

ANNA CLEMENCIA GUERRERO

Eugene Bell Center for Regenerative Biology and Tissue Engineering at Marine Biological Laboratory
Center for Biology and Society at Arizona State University
Phone: 520-906-6230 | Email: acguerr1@asu.edu

EDUCATION

Arizona State University, PhD in History and Philosophy of Science *expected 2022*
Arizona State University, MS in Biology *2019*
Arizona State University - Barrett, the Honors College, BS in Microbiology *2017*

RESEARCH EXPERIENCE

Research Assistant Marine Biological Laboratory, *2020–present*
Eugene Bell Center for Regenerative Biology and Tissue Engineering
Advisors: Drs. Karl Matlin and Jane Maienschein
Topic: History and philosophy of cell biology and synthetic cell research

Doctoral student Arizona State University, Center for Biology and Society *2017–present*
Advisors: Drs. Jane Maienschein, Manfred Laubichler, and Beckett Sterner
Topic: History and philosophy of images in microbiology

Graduate researcher Arizona State University, The Biodesign Institute *2018–present*
Advisors: Dr. César Torres
Topic: Imaging techniques in biofilm research

GRANTS / AWARDS

- National Science Foundation: Synthetic Cells and Rules of Life *2020*
- National Science Foundation Graduate Research Fellowship *2019*
- Ford Foundation Pre-Doctoral Fellowship, Honorable Mention *2019*
- Arizona State University Graduate College Fellowship, Spring *2019*
- with Embryo Project Team, Hazen Education Award from the History of Science Society *2018*
- Arizona State University Moeur Award *2017*
- National Science Foundation REU Grant Recipient – Harvard *2016*
- School of Life Sciences Undergraduate Research Scholar, Arizona State University *2015*
- Mayo Physicians of Tomorrow Scholar, Rochester, MN *2015*
- New American University Scholar, Arizona State University *2013*
- National Hispanic Scholar *2013*

WORK PUBLISHED / PRESENTATIONS

PUBLICATIONS

- Ronai, I, GP Greslehner, F Boem, J Carlisle, A Stencel, J Suarez, S Bayir, W Bretting, J Formosinho, AC Guerrero, WH Morgan, C Prigot-Maurice, S Rodeck, M Vasse, JM Wallis, and O Zacks. "Microbiota, symbiosis and individuality summer school" meeting report. *Microbiome* (2020) 8: 117.
- Guerrero, Anna, "De Monstruorum Causis, Natura et Differentiis (On the Reasons, Nature and Differences of Monsters) (1616), by Fortunio Liceti". *Embryo Project Encyclopedia* (2018-11-29). ISSN: 1940-5030 <http://embryo.asu.edu/handle/10776/13087>.
- Guerrero, Anna, "Fortunio Liceti (1577–1657)". *Embryo Project Encyclopedia* (2018-06-25). ISSN: 1940-5030 <http://embryo.asu.edu/handle/10776/13075>.

PRESENTATIONS

- with Dr. Christy Spackman. “Disrupting Lab Work: Exploring the Role of Art in the Practice and Communication of Biology.” Life Science Ethics Series at Arizona State University. October 30, 2019.
- “How Images Shape the Concept of Regeneration in Microbial Communities.” International Society for the History, Philosophy, and Social Studies of Biology Conference. July 11, 2019.
- “The Relationship Between Vertebral Osteology and Microhabitat and Prey-capture Methods in Snakes.” Barrett, Celebrating Honors Symposium at Arizona State University; April 12, 2017
- “Drawing Conclusions: The Art of Forests over Time.” Harvard Forest Summer Symposium; August 2016; Petersham, MA.
 - Read more at: <http://harvardforest.fas.harvard.edu/blog/anna-guerrero>.
 - See works at: <https://osteoiillustration.com/>

SELECT IMAGES

- Pederson, Neil, et. al. “Chapter 5: Low-Hanging DendroDynamic Fruits Regarding Disturbance in Temperate, Mesic Forests.” On p. 120 in *Dendroecology: Tree-Ring Analyses Applied to Ecological Studies*. Springer, 2017.
- Guerrero, Anna, "DNA and X and Y Chromosomes". *Embryo Project Encyclopedia* (2017-02-06). ISSN: 1940-5030 <http://embryo.asu.edu/handle/10776/11398>.

TEACHING APPOINTMENTS

Instructor - Scientific Illustration

December 2017–Present

The Embryo Project Encyclopedia, Arizona State University

- Design and implement intensive semester long curriculum for undergraduate and graduate students in practical and professional scientific illustration protocol
- Advise students on best practices for clearly illustrating abstract and complicated scientific concepts
- Research and develop scientific images for the *Embryo Project Encyclopedia*'s articles in order to communicate information about embryological and reproductive sciences to a broad audience

Teaching Assistant – Biology and Society Research Colloquium

January 2019–May 2019

School of Life Sciences, Arizona State University

- Advise undergraduate juniors and seniors on research topics and methods in biology and society, teaching skills like literature review, reaching out to professors, giving and receiving feedback, applying for grants, creating work timelines, and goal setting
- Proofread up to 30 research proposal drafts for spelling, grammar, typing mistakes, consistent language, formatting, clarity, and executability

Teaching Assistant – Introduction to Microbiology Lab

August 2017–December 2017

School of Life Sciences, Arizona State University

- Teach introductory microbiology laboratory curriculum including aseptic technique, serial dilution, basic staining and culturing techniques, biochemical testing, microscopy, and identification of pathogenic bacterial unknowns
- Design appropriate and effective learning assessments including quizzes and tests, and grade laboratory procedure notebooks, lab reports, and research assignments
- Supervise and mentor undergraduate students from diverse educational backgrounds during lab experiments, ensuring student safety and learning, and creating an inclusive classroom culture

SCIENTIFIC OUTREACH

Managing Editor, *The Embryo Project Encyclopedia*, Arizona State University

2017–2020

Volunteer Illustrator, AskNature, The Biomimicry Institute

2017–2018

K-12 Scientific Editor, Pearson Education

2017–2018

Freshman Career Seminar Instructor, School of Life Sciences, Arizona State University

2017–2018

Co-Founder and Graphic Designer, Laboratory Casual

2014-2016