Institute for STEM Education
Biotechnology Teaching Laboratory

About the BTL
The BTL services school districts across Long Island and NYC. Students in grades 7-12 are brought to the BTL by their teacher to complete a laboratory activity. All of the labs focus on biotechnology and are usually used to fulfill a required Living Environment or AP Biology lab.

Scheduling
Whether you are assisting or observing, your time in the Biotechnology Teaching Lab is interactive with both the instructor and the students. You are expected to be present and on time each day.

- Contact Debbie Pelio (istem@stonybrook.edu) with the following information:
  - Cell Phone Number
  - E-mail Address
  - Availability – days of the week and time frame
- Check the calendar regularly for dates that you have been scheduled
- http://istem.stonybrook.edu/content/calendar
- In case of cancellation due to illness/emergency please call the I-STEM Office at 631-632-9750 at any time and leave a message
- In the case of inclement weather, Judy Nimmo will call/text to let you know whether or not the school is still planning on attending
- If you need to adjust your schedule speak with Debbie IN ADVANCE

Always check the calendar the night before you are scheduled to confirm room number and time

Dress Code
- Closed toe shoes are required
- Clothing should be neat, professional and appropriate for lab work
  - Jeans are permitted as long as they are neat (no torn, ripped, baggy jeans allowed)

Responsibilities
- Arrive 30 minutes before lab is scheduled to begin and plan to stay 30 minutes after lab ends to prepare and clean up lab
- Arrive knowing which lab activity is scheduled for the day and make sure you have read the procedure
- Interact and assist students as they proceed through the lab. Try to guide students through questions rather than telling them the answer.
- Labs include an approximately 30 minute lunch break – a refrigerator and microwave are available in the I-STEM office
- EMPLOYEES ONLY - Make sure to fill in your time sheet in the office and submit to Debbie Pelio at the end of the pay period
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Safety
- No eating, drinking, gum or candy in the laboratory
- Do not apply any make-up or chap stick while in the laboratory
- Wash hands before leaving the lab room
- Three types of trash (regular, non-hazardous and hazardous) – know before you throw!
- Enforce all lab safety rules with students – no exceptions!

Teaching (Employees Only)
We encourage all assistants to take on some teaching responsibilities after attending a few labs. You will start by choosing one portion of the lab, for example, the introduction/warm-up or how to use the equipment, and will teach that portion a few times and then begin to teach additional portions of the lab.

Before teaching a new section of the lab you will be required to write a lesson plan that lays out in detail what you will be covering and a time schedule of the lesson. New ideas and activities are encouraged, especially for the warm-up/introduction portion of the lab. We are always looking for fresh, interactive and “big-picture” activities to incorporate into the labs.

Labs
There are five labs offered in the BTL:
- Forensics (FOR)
- Bacterial Transformation (BT)
- Polymerase Chain Reaction of Genetically Modified Foods (PCR)
- Restriction Enzyme Analysis (REA)
- Restriction Enzyme Analysis: Varying Enzymatic Conditions (REA-VEC)

For access to the lab manuals please e-mail: istem@stonybrook.edu

Contact Information
I-STEM Office:
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631-632-9750

Instructors:
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