



The American Physiological Society

Frontiers in Physiology

Professional Development Fellowship for Teachers

www.frontiersinphys.org



Six Star Science for Student-Centered Learning

What is Six Star Science?

The APS Frontiers in Physiology fellowship program is built on Six Star Science, the APS research-based framework for supporting excellence in science education for diverse students. The "Six Stars" are:

- ★ **Instruction:** Student-centered instruction is at the heart of exemplary science education.
- ★ **Diversity:** Valuing diversity among students is a defining characteristic of excellence in education.
- ★ **Technology:** Integrating technology to enhance learning is particularly important in science.
- ★ **Authentic Assessment:** To be authentic, assessment must focus on both content and process skills.
- ★ **Current Content:** Utilizing accurate and timely content information is central to scientific study.
- ★ **Reflection:** Reflecting on teaching and learning is essential to maintaining excellence in education.

What is the Frontiers Fellowship?

In this year-long program starting in April, Teacher Fellows can expect to:

- Intensively examine their current teaching methods and learning environments while exploring new Six Star Science strategies.
- Immerse themselves in the world of cutting-edge biomedical research to experience science "in action" - learning how the research process works, what research scientists do, and the intrinsic excitement and challenges of conducting research.
- Deepen their understanding of standards by developing classroom materials that address Six Star Science.
- Build ongoing working relationships between basic and clinical research scientists and science teachers through other in-service experiences, classroom visits, and online communications.



Fellowship Timeline

2009

Spring • Online assignments, including reflections, readings, and hands-on activities.

Summer • Work in an APS member's research lab.
• Participate in the Science Teaching Forum, July 20-26.

Fall • Develop a Six Star Science Lesson/Activity for your classroom.
• Produce an information booklet and podcast on your summer research.
• Participate in Physiology Understanding Week.

2010

Winter • Online assignments.

Spring • Experimental Biology meeting, April 24-28, Anaheim, CA.

Fellowship Payments

- Summer research work.....up to \$4,000
- Science Teaching Forum..... \$500
- Assignments, products..... \$800
- Classroom supplies \$300
- Travel.....valued at ~\$3,700

Total Value: ~\$9,300



Questions? Contact:

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Applications completed with an APS member are due by January 8, 2009 and are available at:

www.frontiersinphys.org

