

# JOHN M. REDDEN

Associate Professor-in-Residence

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**UConn**

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🐦 @reddenjm

## Education:

- PhD **Biomedical Science, UConn Health**  
Department of Cell Biology & Calhoun Cardiology Center (*Spatiotemporal Regulation of PKC via AKAP7*)
- BS **Pharmacology and Toxicology, SUNY University at Buffalo**

## Academic Appointments:

- 2019 - Present **Associate Professor-in-Residence**  
Department of Physiology and Neurobiology, University of Connecticut
- 2019 - 2021 **Assistant Department Head, Engagement & Outreach**  
Department of Physiology and Neurobiology, University of Connecticut
- 2015 – Present **Assistant Director, Faculty Development Programs**  
Center for Excellence in Teaching and Learning, University of Connecticut
- 2015 – 2019 **Assistant Professor-in-Residence**  
Department of Physiology and Neurobiology, University of Connecticut
- 2013 – 2015 **Visiting Assistant Professor**  
Department of Physiology and Neurobiology, University of Connecticut
- 2010 - 2013 **Adjunct Professor**  
Department of Biology, University of St. Joseph
- 2006 – 2007 **Teaching Assistant**  
Department of Biology, SUNY Buffalo

## Awards & Fellowships:

- 2023 **Howard Garrison Science Advocacy Fellow**  
*Federation of American Societies for Experimental Biology (FASEB)*
- 2023 **Leadership Fellow, College of Liberal Arts and Sciences Dean's Office**  
*Project: Barriers to Pedagogical Change in High Enrollment UConn Courses*
- 2022 **HAPS Poster Award**  
Human Anatomy and Physiology Society
- 2018 **Early Career Teaching Excellence Award**  
University of Connecticut AAUP
- 2017 - 2018 **Scientific Teaching Facilitator**  
Summer Institute on Scientific Teaching (HHMI/Helmsley)
- 2016 - 2018 **National Academies Education Mentor in Science**  
National Academy of Science Summer Institute
- 2015 - 2016 **National Academies Education Fellow in the Sciences**  
National Academy of Science Summer Institute

2014 – 2015

**Service Learning Faculty Fellowship**  
Office of Public Engagement, University of Connecticut

## Funding:

- 2023 **Alan R. Bennett Public Health Policy Research Funding**  
“Integrating Health Policy Into Undergraduate Life Science Curriculum”  
Amount: \$29,751 (Active)  
Role: *Co-Principal Investigator*
- 2022 **Scholarship Facilitation Fund**  
“Science Communication in Undergraduate Majors”  
Amount: \$2,000 (Active)  
Role: *Principal Investigator*
- 2021 **CLAS Teaching Innovation Grant**  
“Fostering Ideal Regional Student Transitions in Biology (FIRST-Bio)”  
Amount: \$20,000 (Complete)  
Role: *Co-Principal Investigator*
- 2016 **Provost’s Large Course Redesign Grant**  
“Active, Engaged, Contextual: A Redesign of PNB2264/5”  
Amount: \$14,900 (Complete)  
Role: *Principal Investigator*
- 2015 **CLAS Innovative Education in Science Grant Competition**  
“Teaching Science Writing by Writing for the Public”  
Amount: \$110,000 (Complete)  
Role: *Co-Principal Investigator*
- 2015 **Provost’s Course Development Grant Competition**  
“PNB3120W: Science Writing in Physiology and Neurobiology”  
Amount: \$10,000 (Complete)  
Role: *Principal Investigator*
- 2011 **American Heart Association Fellowship (11PRE780027)**  
“AKAP18 Regulation of I-1, a Novel Mechanism of Phosphatase Inhibition”  
Amount: \$42,000 (Complete)  
Role: *Principal Investigator*

## Publications:

1. Elmowitz, A., Epstein, J., **Redden J.M.** Biology Programs at R1 Universities Are Not Training Students To Communicate With The Public (Submitted August 2023, currently under review)
2. Rabouin, S, **Redden J.M.** Mental Health, Stressors, and Support: Perceptions of Pre-Medical Students at a Large Public University (Submitted July 2023, currently under review)
3. \*Chen, X., \***Redden, J.M.**, Gill, J., Bobrownicki, A., Graham, M.J. Using Pathway Modeling to Evaluate and Improve Student-Centered Teaching Practices in Co-Taught College Science Courses. CBE-Life Science Education (2021) \*equal contribution
4. Dickey, J.W, Kimball, K.H., **Redden J.M.** Understanding Gastric Acid Secretion: An Active Learning Approach. CourseSource (2020)
5. **Redden J.M.**, Tzingounis A.V, Tanner, G.R. A Short Bone Biomechanics Primer, Background for a Lesson in Viscoelasticity. CourseSource (2019)
6. **Redden J.M.**, Tzingounis A.V, Tanner, G.R. What Do Bone and Silly Putty Have in Common? A Lesson on Bone Viscoelasticity. CourseSource (2019)

7. Yang, R., Beqiri, D., Shen, J.B., **Redden, J.M.**, Dodge-Kafka, K.L., Jacobson, K.A., Liang, B.T. P2X4 receptor-eNOS signaling pathway in cardiac myocytes as a novel protective mechanism in heart failure. *Computational and Structural Biotechnology Journal* 13, 1–7 (2015).
8. Yang T, Shen JB, Yang R, **Redden J.M.**, Dodge-Kafka KL, Jacobson KA, Liang BT. A Novel Protective Role of Endogenous Cardiac Myocyte P2X4 Receptors in Heart Failure. *Circ. Heart Fail* (2014)
9. Greenwald, E. C., **M. Redden, J.**, Dodge-Kafka, K. L. & Saucerman, J. J. Scaffold state switching amplifies, accelerates, and insulates protein kinase c signaling. *J. Biol. Chem.* 289, 2353–2360 (2014)
10. **Redden, J. M.** et al. Spatiotemporal regulation of PKC via interactions with AKAP7 isoforms. *Biochem. J.* 446, 301–309 (2012)
11. **Redden, J. M.** & Dodge-Kafka, K. L. AKAP phosphatase complexes in the heart. *J. Cardiovasc. Pharmacol.* 58, 354–362 (2011).
12. Singh, A., **Redden, J. M. J.**, Kapiloff, M. S. M. & Dodge-Kafka, K. L. The large isoforms of AKAP18 mediate the phosphorylation of Inhibitor-1 by PKA and the inhibition of PP1 activity. *Mol. Pharmacol.* 79, 533–540 (2011).

### Textbooks & Chapters:

1. **Redden, J.M.** et al. *Human Physiology* 2<sup>nd</sup> edition (*lead author & editor*). Tophat Monocle (2022)
2. **Redden, J.M.** et al. *Anatomy and Physiology in Context* 2<sup>nd</sup> edition (*lead author*). Tophat Monocle (2022)
3. **Redden, J.M.** et al. *Animal Physiology (Ch.3 – Cardiovascular, Ch.6 – Excitability)*. Tophat Monocle (2018)
4. **Redden, J.M.** et al. *Human Physiology* 1<sup>st</sup> edition (*lead author*). Tophat Monocle (2018)
5. **Redden, J.M.** et al. *Anatomy and Physiology in Context* 1<sup>st</sup> edition (*lead author*). Tophat Monocle (2017)
6. **Redden, J. M.**, Dodge-Kafka, K. L. & Kapiloff, M. S. in *Microdomains in the Cardiovascular System* (eds. Nikolaev, V. & Zaccolo, M.) 37–57 Springer International Publishing (2017).

### Invited Seminars (International):

1. *Failure to Communicate: Curricular Analysis Reveals Deficits in Science Communication Coursework at R1 Universities in the United States*. Public. Communication of Science and Technology. Rotterdam, Netherlands (April 2023)
2. *Choose Your Own Grading Adventure: An Experiment in Democratic Course Management* Engage. Tampa, FL (2023)
3. *Promoting Equity in Course Management and Assessment* [Rescheduled Due to Pandemic, TBD] Engage. Atlanta, GA (2022)
4. *Big Change: Transforming Large Lecture Courses* Engage. Chicago, IL (2018)
5. *Flips & Backflips: Using EdTech for Online Scientific Teaching & Active Learning* Online Learning Consortium (OLC) Accelerate Conference. Orlando, FL (2017)
6. *Facilitating Active Learning in STEM* Engage. Chicago, IL. (2017)
7. *Pedagogies and Teaching Strategies to Help Find Time for Professional Development* Engage. Chicago, IL. (2017)
8. *Active Learning*

## Invited Seminars (Internal):

1. *Student Centered Assessment in Complex Courses* (September 2022)  
College of Liberal Arts and Sciences Teaching Conversation
2. *Accessible & Effective Technology for Large Class Teaching* (July 2022)  
CT Academic IT Conference
3. *Strategies to Decenter Grading in High Enrollment STEM Courses* (May 2022)  
ODI Workshop on Equitable Teaching Practices
4. *Radical Empathy in the Classroom* (2021)  
Graduate Certificate in College Instruction
5. *Size Matters: Teaching Effectively In Large Classrooms* (2020)  
Graduate Certificate in College Instruction [Virtual]
6. *Early Career Faculty Mentoring Panel* (2019)  
Scholarship of Teaching and Learning for STEM Faculty
7. *Evidence Based Teaching: Evidence & Examples* (2019)  
Graduate Certificate in College Instruction
8. *Service Learning in STEM* (2016)  
Faculty Fellows Orientation
9. *Plain Language Science Communication* (2016)  
Honors Seminar

## Accepted Abstracts & Posters:

1. **Redden, J.M.** *Democratizing an Undergraduate Anatomy and Physiology Course: The Journey Towards Ungrading.* HAPS. Fort Lauderdale (May 2022)
2. Krauss, N., Divino, J., Crivello, J., **Redden, J.M.** *Reflections on a Plague Year: A Multiyear Comparison of Student Engagement, Investment, and Performance in Undergraduate Physiology Courses During the COVID-19 Pandemic.* APS/EB. Philadelphia, PA (April 2022)
3. **Redden, J.M.** Chen, X., Gill, J., Bobrownicki, A., Graham, M.J. *Pathway modeling helps you plan, organize, and share your student centered physiology course.* APS/EB. Online. (April 2021)
4. Dickey, J, Kimball, K.H., **Redden, J.M.** *Breaking Out From Tradition: Redesign of Large Physiology Lecture Increases Engagement, Inclusion, Student Outcomes.* APS/EB. San Diego, CA (April 2018)
5. Kimball, K.H & **Redden, J.M.** *Two Steps Forward, One Step Back: Evolution of Online Learning in a STEM Department.* OLC Innovate. Orlando, FL (Nov 2017)
6. **Redden, J.M.** *Theory Into Practice: Investigation of the Service Learning Pedagogy In Undergraduate Physiology Education.* APS/EB. Chicago, IL (April 2017)

7. **Redden, J.M.** *Service Learning in STEM: Teaching Science by Writing for the Public.* AAAS Annual Conference Boston, MA (Feb 2017)
8. Cleary, C., & **Redden, J.M.** *Investigating Service Learning in Undergraduate STEM Coursework.* AAAS Annual Conference Boston, MA (Feb 2017)

## Courses Taught:

\* *Developed course*

### Undergraduate

Anticipated 2024	*Human Physiology at the Extremes	
Anticipated 2023	*Pathways to Academic Success in Biology	
2018-Present	*Physiology in Society and Pop Culture (Honors Conv).	(Univ. of Connecticut, Enrollment: 15)
2016-Present	*Active Learning Assistant Training (Indep. Study)	(Univ. of Connecticut, Enrollment: 30)
2015-Present	*Public Communication of Physiology	(Univ. of Connecticut, Enrollment: 19)
2014-2015	*Introduction to Research	(Univ. of Connecticut, Enrollment: 30)
2013-Present	Human Anatomy and Physiology I	(Univ. of Connecticut, Enrollment: 790)
2013-Present	Human Anatomy and Physiology II	(Univ. of Connecticut, Enrollment: 540)
2013-2023	Enhanced Physiology and Anatomy I	(Univ. of Connecticut, Enrollment: 42)
2013-2023	Enhanced Physiology and Anatomy II	(Univ. of Connecticut, Enrollment: 42)
2011-2013	Anatomy and Physiology	(Univ. of Saint Joseph, Enrollment: 28)
2010, 2011	Microbiology Laboratory	(Univ. of Saint Joseph, Enrollment: 28)
2010, 2011	Molecular Biology Laboratory	(Univ. of Saint Joseph, Enrollment: 28)
2006, 2007	Evolutionary Biology Laboratory	(SUNY Buffalo, Enrollment: 28)

### Graduate

2014	*Proteomics	(Univ. of St. Joseph, Enrollment: 18)
2013	*Cell Biology	(Univ. of St. Joseph, Enrollment: 15)
2013	*Epidemiology	(Univ. of St. Joseph, Enrollment: 12)

## Mentoring

### Primary Thesis Advisor:

2023	Skylar Rabuoin ( <i>Mental Health and Stressors Amongst Pre-Medical Students at UConn</i> )
2022	Kaitlyn Van Dame ( <i>Salud de la Mujer: Evaluating Language Barriers in Medical Communication</i> )
2019	Omar Taweh ( <i>Pediatric Refugee Mental Health</i> )
2018	Jordyn Dickey ( <i>Breaking Out From Tradition: Redesigning a Large Physiology Lecture</i> )
2016	Justin Sardi ( <i>Analysis of Rare Cardiovascular Disorders</i> )

### Thesis Committee Member:

2014-2017	Joshua Lubner, Ph.D. student
2016	Amanda Wildstein, M.S. student

### REU Research Advisor:

2016	Paola Medrano
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## Service

### To The Discipline:

ad hoc reviewer:	AJP-Physiology Education, CourseSource, McGraw Hill, Pearson, TopHat, College Board
judge:	New Haven Science Fair, Connecticut Middle School Science Bowl
organizer:	Storytelling for Scientists (featuring The StoryCollider), Physiology SciCompetition (2019, 2020)

## To The University:

*ad hoc* reviewer: GEOC Grant Competition, CETL Teaching Excellence Award, Post Doc Seed Grants  
advising: Individualized Major (ISJR), Physiology and Neurobiology, University Scholars, Honors Program  
committees: Faculty Senate Writing Subcommittee (Ongoing), UConn Classroom Response System RFP Committee (2022), Assistant Professor-in-Residence Search Committee (2021), McNair Scholars Advisory Board (Ongoing), CLAS Courses & Curricula Committee (Ongoing), PNB Communications Committee (Ongoing), CLAS Strategic Planning Implementation Committee (Working Group Chair, 2020), Transfer Evaluation Committee (Ongoing), Foreign Transcript Evaluation Committee (Ongoing), Assistant Professor-in-Residence Search Committee (2018), CETL Assistant Directors Committee (Ongoing), Anatomy and Physiology Steering Committee (Ongoing), Public Engagement Forum, Large Course Community of Practice, Physiology and Neurobiology By-Laws Committee (2016), Assistant Professor-in-Residence Search Committee (2016)

## Advisory Boards

- The StoryCollider, Academic Advisory Board
- TopHat, Customer Advisors Board

## Press

- **The StoryCollider: Mentors: Stories About Who Helps Us Find Our Way**  
<https://www.storycollider.org/stories/2019/2/8/mentors-stories-about-who-helps-us-find-our-way-OvGvt> ([Link](#))
- **Trial and Error: Flipping the Flipped Class Model**  
<https://www.insidehighered.com/digital-learning/article/2019/02/06/trial-and-error-anatomy-professor-experiments-online-exercises> ([Link](#))
- **Bloom's Taxonomy: A History and Why It's Important**  
<https://tophat.com/blog/blooms-taxonomy-history-important/> ([Link](#))
- **Thanksgiving Turkey Makes You Sleepy? Gobbledygook**  
<https://today.uconn.edu/2017/11/thanksgiving-turkey-makes-sleepy-dont-believe/> ([Link](#))
- **An Interactive Anatomy Textbook With Heart**  
<https://tophat.com/blog/anatomy-textbook-class/> ([Link](#))
- **15 Minutes with a UConn Professor: John Redden**  
<https://gccci.uconn.edu/2017/03/07/15-minutes-with-a-uconn-prof-dr-john-redden/> ([Link](#))
- **Service Learning's Global Impact: Guiding Light Orphans**  
<https://sl.engagement.uconn.edu/2017/04/06/service-learning-global-impact-guiding-light-orphans/> ([Link](#))
- **New Science Writing Course Aims to Make Science Accessible For All**  
<https://sl.engagement.uconn.edu/2016/12/01/new-science-writing-course-aims-to-make-science-accessible-for-all/> ([Link](#))

## Professional Affiliations

*Current:* Public Communication of Science and Technology, American Physiological Society, Human Anatomy and Physiology Society, Society for Neuroscience

*Former:* American Association for the Advancement of Science, American Association of Anatomists, National Organization of Gay and Lesbian Scientists and Technical Professionals, oSTEM, 500 Queer Scientists