

BACKGROUND SUMMARY

Creative, highly-motivated professional with a proven record of initiative and follow-through on multiple sustained innovative projects. Articulate collaborator effective at establishing clear project roles and timelines toward common mission and vision. Unique ability to envision solutions, develop, organize, and finalize projects which support the advancement of physics through engagement and education.

- Effective leadership & teamwork
- Professional networking & collaboration
- Integrates science in education, society, economy, and environment
- Strong community relationships
- Broad content background
- Wide range of practical skills & experience

INFORMAL SCIENCE EXPERIENCE

Free Science Workshop, Ithaca, NY 2016-Present

Co-Founder, Creative Director

Cornell Laboratory for Accelerator-Based Sciences, Ithaca, NY 2010-2019

Science Engagement Specialist

Connects scientists with educators, students, and community through tours, activities, videos, workshops, music, and performances.

The Physics Factory, Tucson, AZ and Ithaca, NY 2002-Present

Co-founder and Executive Director of the Physics Bus

Provides physics exhibitions, on-location science events, and hands-on experiences to schools, community centers, and remote audiences.

FORMAL SCIENCE EXPERIENCE

Cornell University, **Physics Instructor**, Ithaca, NY 2019-Present

Wildcat School, **Physical Science Teacher**, Tucson, AZ 2007-2010

Aztlan Academy, **Physics Teacher**, Tucson, AZ 2002-2007

Tucson High Magnet School, **Physics Teacher**, Tucson, AZ 2004-2005

SELECTED ACCOMPLISHMENTS

- Developer and instructor of PHYS 4500 at Cornell University, including outfitting and management of a physics workshop and studio for use by undergraduates and graduates in the design, construction, and video production of exhibits, lab activities, and demonstrations.
- Co-founded and directed the Wildcat Science Workshop (Tucson, AZ) and Free Science Workshop (Ithaca, NY),
- Co-founded the Global Alliance of Community Science Workshops
- Converted seven vehicles into mobile science centers, including solar/biofuel alternative energy conversion,
- Established and maintained a diverse science outreach team for 18 years,
- Designed, constructed and showcased/presented hundreds of physics exhibits and demonstrations to over 90 thousand people over 20 years.

EDUCATION

MA- Science Education , University of Arizona, Tucson, AZ	2008
Secondary Certification - Physics , University of Arizona, Tucson, AZ	2002
BA- Philosophy/Physics , University of Arizona, Tucson, AZ	1997

PROFESSIONAL CONTRIBUTIONS

Stevenson University – Susan Palmer Slattery Memorial Annual Lecture

- Keynote, *Seven Principles of Science Engagement*, 2018

American Physical Society – March Meeting

- Presentation, *Physics Bus: Innovative Model for Public Engagement*, 2017

Synchrotron Radiation News

- Article, *Student Initiative Drives Education at CHESS*, 2013

Association of Science and Technology Centers

- Presentation, *Designing, Constructing, Presenting Exhibits*, 2012
- Presentation, *Science Clubs-A New Model to Expand our Field*, 2010

Exhibit Files

- Case Study, *The Bonetti Machine*, 2009

Institute of Physics

- Presentation, *Science and Motivation*, 2009

American Association of Physics Teachers

- Presentation, *“The Physics Factory - A Cascade of Education”*, 2006
- Presentation, *“Physics on the Road”*, 2007