Professional development for high school science teachers

Professional development in an era of budget cuts

The Partners in Science program of the M.J. Murdock Charitable Trust offers high school science teachers the opportunity to work alongside college or university scientists on real-world laboratory research of mutual interest. The chance to be part of advanced scientific investigation reignites teachers' passion for science and reinvigorates their teaching. This experience is passed on to students as teachers share the excitement of scientific discovery. Hopefully, more students choose careers in science as a result of their teachers' experience in the Partners in Science program.

How it works

During the Partners in Science program, partners (the high school teachers) spend two summers in a college or university environment pursuing research with their mentor, who is usually a faculty member of the research institution. After the first summer, partners develop a brief pictorial poster showing their research to date for presentation at the national meeting in January. After the second year working with their mentors, partners return to the January conference with an oral presentation on their progress. At these conferences, partners learn about the research of others and share ideas on teaching. During the two-year grant period, the Murdock Trust provides travel funds for high school partners to attend the January national conference in San Diego both years. Often, the relationship formed between the partner and the mentor continues beyond the grant period.

How to apply

Applications are completed by partners and mentors together, and must be submitted by mentors under the auspices of their research institutions. Potential partners and mentors can visit www.sciencepartners.org to view the more detailed Partners in Science Guidelines and download the Partners in Science application. The application deadline is December 1, and candidates are notified by March 1.

Participating in the Partners program improved my teaching, and made me better prepared to instill in my students the excitement of scientific discovery.

—Victor Moore, science teacher
Tillamook, Oregon

Since 1990...

Over 500 teachers
Over 300 scientists
Nearly 50 research institutions
Nearly $9,500,000 granted
Professional development for high school science teachers

Partners in Science Grants

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<tr>
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<th>1st year</th>
<th>2nd year</th>
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<tr>
<td>High school teacher stipend</td>
<td>$5,000</td>
<td>$5,000</td>
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<tr>
<td>Discretionary funds</td>
<td>$1,000</td>
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<td>Academic year professional enrichment</td>
<td>$500</td>
<td>$500</td>
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<tr>
<td>Travel funds for national conference</td>
<td>$1,000</td>
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<td><strong>Total:</strong></td>
<td><strong>$7,500</strong></td>
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Eligibility

Mentors must be academic scientists or principal investigators who hold an appointment in a natural science department at a college, university, or other qualified research institution in Oregon, Washington, Idaho, Montana or Alaska. The investigator also must have an active research program as evidenced by grants and/or publications. His or her institution accepts responsibility for the administration of the award.

High school teachers should possess academic qualifications in appropriate disciplines, in most cases a baccalaureate degree or the equivalent in chemistry, physics, or biology. Applicants must have a high school science appointment and be active in classroom teaching.

Making an impact in the classroom

One of the main goals of PIS is to revitalize Partners’ teaching and to help them appreciate the use of inquiry-based methods in the teaching of science. Beginning with the 2015-2016 academic year, the Murdock Charitable Trust will be partnering with the Van Andel Education Institute to implement the QPOE2 Community of Scientific Practice Model.

As a Partner in Science, you can look forward to: A three-day immersion experience in June, weekly summer online meetings with the group, mentoring from a QPOE2 trained implementation coach, a one-day training at the regional conference in August, school year classroom visit by an implementation coach, and online professional development resources.

Further Impact

A supplemental award of up to $7,000 is available by application to second-year partners to purchase new technology, implement new ideas, or develop new teaching programs for their high school.

For more information, please contact:

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