officer and Director of Corporate and Foundation Relations
University of North Carolina Asheville (2019 – current)

- Oversight of the University Sponsored Programs and Grants Management operations ($6.2 M in grants for FY21, up from $2.2 M in grants for FY20. Number of submitted grants grew from 56 to 99.).
- Cultivate, solicit, and steward corporate and foundation philanthropy in support of university strategic priorities.
- Oversee three grant-funded Centers: North Carolina Center for Health and Wellness (25 staff), National Environmental Modeling and Analysis Center (10 staff), and the STEAM Studio (Science, Technology, Engineering, Art, and Math (STEAM), a fabrication, makerspace with 6 staff).
- Develop strategic initiatives including public/private partnerships.
- Incorporated Blackbaud Raiser's Edge NXT fundraising software into the Corporate and Foundations strategy framework allowing for integration with broader advancement efforts.
- Cultivated strategic partnership with the US Performance Center to create on-campus clinical experiences for students and build a framework for broader regional partnerships promoting aging well, sports medicine, and physical therapy.

Consultant, Special Appointment for Strategic Initiatives
Stetson University (2018 – 2019 Academic Year, while on sabbatical from Oberlin College)

- Retained to coordinate the planning and implementation of a new Health Sciences initiative prompted by an $18 M gift and opportunities to partner with local health care institutions. Worked with Senior Leadership, Faculty, and Community Partners to establish curricular pathways to expand student opportunities in the health professions and initiate design of new 40,000-square-foot Health Sciences facility.

Chief Academic Officer, Dean of Arts & Sciences
Oberlin College (2014 – 2018)

- Oversight of the College of Arts & Sciences: 486 employees, including 280 faculty members and teaching staff (223 are tenured and tenure track faculty members); 2,514 Arts & Sciences students; annual A&S budget was $39.8 M of the total $162 M total budget.
- Direct reports also included the Libraries, Allen Memorial Art Museum, registrar and advising system, Bonner Center for Service and Learning, Office of Undergraduate Research, Office of Study Away, Office of Foundation, Government and Corporate Grants, Center for Teaching and Innovation, and the Writing Center.
- Primary responsibilities: curriculum and program review, faculty hiring, development and review, and academic affairs budget. College-wide strategic planning, implementation, assessment, and accreditation (collaboratively with other divisions).

Oberlin Achievements:

Curricular Initiatives:

- To better communicate the coherence and impact of an Oberlin education and provide greater clarity and guidance for our students as they explore the many opportunities and pathways at Oberlin, I led the Arts & Sciences faculty through a process to articulate Learning Goals for a Liberal Education (the first update to the A&S curriculum since 1977) and oversaw the restructuring of the academic advising system. (Supported by a $100,000 grant from the Mellon Foundation)

- Academic Advising became a focal point of the Curricular and Strategic Planning discussions. A top priority of the new Strategic Plan was to improve the Oberlin advising experience and a centerpiece of bolstering our enrollment management strategy. I established and oversaw an Advising Task Force that

designed and implemented a new system, including introducing a new advising software platform, that was rolled out for the 2017-18 academic year. The new model moved to a developmental/teaching model from a transactional one. A key component of this the new system was developed in partnership with the Dean of Students and engaged student peers in the advising process. I also oversaw the creation of an Academic Advising Resource Center (AARC) – which houses the advising, academic standing and registrar functions. The AARC works in close collaboration with the Dean of Students Office and the Deans of the Conservatory and A&S, and reports to the A&S Dean. Oversight of enrollment management continues to be shared between the AARC, Dean of Students, Deans of the Conservatory and Arts & Sciences, and Admissions.

- In response to chairs' and faculty members' expressed desire for greater opportunities to collaborate with each other and teach at the intersections of their disciplines, I created StudiOC – Oberlin's Center for Convergence as a space for students and faculty to explore topics and issues that, due to their multidisciplinary nature, require a convergence of approaches and disciplinary practices. This space promotes the creativity and intellectual curiosity that are the underpinnings of a liberal arts education. Courses are offered in theme-based clusters that constitute learning communities and provide unique opportunities for Conservatory and Art & Science faculty and students to collaborate across disciplines. (Funding from a Mellon grant ($750,000) and a private gift support ($500,000) supported this work.)
- Assessment of the learning environment was an important priority. Articulated Learning Goals are now in place for the College of Arts & Sciences, the Conservatory, all A&S departments, and included in all faculty syllabi. Reflections on strategies to improve the learning environment are now part of the annual departmental assessment reporting process, an area of focus during reaccreditation.
- Forged a new partnership with Pioneer Academics in Beijing to promote research experiences for high school juniors from around the world. Faculty mentors at US colleges and universities mentor these students via video conferencing technologies. Students participating in these experiences receive Oberlin College credit and have access to Oberlin library resources. This has become a novel revenue stream and admissions vehicle. Oberlin has yielded more than $1.5 M from this partnership, averaging $350 K per year.
- Led a faculty team that participated in an American Association of Colleges and University collaboration funded by the Arthur Vining Davis Foundation to examine strategies for implementing "Signature Work" – one of the high impact practices promoted by AAC&U. The Oberlin team focused on the integration of a culminating experience into a coherent academic planning process. An article describing the work done by this collection of colleges and universities titled "Process of Change and Strategies for Organizing Signature Work" was published in Peer Review (Summer 2018).
- Secured a gift for an annual $50,000 new student prize awarded to an outstanding STEM student who has demonstrated breadth and achievement in their studies beyond STEM disciplines – a celebration of liberally educated scientists. This is the only prize of its kind in higher education.

Inclusive Excellence:

- A strong advocate of diversity in its many forms, I worked with departments and faculty committees to change the process by which requests for faculty lines are reviewed and allocated. Departments are now required to articulate how a new hire would increase interactional diversity on campus. Provided training and assistance for those involved in conducting searches and crafting job descriptions. These efforts realized immediate results with 57% of tenure-track searches yielding faculty of color in the first year.
- Initiated the Science and Technology Research Opportunities for a New Generation (STRONG) Program, a pre-matriculant program for students traditionally underrepresented in the STEM areas – students of color, first generation students and women. Eligible students receive an invitation to apply to this program when they receive their letter of admission. In this way, it has become a yield tool and sends an important message about the types of opportunities that will be available. These students spend five weeks on campus doing research with a faculty member and that mentor's research group. STRONG Scholars now comprise a significant campus community of support for under-served STEM students.

- Bolstered by our successes in creating equitable pathways to success, Oberlin College was one of 24 colleges and universities nationwide to receive a $1 million grant through the Howard Hughes Medical Institute (HHMI) Inclusive Excellence initiative – one of only two liberal arts college awardees. The HHMI project promotes persistence and success of all students in STEM fields by changing the ways the science community is built and science curriculum is delivered.
- As evidence of our success at diversifying the sciences, the percentage of Under-Represented Minority students graduating in STEM disciplines is now greater than the percentage graduating from the College.

Financial Stewardship:

- Led the A&S faculty through budget discussions that resulted in commitments to reduce tenure-track faculty lines by 8 over 5 years, reduce visiting faculty lines from 66 semesters to 50, and implement an early retirement initiative that yielded 15 retirement agreements.
- Through a collaborative review process, we reduced the A&S Academic Affairs budget by $2 M (5%) through a zero-budgeting process involving all department and program chairs.

Clinton Central Schools Board of Education: Elected to a three-year term, 2009-2012, President, 2011-2012, Chair of the Strategic Planning and Curriculum Committee, 2009-2011.

Council on Undergraduate Research, Washington, D.C., President 2004-2005, Executive Board 2003-2006.

ACADEMIC APPOINTMENTS:

Oberlin College Oberlin, Ohio
Chief Academic Officer, Dean of the College of Arts and Sciences, 2014 – 2018
Professor of Chemistry, 2014 – 2019
(sabbatical AY 2018 – 2019)

Hamilton College Clinton, New York
Professor Emeritus, 2014 – present
Professor of Chemistry, 2006 – 2014
Founding Director of the Hamilton College Network for Teaching and Learning, 2012 – 2014
Associate Dean of the Faculty, 2000 – 2004
Worked with Dean of Faculty on matters of the instructional budget, facilities, faculty grants, department and program reviews, personnel, and salary. Served as Affirmative Action Officer on faculty hires and coordinated the academic advising system in cooperation with Dean of Students office.
Chair of Biochemistry Program, 1999 – 2004, 2006 – 2010
Associate Professor of Chemistry, 1999 – 2006
Assistant Professor of Chemistry, 1993 – 1999
Hamilton Courses taught: General Chemistry (Chem 111, 120); Chemical Principles in the Context of Human and Environmental Health (Chem 125), Environmental Science (ES150); Society and the Environment (ES 150); Biological Chemistry (Chem 270); Classical Physical Chemistry (Chem 333); Biophysical Chemistry (Chem 436); Advanced Laboratory Techniques (Chem 351, 352); Miracles, Disasters and Everyday Chemistry (Chem 105), Scientific and Social Perspectives on HIV/AIDS (SophSem 245), Senior Thesis I and II (Biochem 550, 551), Senior Research Tutorial (Biochem 559), Senior Fellowship Research. Principal research advisor for 44 senior research projects and four senior fellowships. Research interests: Spectroscopic investigations of the structure and reactivity of metalloproteins and sol-gel encapsulated proteins.

Montana State University, Bozeman, Montana
Visiting Research Faculty (Sabbatical leave), 2004 – 2005

Knox College Galesburg, Illinois

Assistant Professor of Chemistry, 1992 – 1993 Teaching responsibilities: General chemistry and biochemistry.

AWARDS, HONORS, AND EXTERNAL FUNDING

Cannon Charitable Trust "Support for an NMR at UNC Asheville", $100,000, 2023.

Howard Hughes Medical Institute "Inclusive Excellence Initiative" $1,000,000, 2017-22.

Andrew Mellon Foundation "Convergence in Liberal Education: Enhancing Curricular and Educational Coherence for Student Learning Outcomes" $750,000, 2016-20.

Andrew Mellon Foundation "Examining and Refining the Liberal Arts Experience at Oberlin College" $100,000, 2015-18.

National Center for Science and Civic Engagement (SENCER) "Chemistry and Civic Engagement: The Study of Toxic Chemicals in Everyday Products" (PI for partnership grant with the Green Science Policy Institute) $25,000, 2013-15.

Clare Boothe Luce Award "Undergraduate Research Awards for Women in Science" $144,600, 2012-15.

American Council on Education Fellow 2011-12 Host institution: SUNY-Institute of Technology at Utica/Rome, Host President: Bjong Wolf Yeigh

Matt Brewing Co. "Analytical Assessment of Chemical Markers in the Brewing Process" $4,000, 2011

Nalco Company (with Rick Holz, Loyola University of Chicago)
"Acrylamide Production from Encapsulated Enzymes" $50,000, 2009-11

Christian A. Johnson Teaching Enhancement Award
"Development and Implementation of Discovery-based Laboratories in Chemistry" $10,000, 2008-09

SENCER Leadership Fellow, 2008

National Science Foundation: Research at Undergraduate Institutions
"Mechanistic Studies of Encapsulated Enzymes" $260,000, July 2006

Research Corporation: Departmental Development Award (project director and primary writer)
"Five-Year Plans for Hamilton Chemistry and Physics Departments" $500,000, July 2006

National Science Foundation: Major Research Instrumentation
"Acquisition of a Raman Microscope" $220,000, September 2004

President of the Council on Undergraduate Research, 2004-05, three-year term on CUR Executive Board.

Petroleum Research Fund of the American Chemical Society: UFS Grant
"Characterization of Intermediates in the Catalytic Cycle of Amine Oxidases" $50,000, June 2004

Cottrell College Science Award: Research Corporation
"Characterization of Sol-Gel Encapsulated Amine Oxidase and Chloroperoxidase" $35,000, June 2004

Merck/American Association for the Advancement of Science: Undergraduate Science Research Program
"Collaborative Projects at the Interface of Biology and Chemistry" $60,000, June 2004

Camille and Henry Dreyfus Special Grant Program in Chemical Sciences 2001
" An Integrative, Investigative, Advanced Laboratory Course" $25,000, Spring 2001

National Science Foundation: Course, Curriculum and Laboratory Improvement
"Calorimetry and Capillary Electrophoresis in the Undergraduate Teaching Laboratory" $66,334, June 1999

The John R. Hatch Excellence in Teaching Award Hamilton College, May 1998

Hamilton College Class of 1966 Career Development Award
"Investigative Laboratories for Biochemistry" $2,000, Summer 1998

Emerson Student-Faculty Collaboration Award
"Sol-Gel Encapsolation of Proteins" $5,000, Summer 1998

National Institutes of Health: AREA Program
"Neurocuprein: A Novel Copper Protein" $113,491, 3-year grant, May 1997

Petroleum Research Fund of the American Chemical Society
"Neurocuprein: A Novel Type II Copper Protein" $25,000, 2-year grant, December 1996

Hamilton College Class of 1966 Career Development Award
"Biophysical Chemistry Laboratory Development" $2,000, Summer 1995

Camille and Henry Dreyfus Special Grant Program in Chemical Sciences 1994

"Application of Biophysical Chemistry: An Undergraduate Laboratory" $11,900, Spring 1994

Research Corporation "Spectroscopic Studies of Neurocuprein and its Catalytic Role in Catecholamine Oxidation" $29,035, 2-year grant, September 1993

Petroleum Research Fund of the American Chemical Society
"The Catalytic Role of Neurocuprein in Catecholamine Oxidation" $20,000, 2-year grant, September 1993

National Science Foundation - Research Opportunity Award Univ. of Minnesota, 1993, $10,000
"Exogenous Ligand Binding to the Diiron Clusters of Ribonucleotide Reductase"

PUBLICATIONS: (*Hamilton student co-author)

25. Martinez, Salette; Kuhn, Misty L.; Russell, James T.;* Holz, Richard C.; Elgren, Timothy E. "Acrylamide Production using Encapsulated Nitrile Hydratase from *Pseudonocardia thermophila* in a Sol-Gel Matrix" *Journal of Molecular Catalysis B: Enzymatic*, 100, 19-24, 2014.
24. O'Grady, Clare E.;* Talpey, Peter;* Elgren, Timothy E.; Van Wynsberghe, A. W. "The Development and Implementation of a Bio-molecular Docking Exercise for the General Chemistry Laboratory" *Annual Reports in Computational Methods*, 10, 167-187, 2014.
23. Zadvornyy, Oleg A.; Lucon, Janice E.; Gerlach, Robin; Zorin, Nikolay A.; Douglas, Trevor; Elgren, Timothy E.; Peters, John W. "Photo-Induced H_2 Production by [NiFe]-Hydrogenase from *T. roseopersicina* Covalently Linked to a Ru(II) Photosensitizer" *Journal of Inorganic Biochemistry*, 106, 151-155, 2012.
22. Zadvornyy, Oleg A.; Barrows, Amy M.;* Zorin, Nikolay; Peters, John W.; Elgren, Timothy E. "High Level of Hydrogen Production Activity Achieved for Hydrogenase Encapsulated in Sol-Gel Material Doped with Carbon Nanotubes" *Journal of Materials Chemistry*, 20, 1065-1067, 2010.
21. Elgren, Timothy E.; Zadvornyy, Oleg A.; Brecht, Eric; Douglas, Trevor; Zorin, Nikolay A.; Maroney, Michael J.; Peters, John W. "Immobilization of Active Hydrogenase Enzymes by Encapsulation in Polymeric Porous Gels" *Nano Letters*, 5, 2085-2087, 2005.
20. Pierce, Brad S.; Elgren, Timothy E. and Hendrich, Micheal P. "Mechanistic Implications for the Formation of the Diiron Clusters in Ribonucleotide Reductase Provided by Quantitative EPR Spectroscopy", *Journal of the American Chemical Society*, 125, 8748-8759, 2003.
19. Senior, SueAnn Z.; Mans, Laura;* VanGuilder, Heather D.;* Kelly, Kimberly A.;* Hendrich, Michael P. and Elgren, Timothy E. "Catecholase Activity Associated with Copper-S100B", *Biochemistry*, 42, 43924397, 2003.
18. Smith, Kevyn; Silvernail, Nathan; Rodgers, Kenton R.; Elgren, Timothy E.; Castro, Mauro* and Parker, Robert* "Sol-gel Encapsulated Horseradish Peroxidase: A Catalytic Material for Peroxidation", *Journal of the American Chemical Society*, 124, 4247-4252, 2002.
17. Marcoline, Anne T.* and Elgren, Timothy E. "A Thermodynamic Study of Azide Binding to Myoglobin", *Journal of Chemical Education*, 75, 1622-1623, 1998.
16. Elgren, Timothy E. "Consideration of Lewis Acidity in the Context of Heme Biochemistry: A Molecular Visualization Exercise", *Chemical Educator*, 3:3, 1-11, 1998.
15. Elgren, Timothy E.; Orville, Allen M.; Kelly; Kimberly A.;* Lipscomb, John D.; Ohlendorf, Douglas H. and Que, Lawrence Jr. "Crystal Structure and Resonance Raman Studies of Protocatechuate 3,4-Dioxygenase Complexed with 3,4-Dihydroxyphenylacetate", *Biochemistry*, 36, 11504-11513, 1997.
14. Stemmler, Timothy L.; Sossong, Thomas R.; Goldstein, Jonathan I.;* Ash, David A.; Elgren, Timothy E.; Kurtz, Donald M., Jr. and Penner-Hahn, James E., "Comparison of the Dinuclear Mn Core Solution Structure of Mn Catalase, Arginase and Mn-Substituted Forms of Ribonucleotide Reductase and Hemerythrin", *Biochemistry*, 36, 9847-9858, 1997.
13. Silva, Kathleen E.; Elgren, Timothy E.; Que, Lawrence, Jr. and Stankovich, Marian T., "Electron Transfer Properties of the R2 Protein of Ribonucleotide Reductase from *E. coli*", *Biochemistry*, 34, 14093-14103, 1995.
12. Jones, William B.; Elgren, Timothy E.; Morelock, Maurice M.; Elder, Richard C. and Wilcox, Dean E., "Technetium Metallothionein: Spectroscopic and EXAFS Study of $^{99}TcO^{+3}$ Binding to Zn_7Metallothionein", *Inorganic Chemistry*, 33, 5571-5578, 1994.

11. Elgren, Timothy E.; Ming, Li-June and Que, Lawrence, Jr., "Spectroscopic Studies of Co(II)-Reconstituted Ribonucleotide Reductase R2 from *E. coli*", *Inorganic Chemistry*, 33, 891-894 (1994).
10. Elgren, Timothy E.; Hendrich, Michael P. and Que, Lawrence, Jr., "Azide Binding to the Diferrous Form of Ribonucleotide Reductase R2 Protein", *Journal of the American Chemical Society*, 115, 9291-9292 (1993).
9. Holz, Richard C.; Elgren, Timothy E.; Pearce, Linda L.; Zhang, Jian H.; O'Connor, Charles J. and Que, Lawrence, Jr., "Spectroscopic and Electrochemical Properties of (μ-oxo)diiron(III) Complexes Related to Diiron-Oxo Proteins. Structure of $[Fe_2O(TPA)_2(MoO_4)](ClO_4)_2$", *Inorganic Chemistry*, 32, 5844-5850 (1993).
8. Zang, Yan; Elgren, Timothy E.; Dong, Yanhong and Que, Lawrence, Jr., "A High Potential Ferrous Complex and Its Conversion to an η^2-Alkylperoxoiron(III) Intermediate: A Lipoxygenase Model", *Journal of the American Chemical Society*, 115, 811-813 (1993).
7. Dong, Yanhong; Ménage, Stéphane; Brennan, Bridget A.; Elgren, Timothy E.; Jang, Ho G.; Pearce, Linda L. and Que, Lawrence Jr. "Dioxygen Binding to Diferrous Centers: Models for Diiron-oxo Proteins", *Journal of the American Chemical Society*, 115, 1851-1859 (1993).
6. Anderson, Kristoffer K.; Elgren, Timothy E.; Que, Lawrence, Jr. and Lipscomb, John D. "Accessibility to the Active Site of Methane Monooxygenase: The First Demonstration of Exogenous Ligand Binding to the Diiron Cluster", *Journal of the American Chemical Society*, 114, 8711-8713 (1992).
5. Schallreuter, Karin U.; Elgren, Timothy E.; Nelson, Lowell S.; MacFarlan, S.; Yan-Sze, Isaac and Hogenkamp, Henricus P. "Ribonucleotide Diphosphate Reductase from Human Metastatic Melanoma" *Melanoma Research*, 2, 393-400 (1992).
4. Elgren, Timothy E.; Lynch, John B.; Juarez-Garcia, Carlos; Münck, Eckard; Sjöberg, Britt-Marie and Que, Lawrence, Jr. "Electron Transfer Associated with Oxygen Utilization by Ribonucleotide Reductase", *Journal of Biological Chemistry*, 266, 19265-19268 (1991).
3. Hendrich, Michael P.; Elgren, Timothy E. and Que, Lawrence, Jr. "A Mixed Valence Form of the Iron Clusters in the B2 Protein of Ribonucleotide Reductase from *E. coli*", *Biochemical and Biophysical Research Communications*, 176, 705-710 (1991).
2. Kull, F. Jon; Reed, Michael F.; Elgren, Timothy E.; Ciardelli, Thomas L. and Wilcox, Dean E. "Solid Phase Peptide Synthesis of the □□ and□ Domains of Human Liver Metallothionein and the Metallothionein of *Neurospora crassa*.", *Journal of the American Chemical Society*, 112, 2291-2298 (1990).
1. Elgren, Timothy E. and Wilcox, Dean E. "A Unique Low Frequency Raman Band Associated with Metal Binding to Metallothionein", *Biochemical and Biophysical Research Communications*, 163, 1093-1099 (1989).

BOOKS:

Karukstis, Kerry, and Elgren, Timothy (co-editors) *Developing and Sustaining a Research-Supportive Curriculum: A Compendium of Successful Practices*. Washington, DC: Council on Undergraduate Research, 2007.

REPORTS, PEDAGOGY AND POLICY PAPERS:

12. Hayden-Roy, Patrick; Elgren, Tim; Kneas, Kristi; Malsky, Matt; Reder, Michael "Process of Change and Strategies for Organizing Signature Work" *Peer Review*, 20:2, 12-14 (2018).
11. Kinnel, Robin B.; Van Wynsberghe, Adam W.; Rosenstein, Ian J.; Shields, George C.; Brewer, Karen S.; Cotton, Myriam L.; Borton, Charles J.; Senior, SueAnn Z.; Rahn, Gregory S. and Elgren, Timothy E. "A Departmental Focus on High Impact Undergraduate Research Experiences" in *American Chemical Society Symposium Series – Developing and Sustaining a Successful Undergraduate Research Program*; ACS: Washington, DC, Vol. 1156, 2013, pp 5-22.
10. Elgren, Timothy E.; Cotten, Myriam L.; Borton, Charles J. and Rahn, Gregory S. "Assessing Exposure to Toxic Chemicals: General Chemistry Applied to Human and Environmental Health" Science Education for New Civic Engagements and Responsibilities (SENCER) Model Course (2010),

(http://ncsce.net/assessing-exposure-to-toxic-chemicals-general-chemistry-applied-to-human-andenvironmental-health/).

9. Karukstis, Kerry K.; Elgren, Timothy E.; Ronco, Silvia E.; Feller, Scott E.; Rowlett, Roger S. "Barriers to Seeking External Research Funding: Perceptions and Facts" *J. Chemical Education*, 86, 788-790 (2009).
8. Paris, David C. and Elgren, Timothy E. "Advising: Less is More?" *Inside Higher Ed* (Sept. 29, 2006) http://insidehighered.com/views/2006/09/29/paris
7. Elgren, Timothy E. and Hensel, Nancy "Undergraduate Research Experiences: A Synergistic Relationship Between Scholarship and Teaching" *Peer Review*, 8, 4-7 (2006).
6. Elgren, Timothy E. "From Anecdotes to Direct Measures: Assessing Undergraduate Research" *CUR Quarterly*, 25, 101 (2005)
5. Elgren, Timothy E. "Successful Collaborative Research with Undergraduates Requires Balancing Objectives" *CUR Quarterly*, 25, 52 (2004).
4. Housic, Diane and Elgren, Timothy E. "Curricular Structures to Support Undergraduate Research" (2003) (http://www.bates.edu/Prebuilt/chem-curriculum.pdf)
3. Elgren, Timothy "Fifteen minutes of fame and a legacy of consequences" *Hamilton Alumni Review* (Summer 2003).
2. Elgren, Timothy E. "Undergraduate Research Summer Fellowships Undergo Change" *J. Chemical Education*, 77, 1113 (2000).
1. Elgren, Timothy E.; Domack, Eugene W. and Guyot-Bender, Martine "A Cross-Cultural Science Program" *CUR Quarterly*, 19, 190 (2000).

RECENT LECTURES, PRESENTATIONS, AND WORKSHOPS:

(only undergraduate student co-authors listed)

University of North Carolina Advancement Symposium Wilmington, NC, May 2024
Invited talk: "Finding Friends in Your Faculty: How to Navigate Faculty Relationships and Build Partnerships"

Pioneer Academics – 10th Anniversary Philadelphia, PA, January 2023
Invited talk: "Opportunities and Challenges in Higher Education"

Council of Independent Colleges Institute Chief Academic Officers with Chief Advancement Officers – Baltimore, November 2019
"Projects to Construct Science Buildings that Transform an Institution"

The 17th China Education Association for International Exchange (CEAIE) – Beijing, China, October 2016
Invited lecture "Science Education: Pathways to Innovation and Entrepreneurship"

United International College - 8th Sino-America Liberal Arts Forum Zhuhai, China, November 2015
Invited plenary "Depth, Breadth and Convergence: The Power of a Liberal Arts Education"

University of Washington – Bothell Bothell, WA, February 2014
Led workshop and deliver plenary "Integrating Undergraduate Research Into and Across the Curriculum"

Skidmore College Saratoga Springs, NY, May 2013
Invited to lead workshop on "Coupling Science and Civic Engagement"

Massachusetts College of Liberal Arts May 2012
Invited talk and led workshop: "Integrating Undergraduate Research into and Across the Curriculum" Gordon Research Conference: "Metals in Biology" Ventura, California, January 2012
"Hydrogen Production Via Photoreduction of Encapsulated Hydrogenase" with Amy Barrows. Washington Symposium and Capitol Hill Poster Session Washington, DC, April 2010
National Center for Science & Civic Engagement, "Chemical Toxins: Exposure to Bisphenol A and Halogenated Flame Retardants" with Julia Litzky and Willam McIvor.

Gordon Research Conference: "Metals in Biology" Ventura, California, January 2010
"High Levels of Hydrogen Production from Encapsulated Hydrogenase" with Amy Barrows.

University of Rhode Island Kingston, RI April 2009

Invited talk: "Harnessing the Power of an Enzyme: Functional Biomaterials"

Missouri Western State Univ.: Conf. on Applied Learning in Higher Education St. Joseph, MO Feb 2009
Invited Keynote Address: "Integrating Applied Learning: Forging Direct Links to the Curriculum" and workshop "The Teaching of Research: Research as Teaching"

Gordon Research Conference: "Metals in Biology" Ventura, California, January 2009
"Hydrogen Production from Encapsulated Hydrogenase" with Amy Barrows.

University of Wisconsin – Madison Madison, WI December 2008
Invited talk: "Harnessing the Power of an Enzyme: Functional Biomaterials"

Association of American Colleges and Universities conference "Engaging Science, Advancing Learning: General Education, Majors, and the New Global Century" Providence, RI Nov 2008 Invited talk: "Teaching of Research: Research as Teaching".

Midwest Regional Workshop on Institutionalizing Undergraduate Research, Hope College, Oct 2008
Served as facilitator for NSF-funded workshop coordinated by the Council on Undergraduate Research.

Centre College Danville, KY Aug 14, 2008
Conducted workshop titled "Undergraduate Research Across All Disciplines"

National Conference of the American Chemical Society New Orleans, LA April 2008
Invited talks: "Encapsulation of enzymes: New strategies for probing function", "Identifying and choosing research projects: Getting out of the gates", and "Recruiting and working with undergraduate researchers".
Posters: "Chemical and electrochemical activation of encapsulated redox enzymes" with Amy Barrows, "Halogenase and dehalogenase activities of encapsulated peroxidases" with Christina Clark and Sydney Fasulo, and "Porphyrin chemistry: An integrated investigative advanced laboratory course" with Kaitlin Johnson.

Gordon Research Conference: "Metals in Biology" Ventura, California, January 2008
"Oxidative Dehalogenation by Encapsulated Peroxidases" with Sydney Fasulo, Christina Clark, Nick Berry and Ngoda Manongi.

National Conference of the American Chemical Society Chicago, IL March 2007
Posters: "Encapsulated Peroxidases" with Hilary Gamble and "Raman Characterization of Uranium" with Julianne Tylko.

National Press Club Washington, DC, February 2007
Panel: "Advancing Competitiveness Agenda by Improving Teaching and Student Learning"

Gordon Research Conference: "Metals in Biology Ventura, CA, January 2007
Poster presentation: "Halogenation and Oxidative Dehalogenation Activities of Sol-Gel Encapsulated Peroxidases"

Second Annual Japan-China Crossover Science Symposium
Ibaraki University Mito, Japan, October 2006
Invited talk: "Sol-Gel Encapsulated Enzymes: Spectroscopic and Mechanistic Studies"

Colgate University Hamilton, NY September 2006
Invited talk: "Harnessing the Power of an Enzyme"

University of Massachusetts–Amherst Amherst, MA, February 2006
Invited talk: "Sol-Gel Encapsulation of Proteins: Harnessing the Power of an Enzyme"

National Conference of the American Associate for the Advancement of Science
St. Louis, MO, February 2006
Invited talk: "Undergraduate Research Experiences: A Natural Synergy Between Teaching and Research.

Gordon Research Conference: "Protein Derived Cofactors, Radicals, and Quinones"
Ventura, California, January 2006
Invited talk: "Encapsulation of Metalloenzymes: Mechanistic and Spectroscopic Studies"

Gordon Research Conference: "Metals in Biology" Ventura, California, January 2005
"Encapsulation of Metalloenzymes: Mechanistic and Spectroscopic Studies" with Robert Gordon and Jeff Rubino.

National Conference of the American Chemical Society San Diego, California January 2005
Invited talks: "Departmental Five-Year Planning" and "Infusing Civic Engagement and Public Policy into the Biochemistry Curriculum"
Macalester College St. Paul, Minnesota, November 2004
Invited talk: "Harnessing the Power of an Enzyme"
Gordon Research Conference: "Metals in Biology" Ventura, California, January 2004 Poster Presentation "Sol-Gel Encapsulation of Amine Oxidase" with Robert Gordon and Jeff Rubino. National Conference of the American Chemical Society New York, New York 2003
Invited Talk: "Miracles, Disasters and Everyday Chemistry: Introducing Chemistry and Citizenship"
National Conference of the American Chemical Society New Orleans, Louisiana 2003
Poster Presentations: "Encapsulation of Peroxidases: Novel Catalytic Materials" with Robert Parker and Jeff Rubino; "Sol-Gel Encapsulation of Amine Oxidase" with Robert Gordon; "An Integrated Context for Introducing Research Methods in Chemistry" with Ryan Palmitesso.

SERVICE:

Campus Community

UNC Asheville

Assistant General Counsel Search Committee (2021)
Department of Management and Accountancy Advisory Board member (2021 – current)
Assistant General Counsel Search Committee (2021)
Department of Management and Accountancy Advisory Board member (2021 – current)
Oversight of UNCA Centers: 1) North Carolina Center for Health and Wellness (NCCHW), 2) National Environmental Modeling and Analysis Center (NEMAC), and 3) STEAM Studio (2023 – current)
Provost Search Committee (2024)
Executive Director of the NC Center for Health and Wellness, search committee (Chair) (2024)

Oberlin College

Chair – College Faculty Council (2014 – 2018)
Chair – General Faculty Council (2014 – 2017), member (2014 – 2018)
Education Policies and Procedures Committee (2014 – 2018)
Strategic Planning Steering Committee (2014 – 2016)
Strategic Planning Implementation Committee (2016 – 2018)
Curriculum Coordinating Committee (*ad hoc)* (2015)

Hamilton College

Affirmative Action Officer (2000 – 2004)
Human Subjects Institutional Review Board (2003 – 2005)
Created and Coordinated a Summer Science Program for local Oneida Nation high school students (20002010)
Chair ad hoc Committee on Advising 2000 – 2003
Chair Biochemistry/Molecular Biology Program 1999 – 2004, 2006 – present
Committee on Academic Policy (elected replacement position, 1996, and three year term, 1998)
Co-Advisor for the Biochemistry/Molecular Biology Program 1993 – 2010
Acting Chair Biochemistry/Molecular Biology Program 1994 – 1995
Faculty advisor to the Women's Hockey team (2001 – 03, 2008 – 2014)
Environmental Studies Program Committee (2010 – 2014)
Created and Directed Hamilton College Network for Teaching and Learning (2012 – 2014)
Advisory Committee for Hamilton College Digital Humanities Initiative (2012 – 2014)

Professional Community

Board of Governors of National Conference on Undergraduate Research (NCUR) 2010 (three-year term)

President, Council on Undergraduate Research 2004 (three-year term on Executive board).

Councilor, Council on Undergraduate Research (CUR): Elected three times to three-year terms, 1997, 2000, 2003. Co-chair of CUR Scholarships and Grants Committee

Steering Committees: Engaging Science, Advancing Learning: General Education, Majors, and the New Global Century (American Association of Colleges and Universities, 2008), Undergraduate Research Summit (Bates College, 2003) Reviewer:

Reviewed tenure/promotion candidates for Barnard College, Macalester College, College of Charleston, Trinity University, Harvey Mudd College, University of San Diego, University of Michigan-Dearborn, Bowdoin College, Occidental College, Colby College, Skidmore College, Gustavus Adolphus College, State University of New York – Geneseo, Bates College, Vassar College, Pitzer College and James Madison University.

External Reviewer of the Chemistry Department at the University of San Francisco (2021), Applied and Basic Science Programs at Stetson University (2018), Border Studies Program of Earlham College for the Great Lakes Colleges Association (2016), Oxford College of Emory University (2015), Chemistry Department at Ithaca College (2013), Chemistry Department at Rider University (2012), Chemistry and Biochemistry Department at the University of San Diego (2010 - 2013), Science Programs at Aquinas College (2010), Chemistry Department at Lycoming College (2008), the Natural Sciences at Florida Southern College (2007), the Colby College Chemistry Department (2007), the College of Wooster Chemistry Department (2006), State University of New York – Geneseo (2006), Trinity University Biology and Chemistry Departments (2004, 2007), University of Wisconsin-Eau Claire Chemistry Program (2004), State University of New York – Purchase Natural Sciences Division (2003), Wellesley College Biological Chemistry Program (2003), Marist College Chemistry Department (2002)

Chair of the Merck and the American Association for the Advancement of Science Undergraduate Science Research Proposal Review Committee (2001-2003), member (2000)

National Science Foundation Graduate Student Fellowship Panel (2006)

National Institutes of Health *ad hoc* study section review of Academic Research Enhancement Award (1994)

Research Proposals/Manuscripts from The Research Corporation, National Science Foundation, the Petroleum Research Fund of the American Chemical Society, the Murdock Foundation, Archives of Biochemistry and Biophysics, Biochemistry, Inorganic Chemistry, The Chemical Educator, Inorganic

Biochemistry, Inorganica Chimica Acta, Journal of the American Chemical Society, Nature Communications, Applied Materials and Interfaces, Journal of Molecular Catalysis, Protein Expression and Purification, Biochimica Biophysica Acta: Proteins and Proteomics, NanoLetters, Biomacromolecules, Nano Letters, Langmuir, Journal of Biological Inorganic Chemistry, Journal of Molecular Catalysis B: Enzymatic, Stanford Synchrotron Light Source.

Community

Weaverville Center for Creative & Healthy Living: Vice Chair for Development (2020 – present)

Clinton Central Schools Board of Education: Elected to a three-year term, 2009-2012, President, 2011 – 2012, Chair of the Strategic Planning and Curriculum Committee, 2009 – 2011.

Host Family for Clinton Chapter of *A Better Chance*, 2009 – 2010, Rotary Student Exchange Program 2011.

Volunteer for various Clinton sports organizations: Skenandoa Little League Baseball (head coach, 2008, assistant, 2007), American Youth Soccer Organization (referee 1999 – 2009).