

*Curriculum Vita*  
**Mark D. Wathen**

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**Professional Experience**

- Associate Professor, Utah Valley University, Orem, UT, July 2016 – present.
- Assistant Professor, Utah Valley University, Orem, UT, July 2014 – June 2016.
- Chemistry Department Chair, Snow College, Ephraim, UT, 2010 – June 2014.
- Associate Professor, Snow College, Ephraim, UT, July 2012 – June 2014.
- Assistant Professor, Snow College, Ephraim, UT, July 2008 – June 2012.
- Adjunct Professor, Snow College, Ephraim, UT, August 2007 – May 2008.
- Science Teacher, Manti High School, Manti, UT, July 2001 – June 2007.

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**Education**

- Ph.D.      August 2008  
Chemical Education; University of Northern Colorado, Greeley, CO.  
Dissertation: *Effects of Molecular Representation on Chemistry Students' Understanding of R and S Configuration.*  
Dr. Loretta Jones, Research Advisor
- Awarded Graduate Dean's Citation of Excellence
- M.S.      December 2000  
Organic Chemistry; Utah State University, Logan, UT  
Thesis: *The Design, Synthesis, and Characterization of New Ligands That Can Provide Controlled Catalytic Environment.*
- B.S.      June 1996  
Chemistry; Utah State University, Logan, UT
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## Related Professional Experience

- University Supervisor for Science Student Teachers, (August 2014 – present). Utah Valley University, Orem, UT.
- University Supervisor for Student Teacher, (Fall 2011). Utah State University, Logan, UT.
- Mentor Teacher, (Spring 2007). Utah State University – Ephraim, Ephraim, UT.
- Guest Speaker, (Fall 2007). Science Methods Course Utah State University – Ephraim, Ephraim, UT.
- Science Ambassador, (2005). Center for Disease Control and Prevention (CDC), Atlanta, GA.
- Mentor Teacher, (Fall 2004 & Spring 2002). Snow College Education Department, Ephraim, UT.
- Guest Lecturer, (June 2003). Gear up Sanpete, Ephraim, UT.
- Teaching Assistant, (1998-2001). Department of Chemistry, University of Northern Colorado, Greeley, CO.
- Teaching Assistant, (Spring 2000). Department of Chemistry, Colorado State University, Fort Collins, CO.
- Environmental Chemist, (2000-2001). Weld Laboratories, Inc., Greeley, CO.
- Consultant, (1999). W. H. Freeman and Company, New York, NY.
- Research Assistant, (1997-1998). Department of Chemistry and Biochemistry, Utah State University, Logan, UT.
- Teaching Assistant, (1996-1997). Department of Chemistry and Biochemistry, Utah State University, Logan, UT.

## *Scholarship*

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### Curriculum

Wathen, M. (2012) “Molecular Geometry Laboratory”, [On-line]. Available:  
<http://serc.carleton.edu/sp/chemed-dl/activities/66597.html>

Wathen, M. & Devine, O. (2005). “*Is This Really Okay for Me? A Public Health Statistical Analysis*”, [On-line]. Available:  
[www.cdc.gov/excite/ScienceAmbassador/ambassador\\_pgm/lessonplans\\_stats.htm](http://www.cdc.gov/excite/ScienceAmbassador/ambassador_pgm/lessonplans_stats.htm)

### Presentations

#### *National Presentations*

Wathen, M. (2016, July). “*Lessons Learned: Selecting, Mentoring, and Monitoring Noyce Scholars*”. Presented at 2016 Noyce Summit, Washington, DC.

Wathen, M. (2012, July). “*Molecular Visualizations: How Students use Representations to Determine Molecular Polarity*”. Presented at 22<sup>nd</sup> Biennial Conference on Chemical Education, University Park, PA.

### ***Regional Presentations***

Campbell, D. T., Wathen, M., Herron, D., & Madsen J. (2006, December). “*Joint Pre-service and In-service Pedagogical Action Research Accommodated Through Clinical Experiences of Pre-service Teachers*”. Presented at the National Science Teachers Association Area Conference on Science Education, Salt Lake City, UT.

### ***Local Presentations***

Wathen, M. (2011, February). “*Copyright Laws in Education*”. Presented at Snow College Science Seminar, Ephraim, UT.

Wathen, M. (2009, October). “*Nuclear Chemistry: From Mine to Medicine*”. Presented at Snow College Science Seminar, Ephraim, UT.

Wathen, M. (2009, April). “*From Pupil to Professor*”. Presented at Snow College Science Seminar, Ephraim, UT.

Wathen, M. (2006, April). “*Using Technology to Minimize Errors and Facilitate Higher Order Thinking Skills in the Science Laboratory*”. Presented at Snow College/USU-Ephraim Technology in Math, Science, and Engineering Instruction Conference, Ephraim, UT.

Wathen, M. (2005, October). “*Incorporating Bloom’s Taxonomy into the Classroom*”. Presented at teacher in-service training, Manti High School, Manti, UT.

Wathen, M., Krystyniak, R., & Langdon, L. (1999, February). “*Implementation of Colorado Science Content Standards*”. Presented at the Math and Science Teaching Center Brown Bag Discussion, Greeley, CO.

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## **Grants and Fellowships**

### *National Science Foundation*

Noyce Professional Engagement for Educators in Math and Science, Phase II.  
\$1,050,000 awarded.

Project Director: Richard Tolman

Project Personnel: Co-PIs – Mark Wathen, Christine Walker, Vivienne Faurot,  
and Glen Clark (UVU).

Dan Black and Jonathan Bodrero (Snow College).

Max Longhurst (Utah State University).

## *Hach Scientific*

- Hach Scientific Foundation Graduate Chemistry Research Fellowship, 2007.

## *University of Northern Colorado*

- UNC Graduate School General Fellowship, 2000.
- UNC Graduate School Merit Fellowship, 1999.
- UNC Graduate Non-Resident Fellowship, 1998.

## **Teaching**

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### **Courses**

#### *Utah Valley University*

BIOL4200 CHEM 4200 GEO 4200 PHYS 4200	<i>Teaching Methods in Science.</i> Senior course for preparing science secondary education majors for student teaching.
CHEM 2310	<i>Organic Chemistry I.</i> The first in a series of two organic chemistry classes for students majoring in science and for those interested in careers in medicine, dentistry, veterinary science, and pharmacy.
CHEM 2315	<i>Organic Chemistry I Laboratory.</i> Laboratory course accompanying CHEM 2310.
CHEM 1215	<i>Principles of Chemistry I Laboratory.</i> Laboratory course accompanying CHEM 1210.

#### *Snow College*

CHEM 1210/1220	<i>Principles of Chemistry I &amp; II.</i> Full-year course primarily for students in the physical and biological sciences and engineering
CHEM 1215/1225	<i>Principles of Chemistry I &amp; II Laboratory.</i> Laboratory course accompanying CHEM 1210/1220.
CHEM 1110	<i>Elementary Chemistry.</i> This is the first semester course of a General, Organic, and Biochemistry sequence.
CHEM 1115	<i>Elementary Chemistry I Laboratory.</i> Laboratory course accompanying CHEM 1110.

Distance education course: (This course was broadcast to approximately 10 high schools throughout the state)

PHYC 1000	<i>Interdisciplinary Physical Science.</i> This course is designed to given non-majors a conceptual approach to physic, chemistry, geology, meteorology, and astronomy.
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## *Service*

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### *Service to the Profession*

- Member of the State Science Education Coordinating Committee, 2014 – present.
- Member of the Western States Chemical Education group, 2014-present.
- Member of Chemical Education Digital Library and Chemical Education Research Summit, 2011-2012.
- Snow College/Utah State University Technology in Math, Science, and Engineering Instruction Advisory Panel, 2006 - 2007.

### *Service to the University*

#### *Utah Valley University*

- Member of Advisory Council for the campus-wide Writing Initiative, 2015 – present.

#### *Snow College*

- Member of Strategic Planning Goals Conference
- Member of Retention and Completion Committee
- Chair of Faculty Search Committee (Chemistry 2013, 2014)
- Member of Faculty Search Committee (Education 2011, English 2011).

### *Service to the College*

#### *Utah Valley University*

- Member of the Textbook Review Committee

#### *Snow College*

- Division of Natural Science and Mathematics Scholarship Coordinator, 2011 – 2014.
- Colleague Review Committees
  - Chair of Final Tenure Committee, 2012.
  - Member of Interim Tenure Committee, 2011.
  - Member of Advancement Committee, 2009.

### *Service to the Department*

#### *Utah Valley University*

- Concurrent Enrollment Liaison for CHEM 1010/1015, 2014 – present.

#### *Snow College*

- Chemistry Department Chair, 2010 – 2014.
- Chemistry Lab Coordinator for the Regional Science Olympiad held at Snow College, 2010 – 2014.
- Honor's Program Mentor, Spring 2013.

*Service to the Community*

- Ephraim Middle School Community Council, 2009 – 2011.
- Webelos Scouting Science Badge instructor (3/10, 11/10, 3/11)
- Ephraim Elementary second grade science day, 2010 – 2014.
- Chairperson South Sanpete Science Curriculum Council, 2006-2007.
- Advisor for Ephraim Youth City Council, 2004-2008.

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**PROFESSIONAL ORGANIZATIONS**

- American Chemical Society Division of Chemical Education.
- National Science Teachers Association.
- Two-Year College Chemistry Consortium.
- Utah Science Teachers Association.