



## SUMMER RESEARCH EXPERIENCE FOR TEACHERS IN MECHANOBIOLOGY

June 28 - August 13, 2021  
University of Pennsylvania

### Participating School Districts:

- *Central Bucks*
- *Rose Tree-Media*
- *School District of Philadelphia*
- *Upper Darby*
- *Upper Merion*

The Center for Engineering MechanoBiology (CEMB) is a multi-institutional 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 (RET) is a professional development initiative 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 academic year workshops with the project team and other teachers.

### Benefits of participation

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

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 NOW.....Program website/online APPLICATION at <https://cemb.upenn.edu/diversity/stem-teacher-ret/>



This program is funded in part through a grant from the National Science Foundation's STC program (CCMI): 1548571