

Connect with a Physiologist in Your Community



The American Physiological Society

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www.the-aps.org/education

The APS is a professional scientific membership organization devoted to fostering scientific research, education, and the dissemination of scientific information.

Outreach to Classrooms

Physiology Understanding Week



K-12 Teachers partner with a local area **APS member physiologist** for a classroom, school, or campus visit along with the members of the physiologist's research laboratory. The team **engages students** in relevant learning experiences through interactive, hands-on physiology activities.

Through this real-life, face-to-face encounter with scientists, students learn about how their bodies function and how medical discoveries are made.

Program Goals

- Increase student interest in and understanding of physiology in their lives
- Introduce students to physiology as a possible career
- Increase teacher recognition of physiology in their standards-based science curriculum
- Involve more physiologists in outreach to the students and teachers in their communities



Annual Time Table

- **Spring/Summer:** Teachers and physiologists connect, plan, and schedule an outreach event in November.
- **October 1:** Deadline for PhUn Week Event Planner forms to request free memorabilia for students and t-shirts for the presenting team.
- **First week in November:** Celebrate **PhUn Week!**



Science Fair Awards

Local, Regional, and International Science Fairs

APS members volunteer to offer an APS award at **local or regional science fairs** at the elementary, middle, and high school level. Student winners receive an APS t-shirt and a certificate for the best physiology project. The teachers of the winning students receive the APS book, *Women Life Scientists: Past, Present, and Future* and an APS K-12 resource packet.



The APS also participates as a Special Awards Sponsor for **Intel's International Science and Engineering Fair**.

Each year, the APS recognizes outstanding high school research projects in life sciences. Four students receive cash awards and a subscription to *Physiology*, an APS journal.



Science Teacher Fellowship Programs



Frontiers in Physiology Research Teacher Fellowship

- **Experience science "in action,"** learning how the research process works and what research scientists do, and experiencing the intrinsic satisfaction and excitement of conducting scientific research.
- **Deepen understanding and use of national and state standards** in guiding their curriculum choices.
- **Increase use of effective science teaching strategies**, especially inquiry, diversity methods, and authentic assessment.
- **Expand use of web-based teaching materials** and their skills in developing effective web-based materials for their own lessons.
- **Develop dynamic working relationships with physiology researchers** and with other teachers from across the nation.

Since 1990, 343 science teachers from 44 states have participated in the Frontiers Program.

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Online Teacher Professional Development Program

Explore Effective Teaching Strategies

The APS Six Star Science framework for supporting excellence in science education:

- student-centered instruction
- valuing diversity among students
- integrating technology
- developing authentic assessments
- utilizing accurate and current content
- reflecting on teaching and learning

Understand the Research Process

Learn about:

- the scientific method
- generating valid hypotheses
- connecting basic to clinical research
- using animals and humans in research
- research careers in physiology

Enhance Your Classroom Materials

Use toolkits and Six Star Science to:

- transform cookbook labs into engaging student-centered, inquiry-based lessons
- align lessons to your state and national science education standards

Online Program Timeline

Spring: Readings, reflections, and hands-on activities for examining inquiry, equity, and technology.

Summer: Understanding the research process enhanced by hands-on inquiry-based activities.

Fall/Winter: Transform cookbook labs into Six Star Science lessons for your classroom.

Spring: Attend the *Experimental Biology* scientific meeting.

www.PhUnWeek.org

www.the-aps.org/education/sciencefair

www.frontiersinphys.org

