College of Science and Engineering St. Cloud State University St Cloud, MN 56267 Tel. (320) 308-5468 E-mail: ddgregory@stcloudstate.edu

### **Education:**

1998 Ph.D. in physical organic chemistry, Iowa State University, Ames, IA

Research Advisor: William S. Jenks

1994 B.Sc. Chemistry with honors, Southwest State University, Marshall, MN

## **Appointments:**

2016 – Present	Interim Provost and Vice President for Academic Affairs
2014 - 2016	Dean of the College of Science and Engineering, St. Cloud State University
2013 - 2014	Interim Dean of the College of Science and Engineering, St. Cloud State University
2011 - 2013	Associate Provost for Research/Dean of the Graduate School, St. Cloud State University
2010 - 2011	Interim Associate Provost for Research/Dean of Graduate Studies, St. Cloud State University
2009 - 2010	Interim Assistant Vice President for Research and Sponsored Programs, St. Cloud State University
2006 - 2009	Chairperson, Department of Chemistry, St. Cloud State University, St. Cloud MN, 56301
2008 - 2009	Professor of chemistry at St. Cloud State University, St. Cloud MN, 56301
2003 - 2007	Associate professor of chemistry at St. Cloud State University, St. Cloud MN, 56301
1999 - 2003	Assistant professor of chemistry at St. Cloud State University, St. Cloud MN, 56301
1998 - 1999	Assistant professor of chemistry at the University of Minnesota-Morris, Morris, MN 56267.

## **Administrative and Leadership Experience and Accomplishments:**

Interim Provost and Vice President of Academic Affairs (2016-Present) Overall Accomplishments and Responsibilities

- Responsible for overall leadership and management of the division of Academic Affairs.
- Responsible for the fiscal planning and management of an annual operating budget of \$116 million
- Led the implementation of Reimagining the First Year retention strategy
- Served as a professional advisor in the Initiators Fellowship Brain Trust through the Initiative Foundation.
- Led the implementation of the EAB Student Success Collaborative to increase student service, retention, and graduation.
- Led the development and implementation of enrollment management strategies to increase both recruitment of new students as well as retention of current students.
- Led the revision and implementation of the Program Portfolio Management process as a backbone for continuous improvement for academic affairs.
- Led the development and implementation of Academic Affairs annual workplans that align with institutional goals and objectives.
- Developed monthly meetings with the academic chairs to enhance communication and shared planning.
- Developed monthly meetings with the FA Executive Council to enhance communication and shared planning.
- Led the development and implementation of financial structures within Academic Affairs to allow for strategic investment and data driven decisions
- Led the development and implementation of partnerships with several community college partners including St. Cloud Technical and Community College, Anoka Ramsey Community College, and North Hennepin Community College in partnership with the School of Education, Herberger Business School, College of Science and Engineering, School of Public Affairs, College of Liberal Arts, and the School of Health and Human Services.
- Developed a task force to redesign the curriculum process to ensure timely review of curricular changes
- Participated in the development of a new enrollment management division of the university
- Participated in the fiscal management of the university after the resignation of the Vice President for Finance and Administration.

## Dean of the College of Science and Engineering (2013-2016)

### **Overall Accomplishments and Initiatives**

- Increased declared majors in the college by 40% from FY-13 to FY-16.
- Increased the number of probationary faculty lines by nearly 7%.
- Led the development and implementation of 5 new academic programs in the college.
- Led the development of the Women Engaged in STEM (WESTEM) initiative for college.
- Led the development of the STEM Education initiative for the college.
- Led the development of an operational plan for the \$44 million, 100,000 ft<sup>2</sup> Integrated Science and Engineering Laboratory facility (ISELF).
- Facilitated the last 8 months of construction of the ISELF facility.
- Led the strategic planning process for all the spaces in ISELF.
- Led the "revenue programs" in Medical Technology suite of programs from deficit to revenue generating.
- Led the development of a comprehensive marketing and recruitment plan for the college.
- Led the development of a college budget process that will allow the college to move to a data driven approach for investment.
- Led the development of a comprehensive academic and financial plan for the Medical Technology programs in the Twin Cities Graduate Center.
- Facilitated the ABET accreditation of 5 college programs.
- Led the development of an equipment request process that allows the college to maneuver purchasing of high-cost equipment.
- Led the development of an alumni relations and development plan for the college.
- Participated in a television interview (Channel 5) focused on utilization of ISELF.
- Led the faculty planning groups for each of the unique spaces in the ISELF building.
- Responsible for the allocation of nearly \$1.5 million in equipment funding for the ISELF facility.
- Developed a faculty position request plan that allows the college to move into strategic plan.
- Began the development of a comprehensive marketing and recruitment plan for the college.
- Led the development of a college budgeting plan that will allow a connection between the budget and strategic plan
- Led the development of an equipment request process that allows the college to maneuver purchasing of high-cost equipment.
- Participated in a television interview (Channel 5) focused on ISELF.
- Led the media communications for the college.
- Led the development of an alumni development plan for the college.

### Responsibilities

- Responsible for overall leadership and management of the College of Science and Engineering.
- Responsible for the fiscal planning and management of an annual operating budget of over \$20 million for college
- Direct supervisor for nearly 100 faculty and staff in the College of Science and Engineering.
- Responsible for new program development and implementation
- Responsible for supporting departments, faculty, staff and students to ensure appropriate delivery of programs.
- Responsible for the evaluation of faculty for tenure and promotion.
- Responsible for the implementation of the COSE strategic plan developed by the college in 2012.
- Responsible for the allocation of over \$1.5 million in equipment funding for the ISELF facility.
- Responsible for overseeing all program accreditations.
- Responsible for the implementation of the COSE strategic plan developed by the college in 2012.

# Associate Provost for Research and Dean of Graduate Studies (2010-2013)

# Overall Accomplishments and Initiatives

- Led an increase of over 22% in the SCSU 5-year external funding average from \$5.3 million in 2009 to \$6.5 million in 2013.
- Developed an implementation strategy for the Community of Scholars work plan.
- Led the development of a comprehensive data system related to external funding that reflects the new university organization.
- Developed a data driven investment strategy for each college and school related to fostering activity in external funding.

- Worked with the deans and directors from each school and college to establish engagement targets related to external funding.
- Facilitated the work of the graduate planning committee in the development of a university level strategic plan for graduate education.
- Led the development of an electronic approval process for hiring graduate assistants.
- Developed a cost sharing strategy with Records and Registration for the development and implementation of DARS for graduate studies.
- Led the development of Hobson's application software, which will allow graduate students to apply electronically.
- Developed graduate data analytics and established admission targets for the graduate school.
- Established an SCSU investment strategy that contributed for a significant increase in the number of Fulbright Scholars.
- Developed a comprehensive operational plan for the graduate school. This plan included initiatives in enrollment management, student services, and graduate school infrastructure.
- Developed a budget process for the Twin Cities Graduate Center including three colleges and six programs.
- Developed a budget process for Ed. D. programs in Education Administration and Higher Education Administration.
- Developed a university patent filing process including fostering a relationship with a patent attorney at Dorsey & Whitney LLP.
- Developed and fostered university relationships with community stakeholders.
- Developed a strategic implementation plan for BEPress software. This software will allow SCSU to develop the infrastructure needed to enhance community engagement, define our research and scholarship profile, develop scholarly and institutional repositories, as well as move to electronic thesis and dissertation submission.
- Developed an integration process for the Office of Sponsored Programs and School of Graduate Studies.
- Participated in the Leading Change Forum at St. Cloud State University.
- Established the Scholarship, Research, and Creative Activity committee. This committee is charged with the implementation of the different aspects of the Community of Scholars Work plan.

### **Overall Responsibilities**

- Responsible for a research profile totaling over \$7 million. Responsibilities included overseeing financial and ethical compliance issues of federal, state, and private funding agencies.
- Responsible for all administrative aspects of graduate education including enrollment management, student services, support for program development, approval of curriculum and curriculum changes, and Council of Graduate Studies compliance issues.
- Responsible for the annual operational budget of over \$4 million for the office of Sponsored Programs, The Graduate School, the Twin Cities Graduate Center, the Doctoral Center, and the Statistical Support Center.
- Responsible for all aspects related to the development and protection of university intellectual property.
- Managed the office of Graduate Studies and Sponsored Programs with eight staff members. Duties included dayto-day operations, annual performance evaluations, verification of job descriptions, timesheet verification, dispute resolution, and guidance to ensure efficient accomplishment of duties.
- Responsible for expanding the scholarship and research profile of St. Cloud State University.
- Responsible for the growth of graduate programs that align with the strategic direction of the university.
- Responsible for the implementation of the Community of Scholars work plan.
- Responsible for the development of an enrollment management plan that will allow SCSU to become more intentional in its approach to recruitment, admission, and retention of graduate students.
- Responsible for the development of a plan to increase graduate enrollment in a way that aligns with the strategic direction of the university.
- Served as the institutional Compliance and Integrity Officer and was responsible for the development and implementation of federal compliance requirements including Institutional Review Board, Time and Effort, Federal Funding and Transparency Act, Institutional Animal Care and Use Committee, and Responsible Conduct in Research.
- Worked with the leadership of both IFO and MSUAASF unions on the implementation of new policy.
- Worked with faculty and local/regional companies to facilitate relationships focused on research.
- Worked with the graduate deans from other MnSCU institutions to identify areas of collaboration.
- Oversee the development and implementation of technology in graduate studies including Hobson's and DARS.

- Worked with constituencies across campus to develop technology that would allow graduate studies to track the stipend and tuition allocation associated with the assignment of graduate assistants.
- Established a strategic plan for the SCSU Doctoral Center and integrated and expanded the functioning of the center into the operation of graduate studies.
- Worked with office staff to develop a process to systematically assess current graduate school policies.

## Assistant Vice President for Research and Sponsored Programs, St. Cloud State University (2009-2010)

- Responsible for a research profile totaling over \$5 million. Responsibilities included overseeing financial and ethical compliance issues of federal, state, and private funding agencies.
- Responsible for the distribution of nearly \$320,000 to foster research and scholarship at St. Cloud State University.
- Managed the Sponsored Programs office with four staff. Duties included day-to-day operations, annual performance evaluations, verification of job descriptions, timesheet verification, dispute resolution, and guidance to ensure efficient accomplishment of duties.
- Developed a Sponsored Programs strategic plan focused on increasing the research and scholarly activity profile of the university. The plan realigned Sponsored Program objectives with the Community of Scholars work plan.
- Expanded the mission of Sponsored Programs to include the fostering of research and scholarly activity beyond seeking external funding.
- Worked with the leadership of both IFO and MSUAASF unions on the implementation of new policy.
- Worked with the Special Assistant to the President (Judith Siminoe) and OoC representatives on the revision of the MnSCU Intellectual Property policy.
- Developed and implemented a policy that allowed stipends for faculty/staff engaged in research and scholarly activity.
- Developed and implemented the New Researchers Award which targeted support at faculty and staff in their first five years at SCSU.
- Worked with the Office of the Chancellor to develop a contract with a private company to develop "green" technology. This was the first contract in the MnSCU system that included the collection of royalties on commercialized intellectual property by the University.
- Participated in an interview with a local radio station that focused the level of external funding at St. Cloud State University.
- Developed two reassigned time proposals that allowed two faculty members to accept external funding.
- Met with the Dean's Advisory Council for each college to discuss needed support for each college.
- Led the development of college support plans. These plans focused on the needed support to foster research and scholarly activity.
- Worked with the business office as needed to facilitate the work of faculty and staff engaged in research and scholarly activities.
- Worked with the Business Office, Human Relations office and others on completing an audit for an Environmental Protection Agency research grant.
- Worked with the Vice President of Development to increase the collaboration of the Foundation and Sponsored Programs.
- Worked with the director of CETL to ensure broad support to faculty in both research and teaching including meeting with all of the Dean's Advisory Committees and planning and facilitating a meeting aimed at supporting the work of department chairs.

#### Chairperson, Department of Chemistry, St. Cloud State University (2006-2009)

- Managed a department of 15-18 faculty members and four staff.
- Managed departmental supplies, equipment and student help budgets totaling nearly \$150,000.
- Direct supervisor for four staff members. Duties included day-to-day operations, annual performance evaluations, verification of job descriptions, timesheet verification, dispute resolution, and guidance to ensure efficient accomplishments of duties.
- Submitted comments to faculty and the College of Science and Engineering dean on all chemistry faculty professional development plans and reports.
- Facilitated a bi-monthly meeting of the physical sciences chairpersons to discuss solutions to complex interdisciplinary problems.
- Submitted recommendations on all chemistry faculty tenure and promotion applications to the COSE dean.

- Developed a budget tracking system that would allow for accurate tracking of expenditures. Prior to this system, the department was not closely tracking its income or expenditures.
- Organized and presented an annual budget analysis to the department and COSE dean.
- Developed the department's first short-term and long-term enrollment management plan. The plan focused on the healthy and sustainable growth from the introductory to advanced coursework.
- Planed and facilitated a departmental retreat focused on the development of the department's first strategic plan.
- Presented the department's strategic plan to the SCSU president and led a conversation on the future direction of the department.
- Developed and submitted the 2009 American Chemical Society accreditation report required for program approval. The American Chemical Society approved the program for the next five years.
- Planed and facilitated a department retreat focused on the development of the department's assessment plan.
- Served on the College of Science and Engineering Dean's Advisory Council.
- Developed yearly schedule of courses, personnel and rooms based on student demand and the department's enrollment management plan. These schedules were developed with close collaboration with the biology and physics departments.
- Managed student and faculty complaints and served as a mediator when necessary.

# Co-chair St. Cloud State University Budget Advisory Group (2008-2009)

- Along with the Vice-President for Administrative Affairs presented a budget update at the fall 2010 faculty workshop days.
- Participated in a Minnesota Public Radio story focused on the University's budget situation.
- Joined President Potter on a local radio program to discuss budget and strategic planning.
- Spoke on the implications of proposed budget cuts on the chemistry department at a congressional town hall meeting in St. Cloud.
- Presented and led a discussion on "Developing a Departmental/Divisional Budget" workshop during fall convocation.
- Presented a budget update at the 2009 spring convocation President's address.
- Participated on the budget scenarios development sub-committee. This work focused on developing budget scenarios during the fiscal year.
- Along with the AVP for Administrative Affairs presented and led discussion on "Developing a Departmental/Divisional Budget" to the Deans Advisory Council of each college.
- Collaborated with the Vice-President for Administrative Affairs to develop the agenda for the biweekly meetings.
- Presented and led discussion on "Developing a Departmental/Divisional Budget" to several divisions in Administrative Affairs and Student Life and Development.
- Along with the vice-president of administrative affairs, met with all academic deans to discuss the new budget development process and identify inefficiencies.

## Co-chair St. Cloud State University Strategic Planning Committee (2008-2009)

- Presented strategic planning update at the 2009 Spring Convocation President's address.
- Along with the Assistant Vice-President for Institutional Effectiveness ran all Strategic Planning Meetings, collected committee feedback, and disseminated these comments to the campus.
- Collaborated with the Assistant Vice-President for Institutional Effectiveness in developing the biweekly strategic planning committee agenda.
- Presented a strategic planning update at the 2009 spring convocation President's address.
- Reviewed the Community of Scholars, Online and Technology work plan prior to releasing the plans to the committee.
- Assisted the co-chairs of the Community of Scholars work group in making the changes suggested by the Strategic Planning Committee.
- Served as one of the strategic planning committee liaison to the Budget Advisory Group.

## Chair - Faculty Association Budget Committee (2007-2009)

- Developed and led a workshop entitled "Budget Development Process" during the 2009 fall faculty workshop days. This was the debut presentation of the new budget development process.
- Worked with the faculty senate to ensure FA concerns were addressed in the new budget development process.
- Organized, scheduled and facilitated FA budget committee meetings.
- Served as a FA point of contact for budget matters.

- Participated in the budget development update sub-committee.
- Reviewed SCSU financial reports and reported findings to the FA Senate

## Served on University Integrated Budget and Planning Committee. (2006–2007)

- This committee developed the current University Budget Development Process and New Initiative Process.
- Developed both the Budget Development Process and New Initiative Development Process organizational flow documents.

## Chair - Chemistry Evaluation Promotion and Tenure Committee (2004-2006)

- Led the development and implementation of the Chemistry Long-term Professional Development plan. The plan developed expectations needed for successful promotion and tenure of faculty in Chemistry.
- Led the evaluation of professional development plans and reports along with drafting recommendation letters to the College of Science and Engineering Dean.
- Led the evaluation of tenure and promotional applications along with drafting recommendation letters to the Dean.

#### **Publications:**

- 1. Roskop, L; Cheng, C; Gregory, D. D; Mahroof-Tahir, M.; Theoretical Structural Development of Vanadium/ flavonoid Complexes, *Journal of Molecular Structure*, Manuscript in preparation.
- 2. Sreerama, L., Grant, R., Gross, A., and **Gregory**, **D.** D. Polymorphic Human Class-3 Aldehyde Dehydrogenases, *Enzymology and Molecular Biology of Carbonyl Metabolism-13*, pp. 56-61, **2007**.
- **3.** Lovold, A., Smith, N., Kuyomba, U Reberg, A., **Gregory, D. D.** and Sreerama, L., Role of Human Aldehyde Dehydrogenases in Ethylene Glycol Ether Metabolism: Oxidation of 2-Butoxyethanal and 2-Phenoxyethanal, *Enzymology and Molecular Biology of Carbonyl Metabolism***-12**, pp. 15-26, **2005**
- **4. Gregory, D. D.**; Jenks W. S., Computational Investigation of Vicinal Di-sulfoxides and Other Sulfinyl Radical Dimers. *J. Phys. Chem. A* **2003**, 107, 3414-3423.
- **5. Gregory, D. D.**; Jenks W. S., Thermochemistry of Sulfenic Esters (RSOR'): Not Just Another Pretty Peroxide. *J. Org. Chem.* **1998**, *63*, 3859-3865
- **6.** Darmanyan, A. P.; **Gregory, D. D.**; Guo, Y.; Jenks W. S., Quenching of Singlet Oxygen by Oxygen- and Sulfur-Centered Radicals: Evidence for Energy Transfer to Peroxyl Radicals in Solution, *J. Am. Chem. Soc.* **1998**, 120, 396-403.
- 7. Gregory, D. D.; Wan, Z.; Jenks, W. S., Photodeoxygenation of Dibenzothiophene Sulfoxide: Evidence for a Unimolecular S-O Cleavage Mechanism. *J. Am. Chem. Soc.* 1997, 119, 94-102.
- 8. Jenks, W. S; Gregory, D. D.; Guo, Y.; Lee W.; Tetzlaff, T., The Photochemistry of Sulfoxides and Related Compounds, *Organic Photochemistry*; V. Ramamurthy and K. S. Schanze, Ed.; Marcel Dekker, Inc.: New York, 1997; Vol. 1; pp 1-56.
- 9. Darmanyan, A. P.; Gregory, D. D.; Guo, Y.; Jenks W. S. J., Generation and Decay of Aryl Sulfinyl and Sulfenyl Radicals: A Transient Absorption and Computational Study, J. Phys. Chem. A 1997, 101, 6855-6863.
- **10.** Smoliakova, I. P., Caple, R., **Gregory, D. D.**, Smit, W. A., Shashkov, A. S., Chizhov, O. S., Highly Selective Formation of a β-C-Glucosidic Bond in the Reactions of ArSCl-Glucal Adducts with Silicon-Containing Nucleophiles, *J. Org. Chem.*, **1995**, 60 (5), 1221-1227.

#### Competitively Funded Research Grants (PI or Co-PI):

- Investigation of Vanadium Complex Structure Using Density Functional Theory, University of Minnesota Supercomputing Institute. Grant funded **400** service units on their supercomputer, **2007**.
- St. Cloud State University Research and Creative Activity grant. Funded \$8,775 for the purchase of a florescence polarization analyzer, 2006.
- Calculating Analytical Hessians in Vanadium Complex Structure Using Density Functional Theory, University of Minnesota Supercomputing Institute. Funded **850** service units on U of M supercomputer, **2005**.
- St. Cloud State University Faculty Research grant. Funded \$5,752 for the purchase of a molecular modeling suite of programs used for advanced computations on potential new drugs, 2005.
- Semi-empirical methods to develop the structure of potential insulin mimicking drugs, University of Minnesota Supercomputing Institute. Grant funded **700** service units on the supercomputer, **2004**.
- Center for Teaching and Learning grant. Funded \$16,800 for the extension of an interdisciplinary research program between the chemistry and biology departments, 2004.

- Modeling of vanadium compounds coordinating with the acac ligand, University of Minnesota Supercomputing Institute grant. Funded **300** service units on their supercomputer, **2003**.
- National Science Foundation-MRI grant. Funded \$180,000 for the development of a Lifetime-Based Fluorescence Spectrometer, 2003.
- MnSCU grant. Funded \$5,000 for the development of an interdisciplinary research project, 2002.
- St. Cloud State University Foundation Travel Grant. This proposal was funded for \$340. Funded student travel (Alicia Spychala) to present her research results at the American Chemical Society meeting in Orlando, 2002.
- Short-term Faculty Improvement Grant. Funded \$3,023 for research in the photochemistry of aromatic isocyanates and isothiocyanates, 2001.
- Busch Foundation. Funded \$10,000 to strengthen the laboratory component of several of our laboratory classes, 2001.
- SCSU Grant Getters Grant. Funded \$4,490 for the purchase of molecular modeling computer and software, 2000.

#### **Professional Presentations:**

- "Toward institutional Change: A Holistic Approach to Student Success at St. Cloud State University" Invited talk, American Association of State Colleges and Universities Summer Meeting, 2018
- "St. Cloud State University Comprehensive Facilities Plan" Invited talk, National Association of College and University Business Officers Spring meeting, 2018
- "Brain Development/Function, Technology, and Higher Education" Invited plenary talk, Growth and Globalization & Governance: Promises and Challenges 2025 and Beyond conference, JK Lakshmipat University, Jaipur, India, 2014
- "Student Expectations in the College of Science & Engineering at St. Cloud State University" Invited talk, Kalinga Institute of Industrial Technology, Bhubaneswar India, 2014.
- "Student Expectations and the Future of STEM Education" Invited talk, JK Lakshmipat University, Jaipur, India, 2013.
- "New Vision for COSE and ISELF" Greater St. Cloud Development Corp. board meeting, St. Cloud, 2013
- "Interdisciplinary Research Collaboration between Industry and COSE" St. Cloud Rotary Club, 2013
- "The Future of Graduate Education in the US and the Changing Expectations of Students" Invited talk, University of Cocody, Abidjan, Cote Divoire, 2012
- "Graduate Opportunities and Research Collaborations with St. Cloud State University" Invited talk, University of Ghana-Legon, Accra, Ghana, 2012.
- "Computational Investigation of Vanadium-Flavonoid Complexes" Invited talk, Department of Chemistry, Iowa State University, 2007.
- "Photochemical Investigations of Aromatic Isothiocyanates" Invited talk, Department of Chemistry, University of Minnesota-Morris, 2005.
- "Getting Funded and Staying Connected" Invited talk, Research Site for Educators in Chemistry, Balanced Academic Life Workshop, University of Minnesota-Twin Cities, 2003.
- "Computational and Photochemical Investigation of Aromatic Isothiocyanates" Invited talk, Department of Chemistry, University of Minnesota-Morris, 2001.
- "Computational Characterization of Reactive Intermediates" Invited talk, Department of Chemistry and Biochemistry, Southwest Minnesota State University, 2000.
- "Isocyanate Photochemistry and Life as a Professor at an Undergraduate University" Professional Opportunities in Biological Sciences symposium sponsored by the Department of Biochemistry, Biophysics, and Molecular Biology, Iowa State University, **1999**.
- "An ab-initio and Density Functional Study of Sulfenic-Ester, Intermediates in the Photolysis of Sulfoxides." Inter-American Photochemical Society 9th Winter Conference, Clearwater Beach FL 1997.
- "Photodeoxygenation of Sulfoxides" 210th American Chemical Society National Conference, Chicago, IL, 1996
- "Use of Arylsulfenyl Chloride in the Preparation of Glucal Derivatives" 208th American chemical Society National Conference, San Diego, CA, 1994.

#### **Community Service and Service to Students:**

## Big Brothers and Big Sisters Mentor

Mentored a young man as part the Big Brothers and Big Sisters organization for three years.

### Member of Greater St. Cloud Development Corp – Innovation Corps

Served on the GSDC Innovation Corps from 2013 to present. The Innovation Corps is responsible for the development and implementation of a regional strategy to support and grow innovation in the St. Cloud region.

# Member of Minnesota Medical Manufacturing Partnership - Research & Innovation Working Group

Served on MMMP working group from 2015 to present. This is a sub-group of the MMMP, which was developed to build on its comparative advantages and the foundational strengths of its medical technology sector, MMMP has crafted a strategy to strengthen the ecosystem for entrepreneurship, globally brand and market Minnesota's medical and life sciences cluster, and optimize the regional talent base via training and educational programs focused on medical devices and medical manufacturing.

### Graduate Thesis Co-Advisor

I served as Kerri Schnell's co-advisor for her Masters degree at National University. Kerri's work focused on using FT-IR to gain information about cremated bones. As co-advisor, I worked with Kerri on experimental design, setup and execution as well as writing her thesis. She awarded her degree in the fall of 2007.

#### Graduate Advisory Committee Member

I am currently serving on the masters committee for August Pamplona a graduate student in biology.

### External Reviewer for the Department of Chemistry and Geology at Minnesota State University - Mankato

Led a review team of 3 external faculty to assess all aspects of the Department of Chemistry at MSUM. As the lead reviewer I was charged with submitting a comprehensive report the panel's findings.

## Community College Collaboration

I worked with Dr. Eugina Paulus at North Hennepin Community College to bring her Organic Chemistry students to campus to conduct hands on experiments with our state-of-the-art instrumentation. Over the last six years this program has been growing and the number of students and visit SCSU per year has doubled to over 40 students.

## Public Chemistry Demonstration Shows

Over the last 10 years, I have been involved in performing chemistry demonstration shows to area elementary schools, local Boy Scout troops as well as the general public. Along with nearly 100 undergraduate students I presented chemistry shows for over 3,000 community members.

## Scientific Discovery Program Participant

The Scientific Discovery Program gives high school tenth graders from underrepresented populations the opportunity to conduct summer research at SCSU. I have participated in this program as a research mentor for seven years.

## Advanced Program in Technology and Science

The Advanced Program in Technology and Science give high school 11<sup>th</sup> and 12<sup>th</sup> graders from underrepresented populations the opportunity to conduct summer research at SCSU. I have participated in this program as a research mentor for seven years.

### Invited talk for the Hmong Student Organization

This talk was given to prospective Hmong students and focused on life in a University setting as well as what can be expected from professors.

#### Science Rocks Presenter

Dr. Mark Nook and I participated in the first Science Rocks Conference. This is a joint effort between SCSU and Resource Training and Solutions. Area 5<sup>th</sup> and 6<sup>th</sup> graders came to campus to participate in different workshops that were science focused. The session Dr. Nook and I developed was based on rockets and how they work.

#### Adopt-a-Faculty

I participated in the Adopt-A-Faculty program with W.W. Holes Hall. The First Year Connection program in the SCSU Residence Halls sponsored the program. The program promotes the development of relationships between members of the faculty and first year students outside of the traditional classroom.

## Kids in Chemistry

I was involved with Dr. Leenay in the Kids in Chemistry program. The program is designed to get young people and their parents involved in chemical experiments.