

In the first part of this lab students will perform and analyze a disease transmission simulation using a common bacteria and will be introduced to proper streaking techniques. In the second part of this lab students are going to get to know the most commonly used instruments and tools in molecular biology; the micropipetter, the spectrophotometer, a 96-well plate, an SDS gel apparatus, and an agarose gel apparatus. Students will learn the proper procedure for operating pipettors during this exercise and then load an agarose gel, an SDS gel and a 96-well plate.

Concepts: disease transmission, serial dilution

Skills: proper use of micropipettors; loading an SDS gel, agarose gel, and 96-well plate; operating a spectrophotometer; setting up dilutions.