Grade 8

Cells & Systems – Heart dissection

Students will experience the ways in which research labs and hospitals investigate heart disease with an emphasis on cardiac cells in research and anatomy changes in disease.

Activity: see how scientists study heart disease. Observe live heart cells and heart tissue under the microscope and learn about the heart and heart disease with a pig heart dissection.

Time required
Half day (2.5h)

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
30 min	Introduction to the Research Centre and research interests, connect Research Centre labs to cells and systems topics
10 min	Break for washrooms
15 min	View live cells under phase contrast microscope with attention to scale, size, specialization and cell culture techniques
1 hr 15 min	Participate in a pig heart dissection with attention to heart anatomy and where and how different types of cardiovascular disease affect the organ
15 min	Questions, wrap-up, and clean up

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