



Program in Biotechnology Education

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BAY AREA BIOTECHNOLOGY
EDUCATION CONSORTIUM

BIOTECHNOLOGY WORKSHOP

August 11, 12, 13, 14, 2009
9:00 AM - 3:30 PM

Location:

Sir Francis Drake High School
1327 Sir Francis Drake Blvd.
Room 414
San Anselmo, CA

Presenters:

Katy Korsmeyer, PhD. (BABEC)
Nicole Markelz (BABEC)
Karen Santiago (PROBE)
Elaine Collins, PhD. (SJSU)



Cost: FREE! Graduate level upper division units may be available through SJSU (fee varies depending on units).

Register online at:

<http://signup.marinschools.org/>

Contact:

Laura Trahan, Program Manager
Education Services
Marin County Office of Education
415-499-5870

Lunch and light refreshments will be provided.



Day 1: Basic Biotech

Required for all teachers new to PROBE.
Recommended for 7-9th Life and Physical Science Teachers.

- Learn how to easily incorporate DNA spooling, micropipet use and electrophoresis into your current curriculum.
- Introduce your students to some of the newer tools of science.
- Hands-on activities to include: DNA Spooling, Micropipettors and Pipet Techniques and Veggie Electrophoresis.

Day 2 and 3: Transformation and PCR

Required for teachers new to implementing transformation and PCR labs. Recommended for teachers wishing to optimize results.

- Find the transformation and PCR labs best suited to your Biology, AP Biology, APES or Integrated Science curricula.
- Learn how to trouble-shoot lab prep and protocols to improve results.
- Discuss best practices for incorporating these labs into your existing course.
- Hands-on activities to include pGLO transformation, GFP protein purification and Alu PCR.

Day 4: Advanced and Inquiry-Based Labs

Option 1 - GMO: Previous experience in PCR or participation in Days 2 & 3 required.

- Identify genetically modified foods in your students' diets.
- Challenge students to think about applications and ethics of Biotech.

Option 2 - Diabetes Technology: No previous biotech experience required. Suggested for High school Biology, Physiology, Nutrition and AP Bio courses.

- Help students understand the implications of living with Diabetes while learning to use glucose meters and how nutrition affects diabetes.
- Cover the biochemistry and metabolism of hormonal control of blood glucose.