

WHEN/WHERE IS THE TRAINING?

- On-line portion: May 2010/complete by June 5, 2010.
- Lab portion: June 5-11, 2010 at the University of Alaska Fairbanks campus.



WHAT'S IN IT FOR YOU?

- Up-to-date knowledge and experience with some of the most exciting areas of biology today.
- Networking with university faculty and fellow high school educators.
- Professional development or special topics credits.
- All TIPS-related expenses paid: travel, lodging, per diem.
- Stipend during training.
- Technical and pedagogical support during the following school year.
- Enhanced ability to challenge your students with exciting modern biology.

WHAT WE EXPECT FROM YOU

Participation in TIPS for Students during the school year, including on-line teacher conferencing, aiding student research projects, assisting students to prepare for science symposia, fairs.
Reasonable care of loaned equipment.



TIPS

Training Institute for Partnerships in Science



June 5-11, 2010
Fairbanks, Alaska



WHAT IS TIPS FOR TEACHERS?

The Training Institute for Partnerships in Science offers a deeper understanding of molecular biology and includes time for reflection and pedagogical interactions with education professionals and other like-minded Alaska high school teachers. TIPS for Teachers is a partnership with University of Alaska Fairbanks researchers who supply the content knowledge; TIPS staff, who provide program supplies, equipment, technical assistance, travel, stipends and scholarships; and you!

It all begins with a two-week online class followed by another week of intensive hands-on lab work with university biomedical researchers.

Don't worry if it has been a while since you learned genetics – the on-line portion of the training prepares you to get the most out of the lab experience to follow. Once you get to the lab you'll work with up-to-date equipment as you practice DNA extraction and sequencing, polymerase chain reaction and gel electrophoresis.

The goal is for you to adapt the material for your classroom, with the help of education specialists. We'll also help devise cooperative projects among schools and University researchers. You will be given plenty of time and help.

The TIPS for Teachers summer training is just the beginning. Before school starts, you will receive supplementary equipment and supplies. While you're implementing your TIPS summer plan during the school year, you will also have continued contact with university researchers and your fellow teachers.

Your students can do innovative, award-winning projects for the Science Symposium, science fairs, or the Statewide Virtual Science Fair, with a chance to compete for scholarships and cash awards. Travel to such competitions will be paid for students and accompanying teachers, as well as the cost of a substitute teacher if necessary.



WHAT DO SCHOOLS/DISTRICTS GET?

- Funds for substitutes if needed so teachers participate in BioPREP-related activities.
- Teachers with up-to-date knowledge of basic biotech and research methods.
- State-of-the-art laboratory equipment and supplies.
- Connection to UAF researchers for teachers and students may increase graduation rate and college attendance.
- Scholarships and travel funds for participating students.
- Assistance advertising teacher and student successes in BioPREP-related activities both locally and statewide.

This program and publication were made possible by Science Education Partnership Award (SEPA) Number 5R25AR024282-02 from the National Center for Research Resources (NCRR), a component of the National Institutes of Health (NIH). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of NCRR or NIH.

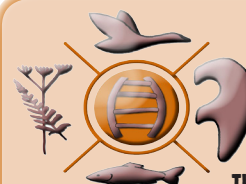
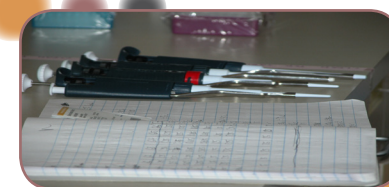
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WHAT WE EXPECT OF SCHOOLS

- Offer genetics/advanced biology course and/or after-school program.
- Administrative assistance for BioPREP program and TIPS teachers.
- Time for teachers/students to attend conferences/symposia, science fairs.
- Assistance in long term tracking of students who participated in science classes.
- Secure lab space for loaned equipment.



Alaska BioPREP
University of Alaska Fairbanks

TIPS for Teachers is part of the Alaska BioPREP program, or Alaska

Biomedical Partnership for the Research and Education Pipeline, that has shown that students are more likely to attend college and to major in science if they collaborate with university researchers while in high school. We especially reach out to Alaska Native and rural participants.

Alaska BioPREP comprises three main programs: TIPS for Teachers and Students; Rural Alaska Honors Institute II: Next Step, a six week residential summer program at UAF for students to work directly in molecular biology research labs and two modules at the Alaska Summer Research Academy, a two week summer residential program to learn about biotech methods, biomedical careers, and human physiology.