

## Gregory J Crouch

Department of Chemistry  
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### Education

- Post-Doctoral Student, 1996-1998  
Washington State University, Pullman, WA
- Ph.D. Organic Chemistry, 1996  
Washington State University, Pullman, WA
- B.S. Chemistry, 1989  
Western Washington University, Bellingham, WA

### Academic Appointments

2016 –	Professor, Career Track
2003 – 2016	Clinical Associate Professor
2000 – 2003	Research Assistant Professor
1996 – 2000	Assistant Research Scientist and Instructor

### Administration, Service, and Leadership

- Past Chair and Faculty Representative to the Board of Regents Aug 2020 – 2021
- Chair, Faculty Senate Aug 2019-Aug 2020
- Chair-Elect, Faculty Senate Aug 2018 to Aug 2019
- Associate Chair, Department of Chemistry, 2017 – present
- Interim Director of Graduate Studies, Aug 2022 - present

### Grants and Awards

- Battelle Memorial Institute "Online Learning Environments (OLE) for the Next Century," 2/1/99-2/31/00 P.I. Gregory J. Crouch (PI), Matthew G. Hudelson, Gary Brown, TDC, \$15,000
- NSF DUE-9850771 "Acquisition of a FT-NMR to Modernize Undergraduate Education in Chemistry," 6/1/98-5/31/00 Gregory J. Crouch (PI), Robert C. Ronald, Donald Matteson, TDC, \$75,499
- NSF DUE -99526819 "Online Learning Environments: A Collaborative Education Project in Math, Science, and Communications," 2/28/00-1/31/01 Gregory J. Crouch (PI), Gary Brown, Karen L. Hallgren, Matthew G. Hudelson, Edith A. Jenkins, TDC \$74,822
- NSF DUE -0127423 "Adaptive Teaching and Learning Environments in Science and Mathematics Education," 4/15/02-3/31/04 Gregory J. Crouch (PI), Abbie Brown, Claudia Brahler, Karen L. Hallgren, and Matthew G. Hudelson, TDC \$100,000

- WSU Provost's Innovation in Teaching and Learning Grant "Developing a Holistic Learning Community Model in Science, Mathematics, Engineering and Technology Education," \$25,000 2003/2004, Crouch (PI), Hudelson, and Davis
- WSU Provost's Innovation in Teaching and Learning Grant "Developing a Learning Community Model in Science, Mathematics, Engineering and Technology Education, Phase II," \$16,000. In addition, WSU Foundation raised an additional \$50,000.00 to meet the goals of this project, 2004/2005, Crouch (PI), Hudelson, and Davis
- WSU Provost's Innovation in Teaching and Learning Grant "Moving Towards an Undergraduate Chemistry Reform: Phase I" \$25,000.00 2004/2005, Jones (PI) & Crouch

## Refereed Publications

- Joshua F. Alfaro, J.F.; Joswig-Jones, C.A.; Ouyang, W.; Nichols, J.; Crouch, G.J.; Jones, J.P. "Purification and Mechanism of Human Aldehyde Oxidase Expressed in Escherichia coli" Drug Metabolism & Disposition 2009, 37, 2393-2398.
- Quitadamo, I; Brahler, C.J.; Crouch, G.J. "Peer Led Team Learning: A Prospective Method for Increasing Critical Thinking in Undergraduate Science Courses" Science Educator 2009, 18, 29-39.
- Peng, C.-C.; Cape, J. L.; Rushmore, T.; Crouch, G. J.; Jones, J. P. "Cytochrome P450 2C9 Type II Binding Studies on Quinoline-4-Carboxamide Analogues" Journal of Medicinal Chemistry 2008, 51, 8000-8011.
- Peng, C.; Rushmore, T.; Crouch, G.J.; Jones, J.P. "Modeling and synthesis of novel tight-binding inhibitors of cytochrome P450 2C9" Bioorganic & Medicinal Chemistry 2008, 16, 4064-4074.
- Hines, S.A.; Collins, P.L.; Quitadamo, I; Brahler, C.J.; Knudson, K.D.; Crouch, G.J. ATLes: The Strategic Application of Web-Based Technology to Address Learning Objectives and Enhance Classroom Discussion in a Veterinary Pathology Course J Vet Med Educ, 2005, 32, 103.
- Benefiel, Caleb; Newton, Ron; Grant, Karen; Crouch, Gregory J. "Remote NMR Data Acquisition and Processing in the Organic Chemistry Curriculum" J. Chem. Educ. 2003, 80, 1494.
- Wahlstrom, J.L.; Randall, M.A., Jr.; Lawson, J.D.; Lyons, D.E.; Siems, W.F.; Crouch, G.J.; Barr, R.; Facemyer, K.C.; Cremo, C.R. "Structural Model of the Regulatory Domain of Smooth Muscle Heavy Meromyosin" J. Biol. Chem., 2003, 278, 5123.
- Mundt, A.A.; Crouch, G.J.; Eaton, B.E. "Bimolecular DNA Triplexes: Duplex Extensions Show Implications for H-Form DNA Stability" Biochemistry 1997, 36, 13004-13009.
- Dewey, T. M.; Mundt, A.; Crouch, G.J.; Zyzanski, M.C.; Eaton, B.E. "New Uridine Derivatives for Systematic Evolution of RNA Ligands by Exponential Enrichment," J. Am. Chem. Soc. 1995, 117, 8474-8475.
- Crouch, G.J.; Eaton, B.E. "Synthesis of 2'-Deoxyuridine Nucleoside Analogs With Appended 5-Position Carbonyl Cross-Linking Groups" Nucleosides Nucleotides 1994, 13, 939-944.

## Presentations

- Light, J. Girardeau L. Beller J. Crouch G.J. Using reflective essays as part of a mixed-method approach for evaluating a freshmen living-learning community for engineering and science majors. Accepted paper for American Society for Engineering Education national conference, Chicago, ILL, June 18-21 2006.
- Light, J. Beller, J. Crouch, G. (2005) A comparison of online and paper student evaluations. 2005, Pacific Northwest Regional Conference American Society for Engineering Education, Butte MT, March 13-15, 2005.
- WSU Provost's Innovation in Teaching and Learning Seminar Series, Developing a Holistic Learning Community Model in Science and Mathematics Education, April 2004
- American Chemical Society – Northwest Regional Meeting, A New Method for Assessing Curriculum Reform in Undergraduate Science and Mathematics Education, July 2002
- CO-TEACH, Small Group Collaborative Learning, Washington State University, September 2001
- Washington State Gender Equity Project, Gender Equity in Science and Mathematics Education Workshop, April 2001
- Northwest Council for Computer Education, Web-Based Adaptive Teaching and Learning Environments, March 2001
- Department of Energy Office of Science Undergraduate Education, Problem-based Science Curricula in Undergraduate Education, August 1999.
- WSU/PNNL Research Collaboration Conference, Online Learning Environments in Science Education, April 1999

## Professional Affiliations

- American Chemical Society
- National Science Teachers Association
- Distinguished member of the National Society of Collegiate Scholars

## Honors and Award

- Sahlin Faculty Excellence Award for Leadership – 2021
- Thomas E. Lutz Teaching Excellence Award – 2018

## Graduate Student Committees

- Parvaneh Ahmadvan (PhD fall 2022)
- Shane Kelly (PhD *spring* 2022)
- Anna Wang (PhD *spring* 2022)
- Shane Kelly (PhD *spring* 2022)
- Dan Collins (PhD summer 2020)
- Jessica Knight (PhD *spring* 2022)
- Armina Abbasi (Ph.D. fall 2021)
- Jacob Markut (M.S., spring 2019)

- Brian Backer (Ph.D. spring 2019)
- Madison Soth (M.S. spring 2018)
- Ericson Paragas (Ph.D. 2018)
- Max Minnig (M.S. spring 2017)
- Armando Pacheco (Ph.D. spring 2017)
- Brandan Cook (Ph.D. spring 2017)
- Abrrrey Monreal (Ph.D. fall 2016)
- Rocio Rodriguez (M.S. spring 2016)
- Charles Murray (M.S. spring 2016)
- Ryan Joseph (Ph.D. 2015)
- Frank Dyer (Ph.D. 2013)
- Chi-Chi Peng (Ph.D. 2009)
- Jenni Light\* (Ph.D. Engineering, Education, and Sociology, 2005)
- Michelle Hebner (M.S. 2005)
- Ian Quitadamo\* (Ph.D. Chemistry, Biological Sciences, and Education, 2002)
- Marci Baily (M.S. 2001)
- Caleb Benefiel (M.S. 2001)
- M. Allen Randall (M.S. 1999)
- Jan Whalstrom (Ph.D. 1998)

## Faculty Service

### *Department*

- Campus Program Assessment 2010-2017
- American Chemical Society Accreditation Liaison 2017 - present
- Secretary, Donald S. Matteson Symposium 2008, 2009, 2010, 2011, 2018
- Secretary, Pacific Northwest Undergraduate Research Symposium in Organic Chemistry & Chemical Biology 2009-2010
- Department IT Committee (chair until 2007) 2004 – 2018
- Graduate Recruiting Committee 1997 – 1999, 2022 – current (C)
- Undergraduate Affairs Committee 2000 – 2002; 2008 – current (C)
- Chemistry Advisor 2000 – 2004
- Various hiring committee 2004-current

### *CAS*

- Undergraduate Advisory Council 2017 - 2019
- Assessment/Course Evaluation Task Force 2015 – 2019

### *University*

- Strategic Planning and Institutional Effectiveness Committee (2019-2020)
- Northwest Commission on Colleges and Universities Retention Academic Member (2019-2021)

- Accreditation, Assessment, and Academic Program Review Committee (2018-2020)
- University Academic Advising Executive Council (2019-current)
- Student Success Council (2018-2020)
- Information Technology Strategic Advisory Committee (2018-current)
- Provost Search Committee (2019)
- Campus & Community Mental Health Task Force (2018-2020)
- Chair, Barriers to Student Success (2019-current)
- WSU Police Advisory Board (2019-2020)
- Strategic Plan Operations Team (2019)
- Chair, Committee on Committees (2018-2019)
- Faculty Senate 2014 – 2016
- Academic Affairs Committee 2013 – 2018 (chair 2016-2018)
- Senate Steering (2016-2021)
- Provost's Affordability Task Force (2016 – 2018)
  - FirstDay project (ongoing)
  - Open Educational Resources subcommittee (2017-current)
  - Quick response tool subcommittee (2017)
  - Faculty advisory subcommittee (2017)
- Learning Management Systems
  - Canvas LMS project (2019-current)
  - Transition Team (2014 – 2016)
  - Evaluation Senate Subcommittee (2013-2014)
- Regents Scholarship Committee 2011 – 2015
- WSU Distance Education & Research Committee 1998 – 2000
- WSU Strategic Planning & Oversight Committee – Undergraduate Experience - 2003
- Washington State Gender Equity Project 2000 – 2002

## Courses Taught

### *Undergraduate*

- Chem 102; Organic and Biochemistry for the Life Sciences
- Chem 240; Elementary Organic Chemistry
- Chem 340; Organic Chemistry I
- Chem 341; Organic Chemistry Laboratory I
- Chem 342; Organic Chemistry II
- Chem 343; Organic Chemistry Laboratory II
- Chem 344/348; Problem Solving in Organic Chemistry
- Chem 345; Organic Chemistry I
- Chem 346; Organic Chemistry II
- Chem 348; Organic Chemistry II (new curriculum)
- Chem 485; Chemistry Capstone
- Chem 391/499/495 Special Topics and undergraduate research

*Graduate:*

- Chem 540 – Physical Organic Chemistry
- Chem 542 – Advanced Organic Chemistry
- Chem 544 – Special Topics: Organometallics
- Chem 590 – Introduction to Research