

Please find here a list of all the projects in the SLI STEM Winter Micro-Internships for 2023. Check back periodically for any updates and added projects.

- 1. Exploring the Possibilities of Virtual Reality in STEM Classes at Foothill College:** Virtual Reality, STEM education
- 2. Understanding the behavior of stem cells:** Stem cell biology, Focused Ultrasound, Bioenergetics
- 3. Developing and Characterizing a Carbon Dioxide Sensor for Deployment in Extreme Environments:** Sensors, Nanotechnology
- 4. Enhancing molecular oxygen level by co-culturing *S.elongatus* (Cyanobacteria) in hypoxic 3D-cancer cells / spheroids:** Cancer treatment, Cell biology, Radiation Oncology
- 5. Mimicry, mate-choice, and aggression in swordtail fishes:** Evolution behavior, Mimicry, Animal Biology
- 6. Impact of the alcohol flushing enzyme on smoking:** Biochemistry, Molecular Biology, Alcohol Metabolism
- 7. Lifting the Bar:** Applied Research, Qualitative Data Analysis, Education, Social Psychology, Social Justice, Justice Reform, Foster Care Experience
- 8. Making molecules dance with light:** Quantum mechanics, Computational Chemistry
- 9. PRICE: Developing a flexible and scalable software tool for rapid protein recovery from large sequencing datasets:** Bioinformatics, Data Science, Genomics
- 10. Playing with the Universe: astro-education simulations in HTML5/Javascript:** programming, Javascript, HTML, CSS, astronomy, simulation
- 11. Investigating radiation resistance of different cancer cell lines:** Cancer studies, cell culture, biological assays
- 12. Researching best metrics to build a science identity to recruit more first-gen/low-income students to pursue careers in science:** Data Science, Psychology, Quantitative and Qualitative Research Methods, Science Education, Coding (RStudio, Qualtrics, Web Design)
- 13. Measuring pulsar scintillation with the Allen Telescope Array:** Observational Astronomy/Radio Astronomy, Data Analysis/Data Science