Spring January 3, 2022

Christiansen Curriculum Vitae (2022).pdf

Mike A Christiansen

Michael A. Christiansen

Utah State University – Uintah Basin Campus
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EDUCATION

Ph.D.	2010	Organic Chemistry, Brigham Young University, Provo, UT
BS	2004	(*cum laude*), Chemistry, Utah State University, Logan UT

ACADEMIC INTERESTS

- Creating and assessing high-impact online chemistry teaching materials for broad audiences
- Restructuring lab courses to include student-designed research projects
- Developing new technologies for assembling medicines and natural molecules more efficiently
- Exploring how natural medicines are formed in nature

PROFESSIONAL APPOINTMENTS

April 2017 –	Associate Professor, Department of Chemistry & Biochemistry, Utah State University Uintah Basin Campus, Vernal, UT
April 2017 – May 2018	Editor-in-Chief, *Journal on Empowering Teaching Excellence*[1] (two issues)
Aug 2011 – April 2017	Assistant Professor, Department of Chemistry & Biochemistry, Utah State University Uintah Basin Campus, Vernal, UT
Apr 2010 – Aug 2011	Postdoctoral Fellow, Department of Chemistry, Colorado State University, Fort Collins, CO
Aug 2004 – Apr 2010	Graduate Student, Department of Chemistry & Biochemistry, Brigham Young University, Provo, UT
Jun 2001 – Aug 2004	Undergraduate Researcher, Spendlove Research Foundation (now Quansys Biosciences), Logan UT

AWARDS AND AFFILIATIONS

Member, Flipped Learning Community Network (July 2015 – present)

American Chemical Society member (February 2008 – present)

2021 USU Uintah Basin Outstanding Faculty Researcher of the Year Award

2021 Eldon J. Gardner College of Science Teacher of the Year Award[2]

2019 USU Uintah Basin Outstanding Teacher of the Year Award

2015 USU Uintah Basin Outstanding Faculty Member of the Year Award

2013 USU Undergraduate Research Mentor of the year

2009-2010 BYU Research Presentation Award | 2008-2009 Telford and Frank Woolley Memorial Research Award

2008-2009 Charles E. and Margaret P. Maw Fellowship | 2008-2009 BYU Research Presentation Award | 2008 American Chemical Society Spring Research Conference Top Presenter Award

[1] Accessible online at http://digitalcommons.usu.edu/jete/.
[2] See https://www.usu.edu/science/awards/awards-faculty.

AWARDS TO STUDENTS

2015 Legacy of Utah State Robins Award, presented to Cathy Mangum (formerly Cathy Crawford, undergraduate mentee)

2015 USU College of Science Undergraduate Researcher of the Year Award, presented to Cathy Mangum (formerly Cathy Crawford, undergraduate mentee)

2013 USU RCDE Undergraduate Researcher of the Year Award, presented to Cathy Crawford (undergraduate mentee)

2013 USU Uintah Basin Undergraduate Researcher of the Year Award, presented to Cathy Crawford (undergraduate mentee)

2012 Summer Undergraduate Research & Creative Opportunity (SURCO) Award, presented to Cathy Crawford (undergraduate mentee)

2012 Fall Undergraduate Research & Creative Opportunity (URCO) Award, presented to Cathy Crawford (undergraduate mentee)

PEER-REVIEWED BOOKS AND BOOK CHAPTERS

***Christiansen, M.A.** Flipped Chemistry in Multi-Site IVC Courses: A Possible Model for the Future of Virtual Chemistry Education. In *Technology-Enabled Blended Learning Experiences for Chemistry Education and Outreach*; Fung, F.; Zimmermann, C., Eds.; Elsevier: Philadelphia, PA, **2021**; pp 117–132. ISBN: 978-0-12-822879-1. Accessible online at https://elsev.spi-global.com/books/EComp/FUNG978-0-12-822879-1/1/OTc4LTAtMTIt/index.php?Type=E and https://www.sciencedirect.com/science/article/pii/B9780128228791000081.

***Christiansen, M.A.** *Organic Chemistry Unleashed*. Top Hat Publishing: Toronto, **2021**. ISBN: 978-0-9866151-0-8. Accessible online at https://tophat.com/marketplace/science-&-math/chemistry/full-course/organic-chemistry-unleashed/3700/.

***Christiansen, M.A.** Teaching Dossier. In *USU Teaching Documentation: Dossiers from the Mentoring Program*; Spicer-Escalante, M. L., Bullock, C. F., Eds.; Office of the Executive Vice President and Provost, Utah State University: Logan, UT, **2019**.

***Christiansen, M.A.** Back to Basics: Principles of Teaching That Will Never Expire. In *Teaching and the Internet: The Application of Web Apps, Networking, and Online Tech for Chemistry Education*; **Christiansen, M. A.**, Weber, J. M., Eds.; American Chemical Society: Washington, DC, **2017**. DOI: 10.1021/bk-2017-1270.ch010.

Teaching and the Internet: The Application of Web Apps, Networking, and Online Tech for Chemistry Education; **Christiansen, M. A.**, Weber, J. M., Eds.; American Chemical Society: Washington, DC, **2017**. DOI: 10.1021/bk-2017-1270.

***Christiansen, M. A.** Flip Teaching College Chemistry in Broadcast Classrooms. In *Interdisciplinary Approaches to Distance Teaching: Connecting Classrooms in Theory and Practice;* Blackstock, A., Straight, N., Eds.; Routledge: New York, **2015**; pp 65–86.

PEER-REVIEWED PUBLICATIONS

†Indicates undergraduate student coauthor *Corresponding Author

†Mangum, C. L.; †Munford, M. S. B.; †Sam, A. B.; †Young, S. K.; †Beales, J. T.; Subedi, Y. P.; †Mangum, C. D.; †Allen, T. J.; †Liddell, M. S.; †Merrell, A. I.; †Saavedra, D. I.; Williams, B. J.; †Evans, N.; †Beales, J. L. ***Christiansen, M. A**. The total syntheses of JBIR-94 and two synthetic analogs and their cytotoxicities against A549 (CCL-185) human small lung cancer cells. *Tetrahedron Lett.* **2020**, *61*. 151360-151363. DOI: 10.1016/j.tetlet.2019.151360.

PEER-REVIEWED PUBLICATIONS (continued)

***Christiansen, M. A.**; Nadelson, L.; Cuch, M. M.; Etchberger, L. H.; Kingsford, T. A.; Woodward, L. O. Flipped Learning in Synchronously-Delivered, Geographically-Dispersed General Chemistry Classrooms. *J. Chem. Educ.* **2017**, *94*, 662-667. DOI: 10.1021/acs.jchemed.6b00763.

***Christiansen, M. A.**; Lambert, A. M.; Nadelson, L. S.; Dupree, K. M.; Kingsford, T. A. In-Class Versus At-Home Quizzes: Which is Better? A Flipped Learning Study in a Two-Site Synchronously-Broadcast Organic Chemistry Course. *J. Chem. Educ.* **2017**, *94*, 157-163. DOI: 10.1021/acs.jchemed.6b00370.

***Christiansen, M. A.**; Weber, J. M.; Sam, A. B.; Kingsford, T. A. Positive Student Responses to Embedding a Student-Chosen Research Project into a Sophomore Organic Chemistry Lab. *Chem. Educ.* **2015**, *20*, 335-341.[3] DOI: 10.1333/s00897152667a.

***Christiansen, M. A.** Inverted Teaching: Applying a New Pedagogy to a University Organic Chemistry Class. *J. Chem. Educ.* **2014**, *91*, 1845-1850. DOI: dx.doi.org/10.1021/ed400530z.

***Christiansen, M. A.;** †Crawford, C. L.; †Mangum, C. D. Less Cookbook and More Research! Synthetic Efforts Toward JBIR-94 and JBIR-125: a Student-Designed Research Project in a Sophomore Organic Chemistry Lab. *Chem. Educ.* **2014**, *19*, 28–33.[4] DOI: 10.1333/s00897142528.

*Edwards, B. F.; Sam, D. D.; **Christiansen, M. A.**; Booth, W. A.; Jessup, L. O. Angry Birds realized: water balloon launcher for teaching projectile motion with drag. *Eur. J. Phys.* **2014**, 35, 1-17.[5] DOI:10.1088/0143-0807/35/3/035009.

***Christiansen, M. A.**; †O'Neil, T.; Lyman, S. Distributed Measurements of Air Quality and Meteorology. In *Final Report: 2013 Uintah Basin Winter Ozone and Air Quality Study;* Shorthill, H.; Lyman, S. Eds.; Uintah Basin 2013 Ozone Study (UBOS): Vernal, UT, **2013**; pp 28-29, 51-58. Online access: http://binghamresearch.usu.edu/files/2013%20final%20report%20uimssd%20R.pdf.

Christiansen, M. A.; *Andrus, M. B. "BOTPPI, a New Wittig Salt Used in the Synthesis of 12-*(S)*-Hydroxy-Eicosatetraenoic Acid [12-*(S)*-HETE]." *Tetrahedron Lett.* **2012**, *53*, 4805-4808. DOI: http://dx.doi.org/10.1016/j.tetlet.2012.06.052.

*Rath, C. M.; Janto, B.; Earl, J.; Ahmed, A.; Hu, F. Z.; Hiller, L.; Dahlgren, M.; Kreft, R.; Yu, F.; Wolff, J. J.; Kweon, H. K.; **Christiansen, M. A.;** Hakansson, K.; Williams, R. M.; Ehrlich, G. D.; Sherman, D. H. Meta-omic characterization of the marine invertebrate microbial consortium that produces the chemotherapeutic natural product ET-743. *ACS Chem. Biol.* **2011**, *6*, 1244-1256. DOI: 10.1021/cb200244t.

***Christiansen, M. A.** The Asymmetric Phase-Transfer Catalyzed Alkylation of Imidazolyl Ketones and Aryl Acetates and Their Applications to Total Synthesis. Ph.D. Dissertation. Brigham Young University, Provo, UT, United States, April **2010**.

*Peterson, M. A.; Oliveira, M.; **Christiansen, M. A.** "Antiproliferative and Protein Kinase Binding Activities of Some N^6,5'-Bis-ureido 5'-Amino-5'-deoxyadenosine Derivatives." *Nucleosides, Nucleotides and Nucleic Acids*, **2009**, *28*, 394-407. DOI: 10.1080/15257770903044432.

*Andrus, M. B.; Harper, K. C.; **Christiansen, M. A.;** Binkley, M. A. "Phase-Transfer Catalyzed Asymmetric Arylacetate Alkylation." *Tetrahedron Lett.* **2009**, *50*, 4541-4544. DOI: 10.1016/j.tetlet.2009.05.090.

*Peterson, M. A.; Oliveira, M.; **Christiansen, M. A.;** Cutler, C. E. "Preliminary SAR Analysis of Novel Antiproliferative N^6,5'-Bis-Ureidoadenosine Derivatives." *Bioorg. Med. Chem. Lett.* **2009**, *19*, 6775-6779. DOI: 10.1016/j.bmcl.2009.09.083.

Christiansen, M. A.; Butler, A. W.; Hill, A. R. *Andrus, M. B. "Synthesis of Kurasoin B Using Phase-Transfer-Catalyzed Acylimidazole Alkylation." *Synlett*, **2009**, *4*, 653-657. DOI: 10.1055/s-0028-1087809.

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[3] Accessible online at http://chemeducator.org/bibs/0020001/20150335.html.
[4] Accessible online at http://chemeducator.org/bibs/0019001/19140028.html.
[5] This article was chosen by the editors of *European Journal of Physics* to be included in the exclusive "Highlights of 2014" collection. See: http://www.usu.edu/ust/index.cfm?article=54802&nl=425.

PEER-REVIEWED PUBLICATIONS (continued)

*Andrus, M. B.; **Christiansen, M. A.**; Hicken, E. J.; Gainer, M. J.; Bedke, D. K.; Harper, K. C.; Mikkelson, S. R.; Dodson, D. S.; Harris, D. T. "Phase-Transfer-Catalyzed Asymmetric Acylimidazole Alkylation." *Org. Lett.* **2007**, *9*, 4865-4868.

OTHER ARTICLES (not peer-reviewed)

Christiansen, M. A. "About This Issue." *Journal on Empowering Teaching Excellence*. **2018**, *2*(1), 1-2. http://digitalcommons.usu.edu/jete/vol1/iss2/3/.

Christiansen, M. A. "About This Issue." *Journal on Empowering Teaching Excellence*. **2017**, *1*(2), 1-3. http://digitalcommons.usu.edu/jete/vol1/iss2/3/.

***Christiansen, M.A.** "Uintah Basin Summer Science Camp Wows Students for the Third Year Running." *USU-Uintah Basin Aggie Update*. May 20th, **2015**, 3-4.

***Christiansen, M.A.**; Edwards, B. F.; Sam, D. D. "Schematics of a Water Balloon Launcher Design and Reproducible Water-Balloon-Filling Procedures Used for a Middle School Summer Science Camp." *USU Uintah Basin Faculty Publications* **2013**, Paper 1. http://digitalcommons.usu.edu/ub_facpubs/1.

***Christiansen, M.A.**; Jessup, L.; Woodward, K. D. "An Electrolysis Experiment for a Middle School Summer Science Camp." *Chemistry & Biochemistry Faculty Publications* **2013**, Paper 456. http://digitalcommons.usu.edu/chem_facpub/456/.

*Andrus, M. B.; Harper, K. C.; **Christiansen, M. A.;** Binkley, M. A. "Phase-Transfer Catalyzed Asymmetric Arylacetate Alkylation." *Synfacts,* **2009**, *8*, 920.

RESEARCH PRESENTATIONS

‡Invited Talk or Poster †Undergraduate student coauthors

Hales, K.; **Christiansen, M. A.;** "Sharing Your Work Through Scholarly Publishing." 2020 Empowering Teaching Excellence Fall Seminar, Utah State University, Logan, UT, United States, August 19, **2020**. *Oral Presentation*. https://www.usu.edu/empowerteaching/engage/archives/recordings/hales_christiansen_conf2020. In review.

‡**Christiansen, M. A.** "Is Teaching to the Test a Bad Thing to Do?" 2019 Uintah Basin Education Summit, Roosevelt, UT, United States, March 9, **2019**. *Oral Presentation*.

‡**Christiansen, M. A.** "From Grad School to YouTube to Print: My Journey in Flipped Learning, Content Creation, and Authoring." USU Chemistry Department Seminar, Logan, UT, United States, March 6, **2019**. *Oral Presentation*.

Law, D.; Busenbark, D.; **Christiansen, M. A.;** Kingsford, T.; Taylor, J. "Mentoring Students for Success." 2018 Empowering Teaching Excellence Fall Seminar, Utah State University, Logan, UT, United States, October 17, **2018**. *Oral Presentation*.

Christiansen, M. A. "Back to Basics: Education Principles That Will Never Expire." 2018 Empowering Teaching Excellence Faculty Conference, Utah State University, Logan, UT, United States, August 15, **2018**. *Oral Presentation*.

Christiansen, M. A. "Back to Basics: Education Principles That Will Never Expire." 2018 Uintah Basin Education Summit, Vernal, UT, United States, March 24, **2018**. *Oral Presentation*.

†Hacking, R. P.; **Christiansen, M. A.** "The Synthesis of an Anti-Diabetes Molecule." 12th Annual Utah Conference on Undergraduate Research (UCUR), Cedar City, UT, United States, February 9, **2018**. *Poster.*

‡**Christiansen, M. A.** "Getting Back to Basics: Education Principles That Will Never Expire." 2017 Uintah Basin Education Summit, Vernal, UT, United States, March 25, **2017**. *Oral Presentation*.

RESEARCH PRESENTATIONS (continued)

Christiansen, M. A. "Flipped Learning in the Broadcast Chemistry Class." 252nd American Chemical Society National Meeting & Exposition, Philadelphia, PA, United States, August 25, **2016**. *Oral Presentation*.

‡**Christiansen, M. A.** "Flipped Learning in the Broadcast Chemistry Class." 252nd American Chemical Society National Meeting & Exposition, Philadelphia, PA, United States, August 21, **2016**. *Poster*.

‡**Christiansen, M. A.** "Flipping Chemistry at a Distance." 2016 Empowering Teaching Excellence Faculty Conference, Utah State University, Logan, UT, United States, August 17, **2016**. *Oral Presentation*.

Christiansen, M. A. "Flipping General Chemistry in a Class that is Synchronously Taught at Multiple Geographic Sites." 2016 Biennial Conference on Chemical Education (BCCE), University of Northern Colorado, Greeley, CO, United States, August 2, **2016**. *Oral Presentation*.

‡**Christiansen, M. A.** "Flipping Organic Chemistry in a Class that is Synchronously Taught at Multiple Geographic Sites." 2016 Biennial Conference on Chemical Education (BCCE), University of Northern Colorado, Greeley, CO, United States, August 3, **2016**. *Oral Presentation*.

Christiansen, M. A. "How to Make Chemistry YouTube Videos That Aren't Boring." 2016 ACS Northwest Regional Meeting, Egan Center, Anchorage, AK, United States, June 28, **2016**. *Oral Presentation*.

‡**Christiansen, M. A.** "STEM Education in the United States: Are We Really Doing that Badly?" 2016 Uintah Basin Education Summit, Vernal, UT, United States, April 9, **2016**. *Oral Presentation*, one talk in each (morning and afternoon) sessions.

Christiansen, M. A. "Creating a New Form of Flip-Teaching: Module-Based Flip-Teaching." 2015 Empowering Teaching Excellence Faculty Conference, Utah State University, Logan, UT, United States, August 19, **2015**. *Oral Presentation*.

‡**Christiansen, M. A.** "Inverted/Flipped Teaching in Undergraduate General and Organic Chemistry Classes." 2015 ACS Northwest Regional Meeting, Idaho State University, Pocatello, ID, United States, June 22, **2015**. *Oral Presentation*.

†Sam, A. B.; **Christiansen, M. A.;** †Young, S. K.; †Mangum, C. L.; †Munford, M. "The Final Assembly of JBIR-94: An Anti-Oxidative/Anti-Cancer Natural Molecule." 15th Annual Uintah Basin Research Conference at Utah State University Regional Campus, Vernal, UT, United States, April 10, **2015**. *Poster*.

‡**Christiansen, M.A.** "Embedding a Student-Designed Research Project into an Undergraduate Laboratory Classroom." 2014 Biennial Conference on Chemical Education (BCCE), Grand Valley State University, Allendale, MI, United States, Aug 5, **2014**. *Oral presentation*.

Christiansen, M.A.; †Crawford, C. L.; †Allen, T. J.; †Liddell, M. S.; †Merrell, A. I.; †Mangum, C. D. "Embedding Student Research Projects into Undergraduate Lab Courses." 14th Annual Uintah Basin Research Conference at Utah State University Regional Campus, Vernal, UT, United States, April 11, **2014**. *Poster*.

†Crawford, C. L.; †Liddell, M. S.; **Christiansen, M. A.** "A Bioactivity Study of Synthetic Compounds Made En Route to JBIR-94 & JBIR-125, Two Anti-Oxidative Molecules Obtained from Streptomyces R56-07." 2013 Uintah Basin Biology Undergraduate Research Symposium, Vernal, UT, United States, Dec 11, **2013**. *Poster.*

†Crawford, C. L.; †Allen, T. J.; **Christiansen, M. A.** "Synthetic Strategies Toward Assembling the Diamide Skeletons of JBIR-94 & JBIR-125, Two Anti-Oxidative Molecules Obtained from Streptomyces R56-07." 2013 Uintah Basin Biology Undergraduate Research Symposium, Vernal, UT, United States, Dec 11, **2013**. *Poster.*

Christiansen, M. A. "Embedding a Student-Designed Research Experience into an Undergraduate Organic Chemistry Lab." 246th Semiannual ACS National Meeting, Indianapolis, IN, United States, Sept 11, **2013**. *Oral presentation*.

RESEARCH PRESENTATIONS (continued)

Christiansen, M. A. "Embedding a Student-Designed Research Experience into an Undergraduate Organic Chemistry Lab." 2nd Process-Oriented Guided Inquiry Learning (POGIL) Southwest Regional Workshop, Colorado Springs, CO, United States, July 17, **2013**. *Oral presentation*.

Christiansen, M. A. "The Use of Flip-Teaching in Undergraduate Organic Chemistry." 13th Annual Uintah Basin Research Conference at Utah State University Regional Campus, Vernal, UT, United States, April 12, **2013**. *Poster*.

†Crawford, C. L.; **Christiansen, M. A**. "Incorporating a Student-Designed Research Project into an Undergraduate Laboratory Classroom." 13th Annual Uintah Basin Research Conference at Utah State University Regional Campus, Vernal, UT, United States, April 12, **2013**. *Oral presentation*.

‡**Christiansen, M. A.** "Reflections on Flip-Teaching in Undergraduate Organic Chemistry." 6th Annual Provost's Series on Instructional Excellence at Utah State University, Logan, UT, United States, February 26, **2013**. *Oral presentation.*[6]

†Crawford, C. L.; **Christiansen, M. A.** "Incorporating a Student-Designed Research Project into an Undergraduate Laboratory Classroom." 7th Annual Utah Conference on Undergraduate Research (UCUR), Logan, UT, United States, February 22, **2013**. *Poster.*

Christiansen, M. A. "Flip-Teaching: Preliminary Findings of a Study with an Undergraduate Organic Chemistry Class." Abstracts of Papers, 23rd ACS Rocky Mountain Regional Meeting, Westin Westminster, CO, United States, October 17-20, **2012**. *Oral presentation.*

†Crawford, C. L.; **Christiansen, M. A.** "Less Cookbook and More Research: The Total Syntheses of JBIR-94 and JBIR-125, Student-Designed Research Projects Conducted in a Sophomore Organic Chemistry Lab." Abstracts of Papers, 23rd ACS Rocky Mountain Regional Meeting, Westin Westminster, CO, United States, October 17-20, **2012**. *Poster.*

Christiansen, M. A.; Andrus, M. B. "Synthesis of 12-HETE using asymmetric phase-transfer catalysis." Abstracts of Papers, 236th ACS National Meeting, Salt Lake City, UT, United States, April 22-26, **2009**. *Oral presentation.*

Binkley, M. A.; Christiansen, M. A.; Harper, K. H. Andrus, M. B. "Phase-transfer catalyzed asymmetric synthesis of *S*-naproxen." Abstracts of Papers, 236th ACS National Meeting, Salt Lake City, UT, United States, April 22-26, **2009**. *Poster.*

ORGANIZER, CONFERENCES AND SYMPOSIA

Co-organizer: "The Present and Future Impact of the Internet, Web Apps, and High-Speed Networking Tech on Local and Global Chemistry Education." Chemical Education Symposium, 252nd American Chemical Society (ACS) National Meeting & Exposition, Philadelphia, PA, United States, August 25, **2016**.

Chair and Co-organizer: 15th Annual USU Uintah Basin Research Conference, Vernal, UT, United States, April 10, **2015**.

Chair and Co-organizer: 14th Annual USU Uintah Basin Research Conference, Vernal, UT, United States, April 11, **2014**.

Co-Chair and Co-organizer: 13th Annual USU Uintah Basin Research Conference, Vernal, UT, United States, April 12, **2013**.

ONLINE YOUTUBE CHEMISTRY VIDEOS (870 videos; 6.2 million views; 31.6K subscribers)

- https://www.youtube.com/channel/UCpUkAZfpeUBMmA_zAAERyZw

[6] See https://www.youtube.com/watch?v=LHpnM17l-Xk.

CONSULTING

DAT Bootcamp, LLC, New York, NY. (2016 – present) – Creating chemistry videos for pre-dental students.

Utah State University, Tooele, UT. (2015) – Served on a committee that designed and built the USU Tooele Campus teaching lab facilities, opened on 1/16/2016.

DAT Bootcamp, LLC, New York, NY. (2015) – Created 150 general chemistry instructional videos for pre-dental students. Videos are available online at http://datbootcamp.com/.

DAT Bootcamp, LLC, New York, NY. (2014) – Created 150 organic chemistry instructional videos for pre-dental students. Videos are available online at http://datbootcamp.com/.

Chemical Abstracts Services (CAS), Cincinnati, OH. (2013-2014) – Created nine SciFinder instructional videos, available online at http://www.cas.org/training/scifinder. (These videos have since been redone by CAS using professional voice actors.)

TEACHING EXPERIENCE

Courses Taught at Utah State University

Chemistry 1210	Principles of Chemistry I, 4 credits, undergraduate majors and non-majors. Fall 2012 – present. Taught annually.
Chemistry 1215	Chemical Principles Laboratory I, 1 credit, undergraduate non-majors. Fall 2012 – present. Taught annually.
Chemistry 1220	Principles of Chemistry II, 4 credits, undergraduate majors and non-majors. Spring 2013 – present. Taught annually.
Chemistry 1225	Chemical Principles Laboratory II, 1 credit, undergraduate non-majors. Spring 2013 – present. Taught annually.
Chemistry 2310	Organic Chemistry I, 4 credits, undergraduate non-majors. Fall 2011– present. Taught every fall during odd-numbered years.
Chemistry 2315	Organic Chemistry Lab I, 1 credit, undergraduate non-majors. Fall 2011– present. Taught every fall during odd-numbered years.
Chemistry 2320	Organic Chemistry II, 4 credits, undergraduate non-majors. Spring 2012 – present. Taught every spring during even-numbered years.
Chemistry 2325	Organic Chemistry Lab I, 1 credit, undergraduate non-majors. Spring 2012 – present. Taught every spring during even-numbered years.
Chemistry 3700	Introductory Biochemistry, 3 credits, undergraduate non-majors. Spring 2013 – present. Taught every spring during odd-numbered years.
Chemistry 3710	Introductory Biochemistry Lab, 1 credit, undergraduate non-majors. Spring 2013 – present. Taught every spring during odd-numbered years.

Courses Taught at Colorado State University

Chemistry 245	Fundamentals of Organic Chemistry, 4 credits, 81 students, undergraduate non-majors. Spring 2011.

Courses Taught at Brigham Young University

Chemistry 353	TA, Organic Chemistry Lab (Non-Majors), 2 credits, ca. 25 students, undergraduate non-majors. Fall 2004 to Spring 2006 (4 terms)
Chemistry 351	TA, Organic Chemistry I, 3 credits, ca. 250 students, undergraduate non-majors. Fall 2004 to Spring 2006 (3 terms)

Courses Taught at Brigham Young University (continued)

Chemistry 352	TA, Organic Chemistry II, 3 credits, ca. 250 students, undergraduate non-majors. Fall 2004 to Spring 2006 (3 terms)
Chemistry 353	Instructor, Organic Chemistry Lab (Non-Majors), 2 credits, ca. 50 students, undergraduate non-majors. Summer 2005 to Winter 2010 (5 terms)

RESEARCH FUNDING

Agency	Project Title	Funding Type	Amount	Award Date
Utah State University	The Synthesis of Boerhavia N, A New Anti-Inflammatory Drug Candidate	Institutional Grant	$4,660.38	6/3/2015
Utah State University	Synthesis and Bioactivity Study of the Anti-Cancer Compounds JBIR-94, JBIR-125, and Their Analogs	Institutional Grant	$4,988.16	6/30/2014
National Institutes of Health (NIH)	MRI: Acquisition of a 500 MHz NMR to Enhance Research and Training*	External Funding	$385,000	8/1/2014
Utah State University	Creating a New Form of Flip-Teaching: Module-Based Flip-Teaching	Institutional Grant	$9,035.07	4/28/2014
Uintah Basin Impact Mitigation District	Pollutant Transport During Winter Ozone Episodes in the Uintah Basin	Contract	$39,042	11/1/2012 – 10/31/2013

*Supporting contributor on this grant proposal, not a P.I.

UNDERGRADUATE MENTORING AT USU (ALPHABETICAL)

Tanner Allen – 2013
[1]Jeremy Beales – 2015
[1]Joseph Beales – 2019
[2]Trevor Carter – 2021
Bradley Eric Funk – 2012-2013
[1]Ryker Hacking – 2017[7]
Kolby Lance – 2012-2013
Miranda Liddell – 2012-2013
[3]Cathy Crawford Mangum – 2012-2015
[1]Andrew Merrell – 2013
Chad Mangum – 2012-2014
Aaron Marshall – 2016
[3]Mica Munford - 2014
[4]Trevor O'Neil – 2013
Alyssa Sam – 2015
Sandra Young – 2014

[1]Summer USU Uintah Basin Internship Fellow

[2]BYU Summer Internship Fellow

[3]2012 SURCO and 2012 URCO award recipient

[4]Summer 2013 Pollution Study Fellow (Uintah Basin Impact Mitigation District Funding)

MENTORING AT BYU AND CSU (ALPHABETICAL)

Chelsey Barrett (BYU) – 2010
Meisha Binkley (grad student, BYU) – 2008-2010
Aaron Butler (BYU) – 2008-2010
Adam Calvert (BYU) – 2008-2009
Kaid Harper (BYU) – 2006-2008
Amanda Hill (BYU) – 2008-2009
Sven Hurney (CSU) – 2011
Shawn Mikkelson (BYU) – 2005-2007
Jason Nielson (BYU) – 2008-2009
Nate Oswald (BYU) – 2010
Mike Lindsay (BYU) – 2010
Melissa M. (BYU) – 2008-2009
Kaylene W. (BYU) – 2008-2009

[7] See: https://www.usu.edu/today/?id=57426, https://news.hjnews.com/allaccess/usu-student-s-research-step-toward-curing-side-effects-of/article_367ff1c1-9dc3-519a-a165-122b6c9ec947.html, http://basinnow.com/blog/vernal-usu-students-research-working-to-end-diabetes-side-effects, https://www.facebook.com/UtahState/posts/10156122791299868, and https://www.facebook.com/usuchemistry/.

UNIVERSITY SERVICE

Committees, Advising, and Proposal Reviewing

September 2019 – present	Member, Statewide Mentorship Committee
September 2019 – present	Committee Chair, Uintah Basin Student Success Committee
April 2017 – present	Promotion and Tenure Committee for Vonda Jump (Sociology Department)
February 2017 – September 2019	Member, Uintah Basin Student Success Committee
April 2017 – September 2019	Member, Empowering Teaching Excellence Committee
March 2017	Grant Proposal Reviewer, Undergraduate Research and Creative Opportunity (USU Office of Research & Graduate Studies)
February 2017	Member, USU Undergraduate Researcher of the Year (Peak Prize) Award Committee
March 2016	Lecturer Search & Hiring Committee (USU Dept. of Chemistry & Biochemistry)
March 2016	Grant Proposal Reviewer, Undergraduate Research and Creative Opportunity (USU Office of Research & Graduate Studies)
Summer 2015	Member, Undergraduate Research Advisory Board
Spring 2015	Member, USU Recruitment and Retention Committee
Spring 2013	Faculty advisor, USU Uintah Basin Chemistry Club (18 students, three club activities in Spring 2013 term)
Summer 2011 – present	Co-chair and cofounder, USU Uintah Basin Summer Science Camp Committee, which organizes an annual summer camp to educate middle school students in science (See COMMUNITY SERVICE below).[8]
March 2016	Grant Proposal Reviewer, Undergraduate Research and Creative Opportunity (USU Office of Research & Graduate Studies)
Summer 2015	Member, Undergraduate Research Advisory Board

Media Recruitment and Appearances

10/17/2019	Local radio interview discussing my research and academic work at USU[9]
2/27/2018	Interview for *The Herald Journal* on our diabetes research[10]
10/3/2016	Interviewed for an article in *The Statesman*, USU's school newspaper (http://ususTatesman.com/is-there-a-stigma-against-being-lds-in-academia/)
10/30/2014	Interviewed on KTVX Channel 4 to discuss our research and promote USU recruitment
9/3/2014	Local newspaper article about my flipped teaching: Bernard, M. Flip teaching technique advances science. *Vernal Express*, 9/23/2014, B4.
9/26/2011, 2/15/2012	Interviews on VTV to promote USU research and recruitment[11]

[8] News stories on our summer camps are found at: http://www.ksl.com/?nid=960&sid=20662672&title=kids-learn-science-of-angry-birds-at-usu-camp&s_cid=queue-11 and http://www.ksl.com/?nid=148&sid=25505471.

[9] See: https://basinnow.com/search.php?query=Mike+Christiansen.

[10] See: https://www.usu.edu/today/?id=57426, https://news.hjnews.com/allaccess/usu-student-s-research-step-toward-curing-side-effects-of/article_367ff1c1-9dc3-519a-a165-122b6c9ec947.html, http://basinnow.com/blog/vernal-usu-students-research-working-to-end-diabetes-side-effects, https://www.facebook.com/UtahState/posts/10156122791299868, and https://www.facebook.com/usuchemistry/.

[11] See: http://www.youtube.com/watch?v=u6vwQPgL-QQ&blend=21&lr=1&ob=5 and http://www.youtube.com/watch?v=8L2rbyWn8Yc.

Media Recruitment and Appearances (continued)

9/15/2011	Joint KVEL 920 radio interview to promote USU research and recruitment

USU Outreach/Education of K-12 Students

Chemistry Demonstrations, Mini Science Camps, and USU Building Tours for K-12 Students

3/15/2018, 1/31/2018, 5/15/2017, 2/1/2017, 12/2/2016, 10/25/2016, 7/7/2016, 6/14/2016, 5/11/2016, 1/21/2016, 10/27/2015, 7/22/2015, 5/18/2015, 5/5/2015, 4/15/2015, 1/21/2015, 8/21/2014 (tour for Governor Gary Herbert), 6/11/2014, 4/9/2014, 1/29/2014, 10/23/2013, 5/20/2013, 4/10/2013, 4/3/2013, 1/24/2013, 10/25/2012, 3/29/2012, 1/26/2012, 10/27/2011, 10/7/2011

High School Senior Recruitment Assemblies

1/17/2014	Duchesne High School	11/2/2011	Union High School
10/10/2013	Uintah High School	9/30/2011	Uintah High School
9/14/2012	Uintah High School		

COMMUNITY SERVICE

USU Science Summer Camps

6/13/2018 – 6/14/2018	Co-chair and co-organizer: sixth annual Uintah Basin Science Summer Camp for Middle and Junior High School Students
6/14/2017 – 6/15/2017	Co-chair and co-organizer: fifth annual Uintah Basin Science Summer Camp for Middle and Junior High School Students
6/22/2016 – 6/23/2016	Co-chair and co-organizer: fifth annual Uintah Basin Science Summer Camp for Middle and Junior High School Students
6/16/2015 – 6/17/2015	Co-chair and co-organizer: fourth annual Uintah Basin Science Summer Camp for Middle and Junior High School Students
6/9/2014 – 6/12/2014	Co-chair and co-organizer: third annual Uintah Basin Science Summer Camp for Middle and Junior High School Students[5]
6/3/2013 – 6/6/2013	Co-chair, co-organizer, and cofounder: second annual Uintah Basin Science Summer Camp for Middle and Junior High School Students[5]
5/30/2012 – 5/31/2012	Co-chair, co-organizer, and cofounder: first annual Uintah Basin Science Summer Camp for Middle School Students[5]

USU Annual Science Fair

2/28/2018	Co-chair and co-organizer: fourth annual Uintah Basin Science Fair for Middle and High School Students (http://www.usu.edu/today/?id=57464)

Invited Community Lectures

6/29/2021, 9/15/2015	"What I Do." 30-minute lecture on my USU teaching and research, given to the Vernal City Chamber of Commerce
11/26/2012	"The Importance of Math." Hour-long lecture given to five different Vernal Junior High classes
10/24/2012	"The Importance of Math." Mini-lecture given to the Uintah High Math Club

Invited Community Lectures (continued)

5/20/2014, 4/25/2012	"The Nature of Matter." Hour-long chemistry class given to second-graders at Maeser Elementary
3/14/2012	"The Importance of Math." Welcome lecture for state math competitors
12/12/2017, 9/7/2017, 12/8/2016, 9/7/2016, 12/8/2015, 9/16/2015, 12/8/2014, 9/11/2014, 12/10/2013, 9/5/2013, 12/15/2011, 9/9/2011	"Intro to Chemistry." Recurring lecture given to UBATC Medical Terminology/Human Anatomy Class

Other Service

12/14/2019	Taught Chemistry at the State Science Fair Olympiad[12]
12/15/2018	Taught Chemistry at the State Science Fair Olympiad
12/9/2017	Taught Chemistry at the State Science Fair Olympiad
4/1/2016	Judge, Middle School Science Fair
2/28/2015 – 3/14/2015	Chemistry Merit Badge Counselor, Boy Scouts of America
10/30/2013 –	Member, USU Uintah Basin Orchestra and Choir (UBOC)[13]
5/13/2012	"Science Day" assistant for second-graders, Maeser Elementary

[12] See https://www.facebook.com/media/set/?set=a.2830896046954620&type=3.
[13] See https://www.youtube.com/watch?v=Utn9UjnHffI and https://www.youtube.com/watch?v=rP_1SNl1YCo&feature=youtu.be.