

Grade 8

Heart research from cell to system

Students will experience the ways in which research labs and hospitals investigate heart disease with an emphasis on different cell types in medical research.

Online BIOLab option: live virtual field trip via Teams, Meet or Zoom to see how scientists study heart disease. Observe live heart cells and heart tissue under the microscope and watch a dissection of pig heart.

Time required
1.5h (flexible)

Grade 8 students receive their first introduction to cell theory in the Cells and Systems cluster, and the BIOLab will show students how important cells are in the study of disease. By viewing with live cells and tissues from our labs, students will experience how basic medical scientists observe the mechanisms of disease and how these findings relate to the health of the whole organism.

Specific learning outcomes addressed: 8-1-01 8-1-03 8-1-04 8-1-06 8-1-09 8-1-11 8-1-12 8-1-18

Time Required	Student Experience
15 min	Introduction to the Research Centre and research interests, connect Research Centre labs to cells and systems topics
15 min	View live cells under phase contrast microscope with attention to scale, size, specialization and cell culture techniques
45 min	Watch heart dissection with attention to where and how different types of cardiovascular disease affect the organ
15min	Questions and wrap-up

Please note: times are approximate, and can be scaled to whatever time you have available!

