

DAVID I. UPEGUI, PH.D.

Assistant Teaching Professor & MAT Science Supervisor · Department of Education, Brown University
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EDUCATION

Ph.D. in Education, University of Rhode Island & Rhode Island College (Joint Program) 2021
Dissertation: [*Social Justice and Evolutionary Biology: A Natural Fit*](#)

Teacher Certification, Rhode Island Teacher Education (RITE) Program, Rhode Island College 2009

M.A., Individualized Program (Psycho-Biology), Rhode Island College 2003
Thesis: *LHRH and PACAP Distribution and Organizational Differences in the Brains of Anophthalmic and Control Mice*

B.A., Biology and Psychology, Rhode Island College 1997
General Education/College Honors; W. Christina Carlson Award for Excellence in Biology Research

ACADEMIC APPOINTMENTS

Assistant Teaching Professor & MAT Science Supervisor, Brown University 2026–present
Department of Education

Adjunct Lecturer in Education, Department of Education, Brown University 2020–2026
Teacher Residency Site Leader, Central Falls High School (MAT clinical placements)

Adjunct Professor of Biology, Rhode Island College 2007–2026

Adjunct Professor of Education, University of Rhode Island Spring 2016

TEACHING

Brown University

Graduate and undergraduate courses in the Master of Arts in Teaching (MAT) program and Education Studies. My courses focus on culturally sustaining pedagogy in secondary science and on supervising candidates in clinical residency.

- EDUC 0530: Fieldwork and Seminar in Secondary Education (Fall 2026)
- EDUC 2510C, 2520C, 2530C: Educational Theory and Practice in Teaching Science I, II, and III (2026–27; EDUC 2530C also Spring 2025)
- EDUC 2515: Learning Theory and Special Populations (Fall 2026)
- EDUC 2565 & 2575: Student Teaching and Seminar, Central Falls residency site (2020–2026)

Rhode Island College

- BIO 111 & 112: Introductory Biology I & II, Early Enrollment Program (EEP)
- BIO 103: Human Biology (lecturer); BIO 109 & 111 laboratory sections (co-designed labs and assessments)

University of Rhode Island

- EDC 102: Introduction to American Education (Spring 2016; co-developed syllabus)

Clinical Supervision & Mentoring

- Supervise MAT candidates in secondary science placements: observation cycles, targeted feedback, lesson planning, and reflective practice, in coordination with mentor teachers.
- Second Reader, undergraduate honors thesis, Brown University (2026–27)
- Induction Coach, Central Falls School District: weekly coaching for a caseload of six first-year teachers (2018–2020)

RESEARCH PROJECTS

Principal Investigator, The CF Experiment

2026–2028

The CF Experiment: State Takeovers, Community Resistance, and the Documentation of Education Through the Longest State Takeover in History

An ethnographic and oral-history study of the Central Falls School District under state control, drawing on interviews with educators, students, families, policymakers, and community members. Co-PI: J. Acosta. Funded by the Ken Wong Fund for Faculty Research, Brown University (\$15,000).

PUBLICATIONS

Books

Upegui, D., & Fastovsky, D. E. (2023). *Integrating racial justice into your high school biology classroom: Using evolution to understand diversity*. Routledge.

Book Chapters

Upegui, D., Morales-Doyle, D., & Milks, K. J. (2026). To be seen in that room: Culturally sustaining pedagogy in science education as everyday teacher practice. In D. Silva Pimentel & K. L. Terrell (Eds.), *Science education and culturally sustaining pedagogies: Research, practices, and critical reflections* (pp. 331–360). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3373-5342-5.ch010>

Upegui, D. (2021). A more just world through the lenses of evolution. In B. Vazquez (Ed.), *On teaching evolution* (pp. 93–102). Keystone Canyon Press.

Peer-Reviewed Journal Articles

Upegui, D., Coiro, J., Battle, S., Kraus, R., & Fastovsky, D. (2022). Integration of the topic of social justice into high school biology curricula. *Science & Education*, 31(4), 923–941. <https://doi.org/10.1007/s11191-021-00287-y>

Public health research (Institute for Community Health Promotion, Brown University):

Gans, K. M., Risica, P. M., Kumanyika, S. K., Kirtania, U., Acharyya, S., **Upegui, D. I.**, Strolla, L. O., & Lasater, T. M. (2009). Final results of a randomized controlled trial to evaluate SisterTalk, a culturally tailored weight control program for Black women delivered via cable television. *Preventive Medicine*, 48(5), 451–456.

Strolla, L. O., Gans, K. M., **Upegui, D. I.**, Fournier, L., Risica, P. M., & Lasater, T. M. (2009). Innovative technology: Using tailored video interventions for health behavior change. *Health Education Research*, 24(3), 414–426.

Gans, K. M., Risica, P. M., Strolla, L. O., Fournier, L., Kirtania, U., **Upegui, D. I.**, Zhao, J., George, T., & Acharyya, S. (2009). Effectiveness of different methods for delivering tailored nutrition education to low-income, ethnically diverse adults. *International Journal of Behavioral Nutrition and Physical Activity*, 6, 24. <https://doi.org/10.1186/1479-5868-6-24>

Eide, M. J., Weinstock, M. A., Dufresne, R. G., Neelagaru, S., Risica, P., Burkholder, G. J., **Upegui, D.**, Phillips, K. A., Armstrong, B. K., & Robinson-Bostom, L. (2005). Relationship of treatment delay with surgical defect size from keratinocyte carcinoma. *Journal of Investigative Dermatology*, 124(2), 308–314.

Weinstock, M. A., Risica, P. M., Martin, R. A., Rakowski, W., Smith, K. J., Berwick, M., Goldstein, M. G., **Upegui, D. I.**, & Lasater, T. (2004). Reliability of assessment and circumstances of performance of thorough skin self-examination for early detection of melanoma in the Check-It-Out Project. *Preventive Medicine*, 38(6), 761–765.

Gans, K. M., Burkholder, G. J., **Upegui, D. I.**, Risica, P. M., Lasater, T. M., & Fortunet, R. (2002). Comparison of baseline fat-related eating behaviors of Puerto Rican, Dominican, Colombian, and Guatemalan participants who joined a cholesterol education project. *Journal of Nutrition Education and Behavior*, 34(4), 202–210.

Parker, D. R., Lasater, T. M., Windsor, R., Wilkins, J., **Upegui, D. I.**, & Heimdal, J. (2002). The accuracy of self-reported smoking status assessed by cotinine test strips. *Nicotine & Tobacco Research*, 4(3), 305–309.

Manuscripts Under Review & In Preparation

Upegui, D., Stevenson, S., Wentzel, L., Cherman, D., Hwang, B., Felipe, J., Martin, S., Sully, C., & Rieser, K. (under review). High-density mentorship as the engine of justice-centered science teacher preparation. Submitted to *Innovations in Science Teacher Education*.

Upegui, D., & Rieser, K. (in preparation). Reimagining science teacher preparation for sustainable futures: A mentored pipeline integrating urban ecology, youth voice, and multimodal design. In E. Dalton, M. Saleem, & S. Bhan (Eds.), *Reimagining education for sustainable futures: Innovation, inclusion, and human development*. IGI Global Scientific Publishing. (Invited chapter; full manuscript due December 2026.)

Upegui, D., Acosta, J., & McLaren, P. (in preparation). From policy to practice: The legislative mandate, historical trajectory, and equitable future of science HQCM.

Practitioner & Public Writing

Upegui, D. (2022, October). How to create a more engaging classroom community. *PBS Teachers' Lounge*.

Upegui, D. (2022, October). [Unpacking human migration](#). *Kaleidoscope: Educator Voices & Perspectives* (Knowles Teacher Initiative).

Upegui, D. (2021, July). [Nurturing the next stewards](#). *Educator's Voice Biotech Blog*, Amgen Biotech Experience.

Upegui, D. (2019, October 11; 2020, February 3). [Tiny teaching stories](#). *Education Week*.

Upegui, D. (2018, January 4). [Treating students with dignity](#). *Education Resources Consortium*.

Upegui, D. (2017, September). [Latinos are more than tacos, sports and music. We are also America](#). *Ed Post*.

Upegui, D., & Martinez, P. (2017, July). La educación en los Estados Unidos. *América News Español*.

Upegui, D. I. (2016, March). The empowerment of evolution education: Teaching about evolution is teaching with social justice in mind [Guest editorial]. *The American Biology Teacher*, 78(3).

Upegui, D., & Acosta, J. (2015, October 30). [We need Latino teachers](#). *Providence Journal*.

Contributor, Larry Ferlazzo's Classroom Q&A, *Education Week* (2022–2026).

GRANTS & FELLOWSHIPS

Grants

PI, *Clinical Experiential Learning Center*, The Champlin Foundation (\$98,700) 2026

PI, *The CF Experiment*, Ken Wong Fund for Faculty Research, Brown University (\$15,000) 2026

Recipient, Community-Based Learning & Research (CBLR) Course Mini-Grant for EDUC 0530, Brown University (\$500) 2026

Collaborator, *Using Electrochemical Geno-Sensing Techniques to Train the Next Generation of Rhode Island Innovators: A High School to College and Industry Biotechnology Program*, Rhode Island NSF EPSCoR 2026

Recipient, Helen Pouch Memorial Fund, Daughters of the American Revolution (\$500) 2025

Co-PI (with D. E. Fastovsky, PI), *Phylogenetic Systematics: Getting Relationships Right in High School*, The Paleontological Society (\$3,500) 2014

Fellowships

FUSE AI Fellow, Throughline (formerly Highlander Institute): Integrating AI into the high school 2025–26

[PBS Digital Innovator All-Star](#), PBS Education 2022

[Master Teacher Fellow](#), Amgen Biotech Experience (contributed to curriculum design) 2021

PRESENTATIONS

Invited Talks & Keynotes

Upegui, D. (2026, October 21). *Same tree, different branches: Science, race, and justice* [Invited sessions]. Day of Understanding, Bryant University, Smithfield, RI.

- Upegui, D.** (2024, March 11). [*Six-pound wonder*](#) [Featured talk]. TEDxBrownU, Providence, RI.
- Upegui, D.** (2022, March). *Social justice in science education* [Invited statewide PD session]. Woonsocket High School Science Team, Woonsocket, RI.
- Upegui, D.** (2021, February). *Educación de ciencia y justicia social* [Invited talk]. Universidad Pontificia Bolivariana, Medellín, Colombia.
- Upegui, D.** (2018, October). Guest expert panelist. *Gateways to STEM Education*, Education Week Online Summit.
- Upegui, D.** (2018, February). *How I found my way into teaching* [Keynote]. ECET2-RI: Elevating & Celebrating Effective Teaching & Teachers, RI.
- Upegui, D.** (2015, November). *Teaching while Latino* [Invited talk]. 20th Anniversary Celebration of the URI/RIC Ph.D. in Education, RI.
- Upegui, D.** (2014, 2016, 2019, 2026). Commencement keynote/featured speaker, Central Falls High School, Central Falls, RI.
- Panelist (2011). *Building a better teacher for RI*. Publick Occurrences Forum, Rhode Island College, Providence, RI.

Conference Presentations

- Walsh, C., & **Upegui, D.** (2025). *Phenomena-based science learning for AP Biology*. AP Annual Conference (APAC).
- Upegui, D.**, & Kenyon, C. (2024). *Making science phenomenal with PBS LearningMedia*. Rhode Island Science Teachers Association (RISTA) Conference.
- Upegui, D.**, & Pimentel, D. S. (2024). *Beyond engagement: The empowering potential of phenomena-based science learning*. RISTA Conference.
- Upegui, D.**, & Milks, K. J. (2023, November). *Socially-responsive science teaching: Building our next generation's leadership capacity through authentic science practices and creative problem-solving*. NABT Professional Development Conference.
- Upegui, D.** (2023). *Integrating racial justice into high school biology classrooms*. Geological Society of America Annual Meeting.
- Upegui, D.** (2023). *JEDI in science education*. National Science Education Leadership Association (NSELA).
- Upegui, D.**, & Milks, K. J. (2022). *Teaching AP Bio in community for social justice: Authentic science and justice-oriented approaches through inquiry*. National Association of Biology Teachers (NABT) Professional Development Conference.
- Walsh, C., & **Upegui, D.** (2022). *Task verbs: Helping students understand them and use them in FRQs*. NABT Professional Development Conference.
- Upegui, D.** (2022). *Teaching AP Biology in community for social justice*. Mass Insight Education.
- Upegui, D.** (2022). *Culturally sustaining approaches for precision medicine*. Amgen Biotech Experience Teacher Roundtable.
- Upegui, D.** (2022). *Social justice in the science classroom*. STEM Teacher Leadership Network.
- Upegui, D.** (2019, April). *If the power plant is right there, how come our neighborhood always has blackouts? Bringing together science and social justice*. National Science Teaching Association (NSTA).
- Upegui, D.** (2016, May). *Education as a conduit for social justice*. RISTA.
- Upegui, D.** (2015, March). *His Panic!* Comeback-City High Expectations Project (CHEP).
- Upegui, D.** (2014, October). *Teaching while brown: Learning under the influence*. Promising Practices Conference, Rhode Island College.
- Upegui, D.** (2013, July). *Evolution education for middle and high school*. RI Technology Enhanced Science (RITES), RIC/URI.
- Upegui, D.** (2012, July). *Technology in the science classroom*. RITES, RIC/URI.

Upegui, D. (2018, August; 2017, August). *Children full of life analysis; Liberatory practices in the classroom* [District professional development]. Central Falls School District.

Student Research Presentations

Upegui, D. (1998, April). *Location differences between LHRH-positive neurons in anophthalmic and control mice*. 2nd NEURON Conference, Trinity College, Hartford, CT.

Upegui, D. (1997, October). *A study comparing the neuroendocrine characteristics of anophthalmic and control mice*. 25th New England Endocrine Conference, Boston University.

AWARDS & HONORS

2023	Lifetime Achievement Award, The Colombian Legacy, Rhode Island State House
2022	Warrior Award , Central Falls Alumni Association
2021	Outstanding Biology Teacher Award (Rhode Island), National Association of Biology Teachers
2021	Humane Educator of the Year , Animalearn
2019	Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) ; State Finalist, 2017
2019	Hispanic Heritage Award, City of Central Falls
2015	Featured Educator, #LatinosTeach , White House Initiative on Educational Excellence for Hispanics
2014	Evolution Education Award , National Association of Biology Teachers
2014	NSTA Shell Science Lab Challenge, District 1 Winner
2014	Alumni Honor Roll, Faculty of Arts & Sciences, Rhode Island College
2013	Amgen Award for Science Teaching Excellence
2013	Outstanding Achievement Award, Latino Public Radio
2012	Golden Apple Award, Rhode Island Department of Education
2009	Excellence Award for Innovation, Brown University
2002	Recognition for advancing quality health care access in RI, Ocean State Action
2013–2023	Official citations from the Rhode Island Governor, Secretary of State, Attorney General, General Treasurer, RI Senate and House of Representatives, mayors of Providence, Pawtucket and Cranston, and Rhode Island’s U.S. Senate and Congressional delegation, recognizing teaching awards and community service

SERVICE

University & Department (Brown University)

- Member, Graduate Committee, Department of Education (2026–present)
- MAT recruitment: information sessions and demonstration lessons (2026–present)
- Member, Humanistic Inquiry in Education Working Group (2026–present)
- Roundtable participant, EDUC1900 Senior Seminar (2026)
- Co-developer, with Mauro Rodriguez, of a professional-development workshop for local high school science teachers (2026)

Professional Service

- Reviewer, *Science Education* (Wiley) (2023–present)
- Book Reviewer, *The American Biology Teacher*, NABT (2022–present): [sample 1](#), [2](#), [3](#)
- Book Proposal Reviewer, Routledge / Taylor & Francis (2022–present)
- Reviewer, *Journal of Latinos and Education* (2016, 2017)
- Development Committee Member, AP Biology, College Board (2022–2026)
- AP Biology Item Writer (multiple-choice), College Board / ETS (2015–2016)
- State Representative, National Association of Biology Teachers (2014–present)
- Leadership Team Member, Rhode Island Science Educators Community (RISEC)
- Accreditation Reviewer for Educator Preparation Programs, PREP-RI (2016, 2018)

- Reviewer, Ed Prep Pitch Fest, RIDE Office of Innovation (2018)
- Mentor, RIDE Mentoring Program for Beginning Educators of Color (2023)
- Syllabus designer, science methods courses, RISPE (2023)
- Contributor/Reviewer, Life Science Teaching Resource Community, American Physiological Society
- Contributor, RI PBS LearningMedia: [resources on oysters and genetics](#) (2021)

Community Service & Youth Programs

- Founder and Coach, Central Falls High School Science Olympiad (multiple regional medals)
- Guest speaker, Participatory Budgeting class, Central Falls High School: survey design and data analysis (2026)
- Collaborator, with S. Cinquemani, on art integration in science education for RISD MAT candidates (2026)
- Head Teacher, Science/Math Investigative Learning Experiences (SMILE) Program, URI (2011–2014)
- Head Coach, North Providence Youth Soccer Association (2010–2015)
- Mentor, ALANA First-Year Student Program, Brown University (2006–2007)
- Assistant Wrestling Coach, Central Falls High School (2002–2004); Head Coach, Central Falls Youth Wrestling Club (2000–2003); SCOPE grant to found an after-school wrestling club (2004)
- Lead Advocate, RI H 5902B (2001), legislation improving medical interpretation services in RI hospitals
- Board Member, Rhode Island Public Health Association (1999–2002); Board Member, Rhode Island Youth Guidance Center (1999–2002); Member, Pawtucket Tobacco Task Force (2000–2002)

ADDITIONAL PROFESSIONAL EXPERIENCE

Science Teacher (ESOL Certified) & Science Content Lead, Central Falls High School, Central Falls, RI
2010–2026

- Taught AP Biology, Human Anatomy & Physiology, PLTW Medical Interventions, Biochemistry, Nutrition Science, and a self-designed Science & Social Justice course to multilingual and historically marginalized learners.
- Led the science department’s instructional planning, data analysis, and vertical alignment during weekly common planning time.
- Partnered with Brown University faculty on preservice teacher placements and lesson study cycles; organized family STEM nights and student research showcases.

Teacher, Statistics & Research, Blackstone Academy Charter School, Pawtucket, RI 2009–2010

Data/LAN Manager, Institute for Community Health Promotion, Brown University 2002–2010

Managed research databases and data reporting for multiple NIH-funded public health trials; supervised four data clerks; administered the network for more than 50 users.

SELECTED PROFESSIONAL DEVELOPMENT

- ExcEL Leadership Academy: Essential and Advanced Support for Working with Multilingual Learners micro-endorsements (2022–2024); certificates of recognition from U.S. Rep. Gabe Amo and Lt. Gov. Sabina Matos (2026)
- UCLA Extension: Multilingual Learner endorsement coursework (10 courses)
- Graduate coursework, Brown University: Social Movements in Health; Philosophy of Science; Methods in Epidemiologic Research
- National Academy of Advanced Teacher Education (NAATE) (2013–2014); Advancing RI Science Education (ARISE), Brown University (2012–2013); RITES Program (2011–2013)
- National Geographic Certified Educator (2019); Barcoding Life’s Matrix, Coastal Marine Biolabs (2014); Institute for Learning, *Accountable Talk* (2012); Amgen-Bruce Wallace Biotechnology Training Workshop; Teaching AP Biology, Cambridge College

SELECTED MEDIA

- *RI PBS Weekly*: [“How this RI science teacher is changing his students’ lives”](#) (May 2023)

- *Boston Globe*, Rhode Island Report podcast: [“The crucial role of teachers in urban schools”](#) (March 2023)
- *University of Rhode Island Magazine*: [“What does social justice have to do with evolution? Everything.”](#) (Spring 2024); [“Evolving education”](#) (Oct 2023)
- *Brown Daily Herald*: [“Beyond the ‘mirage’”](#), TEDxBrownU coverage (March 2024)
- *BAM Radio Network*: three episodes on restorative practices, storytelling, and brain breaks (2023–2024)
- *The Public’s Radio (RIPR)*: [online teaching during COVID-19](#) (2020); [biliteracy recognition on RI diplomas](#) (2016)
- *HHMI BioInteractive*: “Educating for Freedom” with Dr. Bryan Dewsbury (2021)
- *RI Department of Health*: on-camera talent, COVID-19 vaccination public service campaign (2020)
- *WJAR NBC 10*, *WPRI CBS 12*, *Providence Journal*, and *Pawtucket Times*: features and profiles (2010–2023); full list available on request

PROFESSIONAL MEMBERSHIPS

National Association of Biology Teachers (NABT); Sigma Xi, The Scientific Research Honor Society; Rhode Island Science Teachers Association (RISTA); Rhode Island Science Educators Community (RISEC); National Science Teachers Association (NSTA); Association for Science Teacher Education (ASTE).

LANGUAGES

Spanish and English: native fluency (bilingual/bicultural)

Portuguese (Cape Verdean Creole): conversational, intermediate reading proficiency

CREATIVE WORK

Co-founder, Trumpet & Lead Vocals, [Infusion Evolution](#) 1998–present

A musical group performing original compositions. Named [Latine Act of the Year](#) by Motif Magazine (2024). Featured on RI PBS *Ocean State Sessions* (2024): [Sangre](#), [Dímelo](#), [Me Pierdo](#).

Upegui, D. I. (2007). *Pura Vida: Twelve very short stories of fulfilled lives*. Lulu Press. ISBN 9781430305194