



Smithsonian Environmental  
Research Center

**SERC Science Practices and Techniques: Teacher's Academy**  
**Climate Change and Living Fossils**  
**August 13<sup>th</sup>-15<sup>th</sup>, 2018 (9 am-3 pm)**  
**Teachers working with 3<sup>rd</sup>-12<sup>th</sup> Grades**

Do you want to learn how to support your students in the classroom and doing science fair, related to climate change research? Join educators and researchers from the Smithsonian Environmental Research Center (SERC) for this 3-day course, behind the scenes at a Smithsonian research site, focused on understanding the real world practices and techniques used by SERC researchers. We'll teach you how to adapt and translate these techniques for your classroom and science fairs.

**Cost:** Free, \$75/day stipend with \$200 science-fair kit provided at end of 3-day course

**Who Can Register?** DCPS and PGCPs teachers will be given priority, others will be put on a wait list and back-filled if there are openings

**How to register:** E-mail Karen McDonald, [McDonaldK@si.edu](mailto:McDonaldK@si.edu) or call (443) 482.2216

**Day 1 (Owens Science Center)**

- Introduction to the Smithsonian Environmental Research Center and course
- Reviewing climate change and climate change resources
- Understanding deep time
- How do scientists study climate change in the past and the present using plants?
  - Temperature activity calculating the temperature of a region using leaf margins

**Day 2 (SERC, shuttle provided)**

- Tour of ginkgo and fossil atmosphere's study site
- Techniques for studying leaf guard cells and transpiration
- How to study microclimates in urban environments

**Day 3 (Smithsonian Museum of Natural History and Owens)**

- Smithsonian Natural History Museum and Q?rius lab
- Citizen science and Zooniverse
- Challenges of science fairs and climate studies
- Handing out science fair support kits



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