Janet Elizabeth Nelson
Vice President for Research and Economic Development
University of Idaho

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EDUCATION

California Institute of Technology, Pasadena, CA **Ph.D. in Chemistry, May 1991**
Dissertation: *Synthetic, Structural, and Mechanistic Studies in Early Transition Metal and Actinide Chemistry*

Carleton College, Northfield, MN *magna cum laude* **B.A. in Chemistry, June 1986**

PROFILE

Janet Nelson has over 30 years of experience in scientific research, scientific review and research portfolio administration, complex and multidisciplinary program/project management, business development, and science policy implementation. She is a demonstrated leader with experience across academia, government, not-for-profit organizations, and industry.

Janet currently is the Vice President for Research and Economic Development at the University of Idaho, where she serves as the University's Chief Research Officer. In this role, she facilitates university-wide strategic research growth activities, strategic planning, and implementation; directs multiple and diverse constituencies in support of the research enterprise; manages $112 Million in external research funding; provides oversight of the regulatory and compliance environment for research; and promotes the research commercialization and technology transfer to enhance the State of Idaho and the nation.

Janet works closely with faculty to catalyze, encourage, and support research and scholarly activities; to support the creation of new knowledge; to promote the use of this knowledge; and to ensure its integrity. She has a keen focus on building and supporting multidisciplinary teams and growing the research enterprise.

ACADEMIC APPOINTMENTS

Full Professor of Chemistry with Tenure Jan. 2018–present
Clinical Research Professor Sept. 2016–Jan. 2018
Chemistry Department, College of Science
University of Idaho, Moscow, ID

Joint Faculty Appointment May 2018-present
Idaho National Laboratory, Idaho Falls, ID

Adjunct Professor Oct. 2014–Sept. 2016
Chemistry Department, College of Arts and Sciences
University of Tennessee, Knoxville, TN

Adjunct Research Professor Apr. 2014– Sept.2016
Chemistry Department, Eberly College of Arts and Sciences
West Virginia University, Morgantown, WV

Assistant Professor of Chemistry and Biochemistry Sept. 1994–Aug.1996
Middlebury College, Middlebury, VT

Assistant Professor of Chemistry Sept. 1992–Aug.1994
St. Olaf College, Northfield, MN

PROFESSIONAL EXPERIENCE

Vice President for Research and Economic Development ***Sept. 2016–present***
University of Idaho, Moscow, ID

Serves as the University's Chief Research officer and as the principal point of contact for the university in all research-related matters. Supports, promotes, and enhances ongoing research scholarship, and creative activities that address the needs and expectations of the State of Idaho, the region, the nation, and the world. Represents the regional, national, and international research interests of the university to major research funding agencies and foundations, to regional and national research consortia, to national laboratories, to federal and state agencies, and to the private sector. Identifies and implements steps that the University can take to move into the top ranks of research institutions. Participates in formulating strategic plans, directions, and policies for the institution as a whole.

Serves as a member of the university executive team and works cooperatively to achieve the University's goals and objectives. Advises the President on all matters pertaining to the operation and management of University research and economic development activities. Advises the President, senior University administrative officers, and members of the State Board of Education (SBOE) on issues relating to research and economic development by making presentations at meetings of the SBOE and preparing reports, recommendations, findings, and other correspondence as required. Investigates new research opportunities and makes recommendations to the President. Collaborates with other University Vice Presidents on research issues, policies, and initiatives in their respective areas. Serves on: President's Cabinet; Provost Council; Research Council; Institutional Planning and Effectiveness Committee (IPEC); Promotion and Tenure Committee; University of Idaho Center for Agriculture, Food, and the Environment (UI CAFE) Committee; Stillinger Advisory Committee Member

Oversees and provides leadership for the full array of research issues related to the administration of the University's Level III Research Entities. Provides vision and leadership to the research institutes and to the procurement of external research support. Acts as a chief advocate to cultivate relationships and increase research dollars allocated to the University and provides a leadership role in the development and implementation of new University research centers and institutes. Centers and programs include:

Aquaculture Research Institute (ARI)
Center for Modeling Complex Interactions (CMCI)
Idaho Water Resources Research Institute (IWRRI)
Institute for Bioinformatics and Evolutionary Studies (IBEST)
Idaho NSF EPSCoR Program
Integrated Research and Innovation Center (IRIC)
Lab Animal Research Facility (LARF)
Electron Microscopy (EM) Center
Center for Advanced Energy Studies (CAES)

Manages and prioritizes strategic, high-level, and targeted institutional research investment programs including the Stillinger Trust, the Higher Education Research Council (HERC) Infrastructure Program, the UI Seed Grant Program, the Vandals Ideas Project (VIP) Awards, and the UI Excellence Awards.

Provides leadership and oversight for the Office of Research and Economic Development (ORED). Manages an operating budget of more than $12 MM and research expenditures of $112 MM. Directs multiple and diverse constituencies in support of the research enterprise; manages significant research funding; provides oversight of the regulatory and compliance environment for research; provides administrative leadership for commercialization and technology transfer. Holds management authority and budget oversight for the following units:

Office of Research Assurances

- Leads overall effort to ensure the responsible and compliant conduct of its research enterprise.
- Collaborates with researchers to ensure policy compliance and ethical practices. Areas of responsibility include: Research Integrity Officer (RIO); Institutional Review Board (IRB); Institutional Biosafety Committee (IBC); Institutional Animal Care and Use Committee (IACUC); Unmanned Aircraft Systems; and Export Controls.

Office of Sponsored Programs

- Assists UI faculty with finding funding opportunities, and with developing/submitting proposals.
- Provides oversight of regulatory and fiscal compliance, institutional endorsement (signature authority).
- Ensures that the university has adequate standards for managing award funding.

Office of Research and Faculty Development

- Facilitates university-wide strategic research growth activities, strategic planning, and implementation.
- Manages, leverages and coordinates with UI campuses located statewide, external stakeholders, partnering institutions, and federal agencies; formulating research directions and policies for the institution as a whole.
- Brings corporate experience to facilitate institutional change in strategically pursuing large funding opportunities.
- Fosters collaboration, individual grantsmanship, faculty annual awards applications, fellowships, and grantsmanship training.

Offices of Technology Transfer and Economic Development

- Oversees management, protection, and commercialization of the intellectual property created by university personnel.
- Helps business and industry connect and collaborate with university researchers.
- Coordinates economic development programs and develops effective economic development strategies.

Janet E. Nelson, September 2019

Current Board and Advisory Committee Appointments

- American Chemical Society (ACS): Councilor Member, Committee on Science (COMSCI) Science and Technology Subcommittee
- Association of Public and Land-Grant Universities (APLU): Executive Member, Council on Research (CoR) Subcommittee
- Center for Advanced Energy Studies (CAES) Steering Committee
- Cybersecurity Symposium Advisory Board
- IDeA Network of Biomedical Research Excellence (INBRE) Steering Committee Member
- EPSCoR Foundation Board Member
- HIBAR Research Alliance (HRA) Member
- Mountain West Research Consortium Executive Committee Member
- Higher Education Research Council (HERC) Member (Current Chair)
- Idaho Regional Optical Network (IRON) UI Alternate Board Member
- Leadership in Nuclear Energy (LINE) 3.0 Commission Member
- Idaho Global Entrepreneurial Mission (IGEM) Council Member
- Idaho Technology Council (ITC) Tech2Market
- Institutional Safety Culture Steering Committee (co-chair)
- Laboratory for Applied Science & Research (LASR) Board Member
- Research Council

Associate Vice Chancellor for Research Development *Jun. 2014–Aug. 2016*

University of Tennessee, Knoxville, TN

Performed a critical leadership role within the Office of Research & Engagement (ORE), the university community, and nationally: internally, worked widely with faculty, as well as department and college administrators, to promote a culture of transdisciplinary scholarship and engaged outreach around the research enterprise; externally, interacted extensively with federal funding agencies, industry, and corporations. Held delegated signatory authority on all contracts, grants, agreements, proposals, and applications for sponsored projects.

Headed research development, faculty development, and research informatics efforts with a focus on building and supporting multidisciplinary teams and growing the research enterprise. Major emphases were to help catalyze strategic research development and external partnerships; to facilitate transdisciplinary research; and to support funded and unfunded research, scholarship, and creative activity.

Managed and prioritized strategic high-level and targeted institutional investment programs. These included the Scholarly and Research Incentive Fund (SARIF), annual budget of $1.0 M; the Strategic and Transformative Investments in Research (STIR), annual budget of $1.8 M; and the Science Alliance Jointly Directed Research and Development (JDRD) program, annual budget of $800K.

Managed the Science Alliance Collaborative Cohort Program, designed to nurture collaboration between underrepresented UT junior faculty and junior scientists from Oak Ridge National Laboratory (ORNL).

Held direct management authority and budget responsibility for the following units within ORE:

Faculty Development Team

- Fostered collaboration, individual grantsmanship, faculty annual awards applications, fellowships, and grantsmanship training.
- Located and disseminated funding opportunities.
- Administered targeted limited submissions process.
- Provided special focus on securing funding for the social sciences and humanities.
- Built Communities of Scholars across disciplines to promote collaborative, team-based research.

Research Development Team

- Enabled multi-faculty internal and external collaboration around large/complex/strategic opportunities with a focus on developing transdisciplinary teams.
- Built external relationships with the community, corporations, foundations, the state and federal governments, and international entities.
- Provided continuum of support (proposal capture, development, submission, and post-award follow-up) for strategic awards.
- Developed strategic plan targeted at growing UT portfolio with the National Institutes of Health (NIH).
- Pursued and secured large funding and center opportunities from federal agencies. “Wins” included National Science Foundation (NSF) Science & Technology Center (STC) with a full submission; NSF Major Research Instrumentation Program (MRI) (2 awarded in 2015); NSF Industry/University Cooperative Research Centers Program (I/UCRC); NSF Research Traineeship (NRT) Program (awarded 2015); NSF International Research Network Connections (AMI) (awarded 2015); and 2 NSF NRT applications.

Federal Relations

- Matched faculty research capabilities with the science and technology needs of federal mission agencies.
- Facilitated relationships with federal program officials and supported faculty visits with officials.
- Planned and organized events to enable faculty engagement with program officials on campus.

Corporate and Foundation Research Initiatives

- Connected and fostered faculty relationships with private foundations and corporations.
- Connected potential corporate partners to research and university resources.
- Represented UT and built partnerships with community, business, education, and government leaders.
- Tracked and distributed prestigious funding opportunities to faculty with a focus on metrics collected by the Center for Measuring University Performance (CMUP).
- Built university research partnerships through groups such as the TN Valley Corridor (TVC), East TN Economic Council (ETEC), and Council on Advancement and Support of Education (CASE).

UT Core Facilities Program

- Oversaw the creation, development, and administration of the UT Core Facilities Program including integrating the various resources that are available through core facilities.
- Supported the core units including business plan development and capitalization needs; pursued new funding sources to supplement facility operations; developed and maintained support tools including website design, scheduling, and billing for core services.

Research Informatics

- Provided data relevant to the research enterprise, mining information from award and proposal databases including tracking proposal success rates and award totals.
- Analyzed changes in funding support and identified trends in research performance.
- Used metric methodologies to establish institutional strategies on the basis of their research performance.

Janet E. Nelson, September 2019

Science Alliance

- Invested Tennessee state funding in collaborative opportunities with Oak Ridge National Laboratory (ORNL) through the Jointly Directed Research and Development (JDRD) program. Materials science, neutron science, computational science, and bioinformatics were among the most prominent UT-ORNL collaborative areas receiving support. Mentored 2015 UT Collaborative Cohorts.

University of Tennessee Institutional Service

Represented UT research administration on a variety of committees including:

- Associate Deans for Research Committee (Chair)
- Research Council of the Faculty Senate
- Graduate Council
- Sigma Xi Chapter (Held Secretary Office)
- Academic Program Reviews, Administrative Review Team member
- University Center and Institute Reviews
- Professional Development Awards Committee
- Campus Planning and Design Committee
- Campus Space Committee
- Core Facilities Advisory Board
- Symplectic ELEMENTS Steering Committee
- Journey to the Top 25 Milestone Review Committee
- UT/Y-12 MOU Partnership Implementation Committee

Director, Business Development *Jan. 2010–Jun. 2014*

URS Corporation (now AECOM), Germantown, MD

Provided support for development of major projects for the URS Global Management and Operations Services Group (GMOS) Energy and Science Strategic Business Unit. Provided site support for the Department of Energy's (DOE's) National Energy Technology Laboratory Office of Research and Development (NETL ORD) on the Research Engineering Services (RES) Contract as *Director of Program Development* and *Deputy Director of Research*.

Director of Business Development (URS)

- Participated on large corporate research proposal development teams related to energy and science.
- Managed strategic relationships and alliances with other, third-party companies for teaming opportunities.
- Served on color team review panels for large federal proposals.

Director of Program Development (NETL-RES Contract)

- Supported growth/diversification of the NETL ORD portfolio; identified and pursued new opportunities.
- Supported establishment of the NETL Program Development Process; wrote white papers/proposals.
- Developed win strategies; provided capture management; managed proposal preparation and review.
- Identified and developed strategic university, industrial, and governmental teaming partnerships.
- Implemented NDAs, MOUs, CRADAs, and other teaming agreements.
- Planned and executed advanced technology development and technology transition programs.
- Led the establishment of a new URS Research Awards Program at DOE/NETL, designed to advance energy research, develop the next generation of scientists, and promote the entire spectrum of R&D from fundamental concepts to near commercial-ready technologies.

Deputy Director of Research (NETL-RES Contract)

- Co-managed a joint commercial-academic research program responsible for creating, organizing, and coordinating a multidisciplinary team of approximately 90 national and international staff scientists with a supporting university portfolio of over 200 directed research activities, with a multi-year budget of approximately $200 M supporting the NETL federal research effort.
- Advised DOE, URS, university partners, and other governmental agencies and organizations, as requested, on research programs and priorities, and participated in policy and technology development and review activities.
- Responsibilities included schedule development; control, analysis and cost engineering functions; technical direction; and management of subcontractors and security clearance processing.
- Provided direct program management for the successful execution of NETL large, multi-year technical activities with a total portfolio value over $50 M. Projects under direct control: NETL support of National Nuclear Security Administration (NNSA) Office of Defense Programs; NETL Regional University Alliance "Grid Technology Collaborative"; DOE HQ Office of Science Workforce Development for Teachers and Scientists Program; Maintenance of the NETL Hydrogen Fueling RDT&E Platform (Charleston, WV); and George Washington University Activity: Nanocomposites for Fuel Economy Improvement.

Liaison to the NETL-RUA (Regional University Alliance)

- Developed strategic teaming partnerships with NETL, URS, and the 5 partner universities: Carnegie Mellon University, Pennsylvania State University, the University of Pittsburgh, Virginia Polytechnic Institute and State University, and West Virginia University.
- Coordinated with RUA Universities to identify and pursue potential funding opportunities.
- Supported establishment of the NETL-RUA Strategic Growth Area Initiatives in Critical Materials, Grid Technologies, and Shale Gas.
- Built alliances, coalitions, and strategic relationships internally and with other federal agencies, state and local governments, nonprofit and private sector organizations, and commercial and industrial organizations.

Principal Technical Consultant ***Mar. 2009–Jan. 2010***

Parsons, Washington, DC and Pittsburgh, PA

Provided advisory and due diligence services including technology assessment and market analysis for evaluating early stage technology with a focus on biotechnology and bioengineering. Provided contractor support for the DOE's NETL ORD on Research and Development Solutions, LLC (RDS) contract.

Program Manager, Bioengineering

- Facilitated collaboration and joint technology development efforts between DOE/NETL and the University of Pittsburgh. Launched and managed 5 bioengineering collaborative research projects.
- Fostered and maintained state-of-the-art technical knowledge in areas including algae and biofuels biotechnology and bioengineering.
- Assessed the state of technologies focused on commercializing biotechnology in medicine, energy, environmental management and related fields.
- Administered technology transfer programs, including the identification of potential partnerships and collaborative opportunities.

Portfolio Manager, RDS/NETL Contract Attachment H

- Managed 6 projects in a $2.1 M Portfolio. Assured consistency and attention to all reporting requirements, including technical deliverables, schedule adherence, and cost tracking. Projects under direct control included: Collaborative University Support of NETL's Institute for Advanced Energy Solutions (IAES); Development of West Virginia Smart Grid Implementation Plan; Natural Gas Hydrates Pellet Production and Economic Feasibility Analysis; Construction of the NETL Appliance Lab; Design of the NETL Hydrogen Refueling Station; Development of a Bio-Diesel Fueled Solid Oxide Fuel Cell

Project Manager, Natural Gas Hydrate CRADA with NETL

- Managed collaboration to develop and demonstrate the use of Natural Gas Hydrates (NGH); provided technical and systems evaluation of the technology. Prepared, reviewed, approved, and maintained records, including those documents that prescribe processes, specify requirements, or establish design.

Director, Industrial and Environmental Section *Mar. 2008–Mar. 2009*

Biotechnology Industry Organization, Washington, DC

Worked closely with the U.S. Congress, federal agencies, and international organizations to encourage the development of biotechnologies. Responsible for advocacy, business development, and communications services for biotechnology member organizations.

- Provided policy input on synthetic biology, green chemistry, algae and marine biotechnology, pharmaceutical intermediates, fine chemicals, food flavorings, food enzymes and other ingredients, biotechnology used in cosmetics, and nanotechnology and other applications in industrial biotechnology.
- Staffed Industrial and Environmental Section (IES) working groups and board level committees.
- Developed policy options for the IES Governing Body.
- Developed scientific speaking programs for the BIO International Conference, the Bio World Congress on Industrial Biotechnology, and meetings and conferences.
- Reviewed scientific literature, wrote reports, developed press release materials, prepared website content.
- Authored policy papers for advocacy visits on Capitol Hill.

2007 Commerce Science and Technology (ComSci) Fellow *Mar.2007–Jan. 2008*

The National Academy of Sciences, Washington, DC

Awarded one-year federal rotation to the National Research Council (NRC), Policy and Global Affairs Division (PGAD). Participated in the launch and execution of several major study projects of the NRC including:

- A major study project carried out jointly by the Board on Life Sciences (BLS) and the Board on Physics and Astronomy (BPA) on policy issues at the intersection of the physical and biological sciences;
- A major study project carried out by the Committee on Science, Technology, and Law (CSTL) engaging scientific, engineering, legal, and policy communities with the public, to explore the opportunities and challenges posed by synthetic biology;
- A special project to design and execute the First Annual Forum for Students of Science and Technology Policy hosted by NAS in January 2008.

Health Scientist Administrator (GS-15) ***Oct. 2000–Feb. 2008***

National Institutes of Health, Center for Scientific Review (CSR), Bethesda, MD

Served as Designated Federal Official responsible for managing the peer review process in compliance with applicable laws, NIH review regulations, and policy. Served in the Biological Chemistry and Macromolecular Biophysics Integrated Review Group (BCMB IRG).

Deputy Chief, BCMB IRG Feb. 2004–Feb. 2008

- Assisted Chief in supervision of IRG (14 Ph.D. scientists).
- Referred grant applications to appropriate Study Sections within IRG.
- Managed overall Scientific Review Administrator (SRA) workload distribution.
- Assisted with recruiting and training of new SRAs.
- Monitored Study Section nomination slates for quality and timeliness.
- Served as Acting IRG Chief when Chief was unavailable.

Scientific Review Officer, BCMB IRG Oct. 2000–Feb. 2008

- Managed scientific review process for: Macromolecular Structure and Function (MSFA) Study Section; Metallobiochemistry (BMT) Study Section; High Throughput Screening Roadmap; Drug Delivery/Drug Discovery SBIR/STTR Panel; and Other mechanisms (Fellowships, Research Resources).

Referral Officer, Division of Receipt and Referral Feb. 2003–May 2004

- Selected appropriate institute assignments for incoming grant applications.
- Referred applications to Integrated Review Groups (Bioengineering Sciences IRG and Genetics IRG).

Additional NIH Committee Service

- Served on CSR/Division of Extramural Support Activities (DEAS) Communications Committee.
- Served on Steering Committee for Biological Chemistry and Macromolecular Biophysics reorganization.
- Served on SRA Training Committee.
- Served as Point Person for NIH Academic Research Enhancement Award (AREA) grant applications.

Program Officer ***Dec. 1997–Oct. 2000***

American Chemical Society, Petroleum Research Fund (ACS-PRF), Washington, DC

Managed review of ACS PRF research proposals and supervised grant management for those proposals awarded grants.

- Administered Organic/Organometallic, Physical Organic, and Inorganic/Bioinorganic Committees.
- Directed ACS-PRF Scientific Education Program.
- Presented workshops on PRF programs and proposal preparation.
- Conducted site visits to active university grantees.
- Served as Chair-Elect, Chair, and Past-Chair for the ACS Staff Council.

Director, Educational Projects ***Aug. 1996–Dec. 1997***

Wavefunction, Inc., Irvine, CA

Promoted the development and use of computational chemistry methods and molecular modeling tools in the mainstream chemistry community.

- Authored workbooks for incorporating Molecular Modeling into the Organic Chemistry Curriculum.
- Developed and Published Academic Workshop: *Introducing Molecular Modeling into the Undergraduate Curriculum.*
- Marketed and conducted workshops nationwide at universities and scientific meetings.

Assistant Professor of Chemistry and Biochemistry ***Sept. 1994–Aug. 1996***

Middlebury College, Middlebury, VT

- Taught Organic Chemistry I and II, Advanced Laboratory I and II, Advanced Inorganic Chemistry.
- Directed senior thesis work and summer undergraduate student research.
- Directed student research in synthesis of zirconium thiolate complexes.
- Incorporated molecular modeling into the chemistry curriculum.
- Served on Pre-medical advisory committee and McCardell Bicentennial Hall building committee.

Assistant Professor of Chemistry ***Sept. 1992–Aug. 1994***

St. Olaf College, Northfield, MN

- Taught chemistry classes including: Introductory Chemistry, Structural Chemistry and Equilibrium, Chemical Calculations, Organic Synthesis Lab I and II, Adv. Inorganic Chemistry, Advanced Synthesis Laboratory.
- Directed summer undergraduate student research.
- Incorporated air-sensitive synthesis into the chemistry laboratory curriculum.

Postdoctoral Fellow ***Sept. 1991–Sept. 1992***

Los Alamos National Laboratory, Los Alamos, NM Research Advisor: Dr. Gregory J. Kubas

- Conducted synthetic and structural studies of chromium, molybdenum, tungsten, and technetium dihydrogen complexes.

Graduate Research Assistant ***Sept. 1989–Dec. 1989***

Los Alamos National Laboratory, Los Alamos, NM Research Advisor: Dr. Alfred P. Sattelberger

- Conducted synthetic and structural studies of uranium (III) amido complexes.

Doctoral Research ***Sept. 1986–May 1991***

California Institute of Technology, Pasadena, CA Research Advisor: Dr. John E. Bercaw

- Conducted synthetic and mechanistic studies of zirconium olefin complexes.
- Conducted synthetic, structural, and mechanistic studies of tantalum thiolate and sulfido complexes.

Summer Undergraduate Research Fellow ***Summers 1984, 1985***

Washington University, St. Louis, MO Research Advisor: Dr. Andrew W. Maverick

- Conducted synthetic studies of bis(*B*-diketone) palladium complexes.

Laboratory Assistant ***Jun. 1986–Sept. 1986***

Sheldahl, Inc., Northfield, MN

- Designed prototype and construction of flexible multi-layer printed circuitry.

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

- American Association for the Advancement of Science (AAAS)
- American Chemical Society (ACS)
- Association of Biomolecular Resource Facilities (ABRF)
- Association of Public and Land-Grant Universities (APLU)
- Association of Research Integrity Officers (ARIO)
- Council on Competitiveness, Technology Leadership and Strategic Iniative (COC-TLSI)
- Council on Governmental Relations (COGR)
- Council on Undergraduate Research (CUR)
- Government-University-Industry Research Roundtable (GUIRR)
- Idaho Technology Council (ITC) Tech2Market
- National Council of University Research Administrators (NCURA)
- National Organization of Research Development Professionals (NORDP)
- Sigma Xi, (also former Secretary for UT Chapter, 2015)
- University Economic Development Association (UEDA)
- University Industry Demonstration Partnership (UIDP)

HONORS AND AWARDS

- Honorary Member, National Academy of Inventors (NAI), 2019
- Elected Fellow, American Association for the Advancement of Science (AAAS), 2018
- Fall Commencement Speaker, University of Idaho, 2017
- Graduate of Higher Education Resource Services (HERS) Institute at Denver, CO, 2017
- Introduction Knoxville, Class of 2015
- URS Corporation President's Award for Business Development, 2013
- Commerce Science and Technology (ComSci) Fellow, 2007
- Project Kaleidoscope Faculty for the 21st Century
- Carleton College, Distinction in Major, 1986
- Phi Beta Kappa, 1986
- Dow Chemical Company Fellowship, 1982–1986
- Westinghouse Science Talent Search Finalist, 1982

COMMUNITY SERVICE

- 1997–Present Peer review for proposals and manuscripts: ACS-PRF, NSF, Sloan Foundation, MIT Press, IGEM, NASEM
- 2008 Judge for International Genetically Engineered Machine (iGEM) Competition
- 2007–2009 Board of Directors, Science MONTGOMERY
- 2007–2008 Judge and Chair of Chemistry Section, Montgomery Area Science Fair

PROFESSIONAL DEVELOPMENT

- 2018 U.S. Department of Health & Human Services Office of Research Integrity "RIO Boot Camp"
- 2017 Society of Research Administrators Internation (SRA) "Senior Executive Institute"
- 2015 National Council of University Research Administrators (NCURA) Senior Level Workshop "Research Related Metrics: Grant Success Rates, Research Performance Metrics, Forecasting"
- 2015 National Council of University Research Administrators (NCURA) Senior Level Workshop "Performance Metrics in Research Administration"
- 2015 Association of Public and Land-Grant Universities (APLU)/COR "Workshop for New & Future Vice Presidents/Vice Chancellors for Research & Graduate Deans"
- 2014 Society of Research Administrators Internation (SRA) "Senior Executive Institute"
- 2013 Advanced Leadership Development, SOMA International Consultancy, 6-day course "Strategy Development and Implementation, Organizational and Cultural Change, Leadership Development"
- 2012 Darla Moore School of Business, University of South Carolina, "Thinking Strategically and Winning the Business"
- 2012 Darla Moore School of Business, University of South Carolina, "Develop2Lead"
- 2006 National Institutes of Health (NIH) course "Introduction to the Principles and Practice of Clinical Research"
- 2005 National Institutes of Health (NIH) course "Redox Biology"
- 2004 National Institutes of Health (NIH) course "Extramural Scientist Administrator Training"
- 2002 National Institutes of Health (NIH) course "Principles of Clinical Pharmacology"
- 2000 American Chemical Society (ACS) M2L-Management to Leadership Program

GRANTS AND CONTRACTS

National Science Foundation (NSF #1757324), 2018-2019, **PI**, *EPSCOR RII Track 1: Linking Genome to Phenome to Predict Adaptive Responses of Organisms to Changing Landscapes* $20,000,000. (As Principle Investigator and Project Director, responsible for overseeing program performance to achieve the program goals.)

National Institutes of Health (NIH 1 UT2 GM130166-01), 2019-2021, **Co-PI**, *STTR UT2 Regional Technology Transfer Accelerator Hub*, $104,500.

National Science Foundation (NSF #1828988), 2018-2019, **Co-PI**, *Workshop to Plan the Initiation of the HIBAR Research Alliance*, $50,000.

National Science Foundation (NSF #1301792), 2013-2019, **PI**, *EPSCOR RII Track 1: Managing Idaho's Landscapes for Ecosystem Services*, $20,000,000. (Complete. As Project Director and Principle Investigator, responsible for overseeing program performance to achieve the program goals.)

National Institutes of Health (NIH 1 C06 RR017587-01), 2002-2027, **PI,** *Renovation of Life Sciences Facility*, $2,000,000. (Original Project Period: 9/30/2002 - 9/29/2007; Responsible for annual monitoring and reporting of facility usage until 9/29/2027.)

National Science Foundation (NSF #1643289), 2016, **Co-PI,** *I-Corps South to Expand Entrepreneurial Training*, $1,800,000. (Served as lead investigator at the University of Tennessee, Knoxville, providing oversight and direction to UTK activities supporting the node.)

National Science Foundation (NSF #1304637), 2014, **PI,** *Collaborative Research: Decoding and Predicting Greenland's Surface Melt History & Future with Observations, Regional Atmospheric Modeling and GCMs, $108,092.* (Served as the institutional PI on this project, on behalf of UT Martin PI Dr. Christopher Karmosky 2014-2016.)

Council on Undergraduate Research, Academic-Industrial Undergraduate Research Partnership (AIURP) Award, 1996, undergraduate summer research fellowship support, $3000.

National Science Foundation Chemlinks Module Development, 1995, **PI**, *Environmental Impact of Nuclear Technology*, $50,621.

National Science Foundation Field Test Site, 1995, **PI,** *Development of a Materials Oriented General Chemistry Course*, $500.

National Science Foundation Instrumentation and Laboratory Improvement (NSF ILI), (NSF #9352345), 1995, **Co-PI,** *Molecular Modeling Laboratory for Undergraduate Instruction*, $41,962.

Vermont Institute of Science Math and Technology (Vermont EPSCoR), 1994, **Co-PI,** *Integration of Computational Chemistry into the Undergraduate Classroom: Using Molecular Modeling to Enhance Organic Chemistry*, $3,500.

Research Corporation, 1994, **PI,** *Synthetic Strategies for the Preparation of New Monocyclopentadienyl Zirconium(IV) Sulfur Complexes*, $33,919.

American Chemical Society-Petroleum Research Fund-Type G, 1994, **PI,** *Preparation and Reaction Studies of Monocyclopentadienyl Sulfide and Thiolate Complexes of Zirconium(IV)*, $20,000.

NSF Instrumentation and Laboratory Improvement (NSF ILI), (NSF #9552386), 1993, **PI,** *Incorporation of Vacuum Line Systems for Air-Sensitive Chemistry into the Chemistry Curriculum*, $6,635.

PRESENTATIONS

Genes to Environment: Modeling, Mechanisms, and Mapping (GEM3). Andrew Kliskey, Janet E. Nelson, Ronald Hardy, Jennifer Forbey, Colden Baxter. 26th NSF EPSCoR National Conference, Columbia, SC, to be presented October, 2019.

Innovative Intellectual Property Flips the Idaho Economy. Panel Members: Lindsay Notwell, Vid Mohan-Ram, Brad Frazer, Tom Kealey, Dave Boren, Janet Nelson, Cheryl Adams. Idaho Technology Council Vision Idaho, Boise, ID, August, 2019.

Public Impact-Focused Research. Facilitators: Sandra Brown and Janet E. Nelson. Asociation of Public and Land- Grant Universities Council on Research (APLU-CoR) Summer Meeting, State College, PA, June, 2019.

Arts, Humanities, and Social Sciences in the Research Enterprise. Facilitators: Janet E. Nelson and Matt Tarr. Association of Public and Land-Grant Universities Council on Research (APLU-CoR) Summer Meeting, State College, PA, June, 2019.

Business Development for Research and Developing the Research Enterprise as an Effective Team. Panel Members: Janet E. Nelson, Neil Sharkey, Sarah Nusser, Theresa Mayer, Mark McClellan, Kevin Gardner, Cynthia Sagers. Workshop for New and Future Vice Presidents/Vice Provosts/ Vice Chancellors for Research at the Asociation of Public and Land-Grant Universities Council on Research (APLU-CoR) Summer Meeting, State College, PA, June, 2019.

National Programs on Impact-Oriented Research. David Conover, Louise Howe, Janet E. Nelson, Michele Popowitz, Andy Hor, "Solving Problems through Collaborative Research" 4th Annual Association of Pacific Rim Universities (APRU) Vice Presidents for Research Meeting, San Diego, CA, October, 2018.

Research Infrastructure and Shared/Core Facilities. Janet E. Nelson, Jason Carter, Chris Keane, Cassandra Moseley, Ann Norton. Association of Public and Land-Grant Universities Council on Research (APLU-CoR) Summer Meeting, Bozeman, MT, July, 2018.

Re-Imagining High Performance Computing in Idaho. Janet E. Nelson. High Performance Computing Workshop, Boise, ID, August, 2018.

HIBAR-Infusing Real World Perspectives. Janet E. Nelson, Roger Wakimoto, Angela Diaz, and Lorne Whitehead. National Science Foundation (NSF) Germination Workshop, Arlington, VA, June 2018.

University of Idaho Fall Commencement Speaker. Janet E. Nelson. University of Idaho, Moscow, ID, December 2017.

Idaho NSF EPSCoR: Strengthening Diversity and Workforce Development through Statewide Collaborations. Janet E. Nelson, David Rodgers, Shawn Benner, Rick Schumaker, Sarah Penney, Donna Llewelyn, Sonia Martinez. NSF INCLUDES Summit: Broadening Participation through Center-Scale Research, Alexandria, VA, January, 2018.

Fostering Interdisciplinary and Highly Integrated Basic and Responsive (HIBAR) Research to Advance University of Idaho Research Excellence. Janet E. Nelson, Malcom M. Renfrew Interdisciplinary Colloquium, Moscow, ID, October 2017.

Large Proposal Development: Best Practices for Support. Janet E. Nelson, Faith Kirkham Hawkins, Michelle Popowitz and Mridul Gautam. Association of Public and Land-Grant Universities Council On Research (APLU-CoR) 2017 Summer Meeting, Reno, Nevada, July 2017.

Fostering Collaboration to Improve Fire Science Resiliency. Janet E. Nelson, Creating a Fire-Resilient Community Conference, Ketchum, ID, June 2017.

Water Resources at a Systems Level. Janet E. Nelson, The Coming Water Wars…and How to Avoid Them, an Origins Project Workshop at Arizona State University, Tempe, AZ, May 2017.

Using Research Metrics to Guide Research Development Efforts. Anna Banks and Janet E. Nelson, National Organization of Research Development Professionals (NORDP) 2016 Research Development Conference, Orlando, FL, May 2016.

Creating the Next Gen TeamScience Workforce: Lessons Learned in Tennessee. Suzie Allard, Janet E. Nelson, Danielle Pollock, Kristina Dorsett, Amy Forrester, Robert Partee, and Thomas Waldrupe, 2016 Science of Team Science (SciTS) Conference, Phoenix, AZ, May 2016.

Development of a Centralized Core Facilities Program at the University of Tennessee, Knoxville. Jon Phipps and Janet E. Nelson, Association of Biomolecular Resource Facilities (ABRF) Annual Meeting, Fort Lauderdale, FL, February 2016.

Synthetic Biology: A Discussion of the Social Ethical Approach to an Emerging Technology. Janet E. Nelson, Joint Institute for Biological Sciences (JIBS) ORNL/UT SynBio Workshop, Oak Ridge, TN, May 2015.

Building an NIH Research Portfolio Without a Local Medical School. Janet E. Nelson, Meredith Murr, and Jennifer Webster, 7th Annual Conference of the National Organization of Research Development Professionals, Bethesda, MD, May 2015.

Women in STEM Research: Securing Internal and External Research Funding at UT. Janet E. Nelson, First Annual UT Women in STEM Research Symposium, Knoxville, TN, April 2015.
Securing External Research Funding: Being Competitive in a Changing National Landscape. Janet E. Nelson, Department of Chemistry Board of Visitors Meeting, Knoxville, TN, November 2014.
Research Support at UT. Janet E. Nelson, University of Tennessee Future Faculty Program, September 2014.

Promoting Research and Engagement: An Entrepreneurial Approach. Janet E. Nelson, University of Tennessee, Knoxville, TN, May 2014.

Chemistry at the National Energy Technology Laboratory. Janet E. Nelson, West Virginia University, Morgantown, WV, February 2014.

The Pacific Coast Energy Research Initiative (PCERI). Janet E. Nelson, workshop leader, Oregon State Research Day at NETL, Albany, Oregon, October 2013.

Developing a Strategic Plan for Growing the Research Portfolio. Janet E. Nelson, Oregon State University, Corvallis, Oregon, May 2013.

Establishment of the URS NETL-RUA Research Awards. Janet E. Nelson, NETL-RUA Spring Meeting, Morgantown, West Virginia, March 2013.

The NETL-RUA Grid Technology Collaborative (GTC): A Next Generation Power Converter. Janet E. Nelson, panel member, Electric Power Industry Conference (EPIC), Pittsburg, Pennsylvania, November 2012.

Renewables. Janet E. Nelson, panel moderator, Sustainable Energy Forum, Youngstown State University, Youngstown, Ohio, June 2011.

NETL Hydrogen Fueling Platforms in West Virginia. Janet E. Nelson, West Virginia Clean State Program meeting at the State Capitol, Charleston, West Virginia, October 2010.

NETL Hydrogen RDT&E Platform. Janet E. Nelson, Hydrogen Economy Action Summit III at the Energy & Environmental Research Center (EERC), Grand Forks, North Dakota, September 2010.
Biofuels. Janet E. Nelson, panel moderator, Sustainable Energy Forum, Youngstown State University, Youngstown, Ohio, June 2010.

Biopower: Innovations and Feedstocks Panel. Janet E. Nelson, Charles Taylor, Tom Allnut, David Haberman, Gerry Groenewold, 2010 Renewable Energy World Conference & Expo North America, Austin, TX, February 2010.

The Algae Biofuel Value Chain. Janet E. Nelson, A Webinar for Technology Evaluation in the Biofuels Market, Parsons Corporation, December 2009.

Biomass Conversion to Liquid Fuels. Janet E. Nelson, panel moderator, Sustainable Energy Forum, Youngstown State University, Youngstown, Ohio, June 2009.

Synthetic Biology for Advanced Biofuels, Biobased Chemicals. Janet E. Nelson, Karl Sanford, Stephen Del Cardayre, A Webinar for Reporters, Biotechnology Industry Organization, February 2009.

Roundtable on the Future of the Chemical Industry. Janet E. Nelson, panel moderator, Elevance Renewable Sciences, Bolingbrook, IL, February 2009.

The Biological Revolution from Genetics to Synthetic Biology. Janet E. Nelson, Forum for Graduate Students in Science, Technology, and Health Policy, National Academy of Sciences, January 2009.

Economic Challenges and Impacts in the Commercialization of Synthetic Biology. Janet E. Nelson, Challenges and Opportunities in the Emerging Field of Synthetic Biology Planning Meeting, Bellagio, Italy, October 2008.

Emergence of Professional Organizations in Synthetic Biology. Janet E. Nelson, Synthetic Biology 4.0, Hong Kong, China, October 2008.

Synthetic Biology: Can We Make Biology Easy to Engineer? Janet E. Nelson, session moderator, The Pacific Rim Summit on Industrial Biotechnology & Bioenergy, Vancouver, BC, Canada, September 2008.

Synthetic Processes. Janet E. Nelson, session chair, 12th Annual Green Chemistry and Engineering Conference, Washington, D.C., June 2008.

Science Policy and the National Academies. Janet E. Nelson, ComSci Presentation, Washington, D.C., May 2007.

Reorganization Activities at the NIH Center for Scientific Review. Janet E. Nelson, Metals in Biology Gordon Research Conference, Ventura, CA, January 2004.

Proposal Preparation Workshops and Presentations on Programs of the PRF. Janet E. Nelson, 2000 ACS Great Lakes Regional Meeting, Fargo, ND; 2000 NSF Inorganic Workshops, Elkridge, MD; 1999 ACS Northeast Regional Meeting, Potsdam, NY; 1999 Midwest Association of Chemistry Teachers in Liberal Arts Colleges annual meeting, Rock Island, IL; 1999 NSF Inorganic Workshops, Elkridge, MD Presentations on Programs of the PRF. Janet E. Nelson, Site visits to Kansas University, Macalester College, Barnard College, Columbia University, Trinity University, Clarkson University, Syracuse University, Brown University, Providence College; and Texas A&M to meet with PRF grantees. (1998–2000).`

Molecular Modeling in Organic Chemistry. Janet E. Nelson, Invited Seminar Speaker, Purdue U., October 1998.

What Molecules Look Like. Janet E. Nelson, Warren J. Hehre, ACS National Meeting, San Francisco, April 1997.

Spartan in the Organic Curriculum. Janet E. Nelson, Molecular Modeling Workshop, University of Massachusetts, January 1996.

Introducing Molecular Modeling into the Undergraduate Chemistry Curriculum. Janet E. Nelson and Warren J. Hehre. Presented at: ACS National Meeting, Orlando, Florida, July 1996; PKAL F21 National Meeting, October 1996; University of California, Hayward, California, December 1996; Fairfield University, Fairfield, Connecticut, January 1997; St. Mary's College, Notre Dame, Indiana, January 1997; Macalester College, St. Paul, Minnesota, January 1997; University of California, Fullerton, California, January 1997; ACS National Meeting, San Francisco, California, April 1997; University of Massachusetts Amherst, Amherst, Massachusetts, June 1997; University of California, Hayward, California, July 1997; California Polytechnic State University, Pomona, California, July 1997; Hendrix College, Conway, Arkansas, July 1997; University of Richmond, Richmond, Virginia, July 1997; University of Seattle, Seattle, Washington, August 1997; Elizabethtown College, Elizabethtown, Pennsylvania, October 1997; Washington University, St. Louis, Missouri, October 1997; PKAL F21 national meeting, November 1997.

Molecular Modeling in the Organic Chemistry Curriculum at Middlebury College. Janet E. Nelson, Stewart A. Williamson. 1995 International Chemical Congress of Pacific Basin Societies, Honolulu, HI, December 1995. Abstract #1806.

Incorporation of Portable High Vacuum Line Systems into the Undergraduate Chemistry Curriculum. Janet E. Nelson, Mark Pearson, Jonathan Gilbert. 28th Great Lakes Regional Meeting of the American Chemical Society, La Crosse, WI, June 1995.

Development of Advanced Laboratory Experiments: Synthesis of Very Air-Sensitive Compounds Using High Vacuum Systems. Janet E. Nelson. Gordon Conference on Innovations in the Teaching of College Chemistry, Oxnard, CA, January 1994.

Synthesis, Characterization, and Spectroscopic Investigations of Cr(CO)3(PCy3)2(η2-H2). Janet E. Nelson, J. Eckert, and Gregory Kubas. 203rd ACS National Meeting, San Francisco, CA, April 1992. Abstract INOR #450.

Stereochemical Investigations of α-Alkyl Migrations from Sulfur to Tantalum. Janet E. Nelson and John E. Bercaw. ACS Western Regional Meeting, San Francisco, CA, October 1990.
An Unexpected Isotope Scrambling Process Accompanies Hydrozirconation of Styrene. Janet E. Nelson, John E. Bercaw, and Jay A. Labinger. 1989 ACS Western Regional Meeting, Pasadena, CA, October 1989.

Synthesis and Reactivity of Permethyltantalocene Thiolate, Thioaldehyde, and Sulfido Derivatives. Janet E. Nelson and John E. Bercaw. 196th ACS National Meeting, Los Angeles, CA, September 1988. Abstract INOR #166.

PUBLICATIONS

Re-Invigorating HIBAR Research for the 21st Century: Enhancing Fundamental Research Excellence in Service to Society. Lorne A. Whitehead, Scott H. Slovic, and Janet E. Nelson, *Technology Innovation.*, Accepted for publication, **2019**.

The Case for Public Impact-Focused Research. Sarah Rovito, Sandra Brown and Janet E. Nelson, *NCURA Magazine,* Accepted for publication, **2019**.

The Importance of Validating Faculty Research. Scott Slovic and Janet E. Nelson, *Inside Higher Ed.*, **September 4, 2019**.

University of Idaho Event Shows How Research Here and Around the U.S. Betters the World. Scott Slovic and Janet E.Nelson, *The Idaho Statesman*, **May 31, 2019.**

HIBAR Research Alliance Initiation Workshop. Sandra. Brown, Janet. Nelson and Lorne. Whitehead. **March 2019.** [Online, Available: http://hdl.handle.net/2429/70630. [Accessed 23 July 2019].

Capturing and Catalyzing Global Reach: The Role of University Research Administrators. Scott Slovic and Janet E. Nelson, *NCURA Magizine*, January/February, **2019,** 12-13.

Perspective on Opportunities in Industrial Biotechnology in Renewable Chemicals. Brent Erickson, Janet E. Nelson, and Paul Winters, *Biotechnology Journal*, **2012,** 7(2). doi:10.1002/biot.201100069.

New Biotech Tools for Green Chemistry. Brent Erickson and Janet Nelson, *CHEManager Europe*, **2008,** *10*, 14.

The Molecular Modeling Workbook. Warren J. Hehre, Alan J. Shusterman, and Janet E. Nelson, Prentice Hall, **2006**, ISBN#0132367319.

Organic Chemistry, by Bruice, 4rd Edition, Molecular Modeling Workbook. Paula Yurkanis Bruice, Warren J. Hehre, Alan J. Shusterman, and Janet E. Nelson, Prentice Hall, **2004**, ISBN#0131410407.

Molecular Modeling Workbook to Wade's Organic Chemistry, 5th Ed. Warren J. Hehre, Alan J. Shusterman, and Janet E. Nelson, Prentice Hall, **2003**, ISBN#0131008285.

Organic Chemistry, by Bruice, 3rd Edition, Molecular Modeling Workbook. Paula Yurkanis Bruice, Warren J. Hehre, Alan J. Shusterman, and Janet E. Nelson, Prentice Hall, **2001**, ISBN#0130320269.

The Molecular Modeling Workbook to Wade's Organic Chemistry. Warren J. Hehre, Alan J. Shusterman, and Janet E. Nelson, Prentice Hall, **2000**, ISBN#0130304328.

The Molecular Modeling Workbook for Organic Chemistry. Warren J. Hehre, Alan J. Shusterman, and Janet E. Nelson, Wavefunction, Inc., **1998**, ISBN # 1-890661-06-6.

A Guide to Graphical Models and Graphical Modeling in Spartan. Warren J. Hehre, Janet E. Nelson, and W. Wayne Huang, Wavefunction, Inc., **1997**, ISBN # 1-890661-01-5.

Introducing Molecular Modeling into the Undergraduate Chemistry Curriculum. W. J. Hehre and J. E. Nelson, Wavefunction, Inc., **1997**, ISBN # 0-9643495-8-2.

Using Molecular Modeling to Enhance Visualization in the Organic Chemistry Classroom. Janet E. Nelson, L. Kraig Steffen, and Stewart A. Williamson, *The Chemical Educator*, **1996**, (1)6S 1430–4171 (97)06074-3. URL: http://journals.springer-ny.com/chedr/.

Creating Simple, Low Cost, Animations for Organic Chemistry Instruction. L. Kraig Steffen, Michael Gill, J. Gundersen, and Janet E. Nelson, *The Chemical Educator*, **1996**,1(5)S 1430–4171(96)05058-3. URL: http://journals.springer-ny.com/chedr/.

Isolation of an Extremely Labile Dihydrogen Complex, $Cr(CO)_3(PPri_3)_2(H_2)$, Containing the Shortest Ligated H-H Bond. Gregory J. Kubas, Janet E. Nelson, Jeffrey C. Bryan, Juergen Eckert, Linda Wisniewski, and Kirt Zilm, *Inorganic Chemistry*, **1994**, *33*, 2954.

Synthesis and Characterization of Thioaldehyde-Hydride Derivatives of Permethyltantalocene. Investigations of Their Equilibrium with Thiolates and the Stereochemistry of Alkyl Migrations from Sulfur to Tantalum. Janet E. Nelson, Gerard Parkin, and John E. Bercaw, *Organometallics*, **1992,** *11*, 2181.

The Structure of Permethyltantalocenephenethylthioaldehyde Hydride, $(\eta^5\text{-}C_5Me_5)_2Ta(\eta^2\text{-}SCHCH_2C_6H_5)H$. Janet E. Nelson, Lawrence Henling, Richard Marsh, and John E. Bercaw, *Acta. Cryst.*, **1992**, *C48*, 1023.

Synthesis, Characterization, and X-Ray Structure of $\{[K(THF)_2]_2[U(NH\text{-}2,6\text{-}i\text{-}Pr_2C_6H_3)_5]\}\bullet THF$. Janet E. Nelson, David L. Clark, Carol J. Burns, and Alfred P. Sattelberger, *Inorganic Chemistry*, **1992,** *31*, 1973.

"Formation of B-CH Agostic Alkenylzirconocene Complexes" and "Reactions of B-Agostic Alkenylzirconocene Complexes" Commentaries. Janet E. Nelson and John E. Bercaw, *Chemtracts, Analytical, Physical, and Inorganic Chemistry*, **1990,** *2*, 308–382.

An Unexpected Isotope Scrambling Process Accompanies Hydrozirconation of Styrene. Janet E. Nelson, John E. Bercaw, and Jay A. Labinger, *Organometallics*, **1989**, *8*, 2484–2486.

Synthesis and Metal-Complexing Ability of m-Xylenebis(B-diketones). Andrew W. Maverick, Daniel P. Martone, Julie R. Bradbury, and Janet E. Nelson, *Polyhedron*, **1989,** *8*, 1549–1556.

Crystal Structure of p-Iodobenzoic Acid. Russell G. Baughman and Janet E. Nelson, *Acta. Cryst.*, **1984,** *C40*, 204–206.