# **Phagehunting Program**





## **Using a Gel-Doc Camera to Take Plaque Pictures**

#### **OBJECTIVE**

To keep a visual record of plaque morphology using a GelDoc XR+ System.

#### **BACKGROUND**

Properly documenting progress and results is a cornerstone of good scientific technique. For this reason, it is imperative that pictures documenting plaque morphology are taken throughout the process of purification to track progress and report findings.

### **HELPFUL TIPS**

- This protocol only outlines procedures for using the GelDoc camera; for instructions and general guidelines to taking good plaque pictures and for instructions using a simple digital camera, please refer to **TOOLBOX Taking Plaque Pictures**.
- The GelDoc system is an expensive piece of equipment. Do not tamper with settings that are not necessary or unfamiliar. If following these instructions cannot generate a good picture, ask for help in the lab as the previous user may have altered certain hardware or settings or software preferences.

#### **PROCEDURES**

1. On the computer, launch "Image Lab" from the dock.



- 2. Click the "New Protocol" button located on the top left of the screen.
- 3. Click "Select," hover over "Custom," and select "Plates."
- 4. Click "Position Gel" (a yellow button on the bottom left of the window). Ensure that the "Epi White" button on the GelDoc camera has been selected.
- 5. Remove the lid of the plate, open the door of the GelDoc camera hood, and place the plate on the transilluminator stage.
- 6. Using the "Live View," center the plate. Click the green "+" and "-" buttons or slide the zoom bar to adjust the image. Exposure and focus will be automatically corrected later, and is not a concern.
- 7. Click "Run Protocol."
- 8. An image will appear in a new window in a few seconds.

- 9. Click the contrast button (-) and adjust the brightness and contrasts.
- 10. Hit "Save." Name the image and save it in an appropriate folder in the hard drive under "Documents."
- 11. Print out the image (and save it in the notebook alongside analyses and explanations) by clicking "File" then "Print." Ensure the correct printer (Mitsubishi P93D) is selected.
- 12. To save a copy of the image in a format that can be recognized by other computers (such as PNG, TIFF, JPG), select "File," then "Export," then "Export for Publication." A 300 or 600 dpi image is suitable for publication, but a 150 dpi image would suffice for most PowerPoint presentations.