

**Samiksha Raut**

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**(a) Professional Preparation**

<u>Institution</u>	<u>Location</u>	<u>Major or Area</u>	<u>Degree and Year</u>
Nagpur University	India	Biology (Life Sciences)	B.Sc. 2000
Nagpur University	India	Zoology (Fisheries)	M.Sc. 2002
The University of Alabama at Birmingham (UAB)	Birmingham, AL, USA	Biology (Environmental Toxicology)	Ph.D. 2009

**(b) Appointments**

2019-present	Associate Professor, Department of Biology, UAB.
2012-2019	Assistant Professor, Department of Biology, UAB.
2009-2012	Assistant Professor, Department of Natural Sciences, Dalton State College.
2003-2003	Project Assistant, Environmental Impact and Risk Assessment Division, National Environmental Engineering Research Institute, India.
2002-2003	Lecturer, Department of Zoology, Nagpur University, India

**(c) Publications and other products**

**2016-2017** Invited Author: McGraw Hill publishers, instructor resources for 'Living World' By George Johnson, 9<sup>th</sup> edition

Mendoza DA, Adkins SJ, Bhatt JM, Morris JJ, **Raut SA**. "Service-Learning curriculum increases climate change awareness", Science Education and Civic Engagement: An International Journal –winter 2020 issue

ROSE Network (Research on STEM Education) at UAB (**2018-2023**) - Co-Founder and **Co-PI** on NSF funded NSF-RCN UBE 1826988. "The ROSE network: Improving Research inclusivity through a grassroots culture of scientific teaching". Goal: to bring together educators from the Birmingham area and the state of Alabama to propagate evidence-based practices: active-learning and course-based undergraduate research experiences. Coordinate other networking opportunities for various community college educators attending ROSE meetings. Website: <http://www.rosenetwork.org/>

**Raut SA**, Howell WM, Angus RA. (2011) Endocrine disrupting effects of spironolactone in female western mosquitofish, *Gambusia affinis*. Environmental Toxicology and Chemistry 30(6): 1376-1382. PMID: 21351124

**Raut SA**, Angus RA. (2010) Triclosan has endocrine-disrupting effects in male western mosquitofish, *Gambusia affinis*. Environmental Toxicology and Chemistry 29(6):1287-1291. PMID: 20821571

#### **(d) Synergistic Activities**

##### **1. Undergraduate Teaching**

I am at the forefront of the undergraduate education reform at UAB. I have re-designed the introductory courses at UAB by actively incorporating evidence-based practices as per vision and change and designed the Biology Learning Assistant initiative. Besides, I have designed new pedagogy courses for the graduate students and post-docs with the Center for the Integration of Research, Teaching and Learning (CIRTL) besides teaching undergraduates. Prior to UAB, I have designed new upper-level biology courses for the baccalaureate program in Biology at a Hispanic serving institution- Dalton State College. At UAB, I have received Deans Award for Excellence in undergraduate teaching, Disability Support Services Outstanding Faculty Award, Provost Award for Faculty Excellence in Service-Learning and Student Organization Advisor of the Year Award for Phi Sigma Biological Honors Society.

##### **2. Mentoring**

I have personally mentored 16 graduate students and 2 post-doc through the CIRTL-UAB network on evidence-based practices, of which two currently hold faculty appointments. I am also the teaching mentor for the NIH- MERIT (Mentored Experiences in Research, Instruction & Teaching program) and PALM (Promoting Active-Learning and Mentoring) mentor for a post-doc at UAB. Furthermore, I have supervised 12 undergraduate research students, and 2 graduate students on different biology education projects. As regards the undergraduates, one among them was a McNair scholar and has gone on to graduate school in education and two to professional schools. Furthermore, six of these students are first generation minority female students.

##### **3. Biology Education Research**

I am actively pursuing collaborations in biology education research with Dr. Justin Schafer from the Colorado School of Mines, Dr. Ben England from Saint Louis University and Dr. Jeffrey Olimpo from the University of Texas at El Paso.

##### **4. Professional Activities**

I am a National Academies Education Fellow in the Life Sciences (2018). I participated in the 2018 HHMI Summer Institute on Scientific Teaching at University of California at San Diego and was thereafter selected as a National Academies Education Mentor in the Life Sciences (2019-to date). I serve as an associate member on ASCB-Education committee (American Society of Cell Biology) and co-organizer for the Foundational Cell Biology workshop for the 2020 annual meeting. I have served as the vice-president and president of Sigma Xi –UAB that aims at broadening the participation and raising awareness towards scientific endeavors. Lastly, I am serving as a co-chair (2019-2020) for the First Year Experience (FYE) at UAB to align all FYE courses across our campus with our newly designed undergraduate CORE curriculum.