

Lab Location

e-Suite, Balcony Level 3



Lab Guides help you make the most of your Museum visit and lab experience. You'll find key concepts, pre- and post-visit classroom activities, and additional resources to continue the exploration.

Lab Guide

Heart Surgery 101



Lab Information

Please let the Lab Coordinator know of any special needs or requests in advance at (773) 947-6782 or learning.lab@msichicago.org. On the day of your lab, please advise the Lab Facilitator of those requests as soon as you arrive.

The Lab Facilitator is not responsible for the discipline of your students and, for safety reasons, has the right to ask disruptive students to leave the lab. Please notify chaperones they will be responsible for student behavior. The Lab Facilitator may request the help of teachers and chaperones during the lab.

Visit Information

Please plan to arrive at the Museum at least 30 minutes before your first lab is scheduled. If you are late to your scheduled lab session, the Museum reserves the right to cancel the lab and reschedule it at a later date if availability permits. If the lab cannot be rescheduled, lab fees are forfeited.

Payments must be received two weeks prior to the lab or it will be cancelled. Labs cancelled with fewer than two weeks notice will not be refunded. Based on availability, labs may be rescheduled for a handling fee of \$10. No exceptions.

We look forward to seeing you at the Museum!

About the Lab

Learn about careers in the OR, handle real surgical tools and ask questions while watching a pre-recorded session of open heart surgery. After your session, explore the heart and body further in the Museum's exhibit *YOU! The Experience*, located in Abbott Hall.

Grade: 7th-12th
Capacity: 35 students
Duration: 75 minutes

Illinois Learning Standards

4: A; 5: B, 11: A; 12: A, B; 13: A, B; 22: A, B, C; 23: A, B, C



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Key Concepts

Review with your students before your visit.



Angiogram

An x-ray that uses dye injected into the arteries to study blood circulation.

Atherosclerosis/arteriosclerosis

Commonly called “hardening of the arteries,” a variety of conditions caused by fatty or calcium deposits in the artery walls causing them to thicken.

Bypass

An alternative passage created surgically to divert the flow of blood around a blockage.



Coronary

Of or pertaining to the human heart, with respect to health.

Heart attack (myocardial infarction)

Occurs when one or more regions of the heart muscle experience a severe or prolonged decrease in oxygen supply caused by blocked blood flow to the heart muscle.



Graft

Replacing or repairing a damaged body part by surgically transplanting or implanting something onto it (living tissue, for example).

Plaque

Deposits of fat or other substances attached to the artery wall.

Risk factor

A condition or activity that might adversely affect the heart.

Pre- and Post-Visit Activities

Find more activities at www.livefromtheheart.org.

Risk Factors – Before your visit, ask your students to make a list of risk factors for heart disease. Visit some of the websites below to learn more about the heart, cardiovascular system and cardiovascular disease.

Resources

- MSI's *Live ... from the Heart* program
www.livefromtheheart.org
- American Heart Association
www.heart.org
- Discovery Health
<http://health.discovery.com/centers/heart/heart.html>
- KidsHealth
www.kidshealth.org