



## SUMMER RESEARCH EXPERIENCE FOR TEACHERS IN MECHANOBIOLOGY

June 20 – July 31, 2023

University of Pennsylvania



The Center for Engineering MechanoBiology (CEMB) is a national Science and Technology Center funded by the National Science Foundation to advance the study of mechanical forces in molecules, cells, and tissues in both plants and animals.

The Summer Research Experience for Teachers (SRET) is a professional development program for high school science teachers focusing on the interdisciplinary and broad themes of mechanobiology. Topics include cellular and molecular biology, bioengineering, biophysics and the mechanics of cells and tissues relating to cancer and other inflammatory diseases, along with various aspects of plant cell biology and growth. Teachers will (1) participate in a CEMB research project during the summer, (2) develop a personal curriculum plan with specific lessons and activities to use in their teaching practice the following academic year, and (3) participate in several academic-year workshops with the project team and other teachers.

### Benefits of participation

- Enhanced content knowledge in cell biology, molecular biology, and mechanobiology
- Develop research skills in various aspects of biology, physics and chemistry to enhance classroom practice
- Professional development in inquiry-based unit development
- Additional resources for classroom integration
- Satisfies Act 48 professional development requirements
- A generous summer stipend (\$6,000)

We encourage teachers to apply in collaborative teams from local schools and school districts in the Philadelphia region. Individuals are also welcome to apply.

APPLY BY APRIL 14, 2023.....Program website/online APPLICATION at:

<https://cemb.upenn.edu/resources/stem-teacher-research-experiences/>



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