Community teaching opportunities

Sarah Laun PhD
Lab and Program Manager of
Baltimore Underground Science Space
(BUGSS)

www.bugsssonline.org
Community labs provide citizen access to a reasonably equipped molecular biology lab
People who work in community labs are a diverse group

- Artists
- Lawyers
- Scientists
- High school teachers and students
- Computer programmers
- Engineers
- Entrepreneurs
DIY Biology takes a broad view of science

- Focus on molecular bio, microbiology and synthetic biology (BSL-1)
- Interdisciplinary projects
  - Art
  - Food & Brewing
  - Science and Society
  - Hardware & bioprinting
So what kinds of teaching opportunities exist at a community lab?
Level 1 - For those new to teaching, who want an introductory experience with a small time commitment

Lab Skill Night
- 2 hr hands-on course
- 2-6 people/class
- Teach one technique
  - Restriction digest, gel electrophoresis
  - bacterial transformation, SDS-PAGE

Teaching Assistant
- Assist with a lab class at BUGSS
- Deliver 1-2 mini-lectures
- Low-pressure environment
Level 2- For those who want experience teaching and designing courses

- Teach a course (1-4 sessions of ~4 hours each)

- Instructors will receive student feedback on course design and implementation.

- Opportunity to teach course several times to adapt, revise, and show improvement
Third Level – for those who want the opportunity to adapt their own research into a teaching setting

- Develop a hands-on course based on your research
  - 1-4 sessions of ~4 hours each

- Mentoring will be provided to determine the appropriate scope and level of course content

- Discussions of the ethical and social impacts of the research encouraged
Upcoming Teaching Opportunities

- **Sips ‘n SNPs**
  - Friday July 15th 7-9 pm
  - Wine and discussion of direct-to-consumer genotyping

- **CRISPR Intro**
  - Saturday Aug 4th -25th 10am - 2pm
  - Design and clone a guide RNA; CRISPR mutagenesis in yeast

- **Food Forensics**
  - 4 Saturdays Oct/Nov (9am-1 pm)
  - Barcoding different food samples to confirm species

- **Behavioral genetics**
  - 1 Saturday Nov/Dec (9am-1 pm)
  - Associative behavior and chemotaxis in *C. elegans*
Other opportunities

- **Public outreach**
  - Open houses for the public, school groups, community fairs, blogging
  - Increase public understanding of science

- **Mentor a research project**
  - Help with literature reviews, designing protocols, supervising lab work, creating presentations
  - Gain experience mentoring students

- **Give a seminar**
  - Present your research to the public
  - Gain experience communicating to a lay audience
Please contact us for more info!

- Email BUGSS: [info@bugsssonline.org](mailto:info@bugsssonline.org)
- Sarah Laun (me) [slaun@bugsssonline.org](mailto:slaun@bugsssonline.org)
- Check us out online:
  - [www.bugsssonline.org](http://www.bugsssonline.org)
  - @Bugssslab (Twitter, Facebook, Instagram, LinkedIn)