



PREPARATION



ISOLATION



PURIFICATION



AMPLIFICATION



EXTRACTION



CHARACTERIZATION



SEQUENCING



ANNOTATION



PHAMERATION



FURTHER DISCOVERY

Unpacking “Phage in a Box”

OBJECTIVE

Unpack “Phage in a Box” to get ready for classroom research.

BACKGROUND

“Phage in a Box” is offered to teachers around the country to conduct phagehunting in a classroom setting. This protocol outlines the steps to unpacking “Phage in a Box.”

APPROXIMATE TIME NEEDED

~15 minutes

PROCEDURES

1. **A request for “Phage in a Box” must be received at least 3 weeks prior to shipment date.**
 - a. A detailed research plan is required for a “Phage in a Box” request.
 - b. When requesting a box, make sure to mention supplies that the school already possesses. This includes micropipettors, pipettors, microcentrifuge tube racks, Parafilms, micropipette tips, etc.
 - c. The box will be shipped via UPS 2nd Day Air, unless otherwise noted.
2. A checklist is included in the box. Upon receipt, verify all items meant to be included.
3. The bacteria will be sent in a 250 mL conical tube wrapped in Parafilm, contained in a plastic vessel. Carefully remove the parafilm and vent well. Growing the bacteria in the classroom is also very simple to do (See **PREPARATION: Growing *Mycobacterium smegmatis* stlr02**).
4. Refrigerate agar plates until use. If a tube of leucine is requested/sent, refrigerate it as well. Everything else is to be stored at room temperature.
5. All media/reagent additives have been added prior to shipment. This means that the phage buffer already contains CaCl₂, and the 7H9 already contains leucine and CaCl₂.
6. Please return the Classroom Phagehunting Report once the class activity is over. The Report form will be included in the box, and can also be found online at www.phagesdb.org.