

STEM in Action

Experience how scientific discoveries are translated into products that benefit society through one-week online tracks in the biological sciences and in engineering.

Fully Online
Application Deadline: May 15

2025 Tracks

Session 1 (June 16 – June 20)

- *Drug Discovery I* – Explore the drug discovery process and mechanism of drugs used for neurology, oncology and other fields. Pitch a new drug molecule as a team. Ideal for students interested in medicine and research.
- *Medical Device Development* – Learn about the medical device industry and product design, manufacturing, and regulatory approval. Ideal for engineering students exploring industry options and future healthcare professionals who are interested in the design of medical technology.

Session 2 (July 7 – July 11)

- *Biopharmaceutical Process Engineering* – Explore the manufacturing process of biopharmaceutical drugs such as antibodies, vaccines, and cell and gene therapy. Ideal for biology majors exploring engineering concepts, and chemical engineers who want to learn more about biology.
- *Biotech Industry Careers* – unravel the multitude of career opportunities in the healthcare and biotechnology sectors. Ideal for STEM majors interested in business, innovation, and related areas.
- *Drug Discovery II* – See description in session 1
- *Next Generation Sequencing* – explore the genetic code using breakthrough technology and learn about its application to diagnosis of cancer, inherited disorders, and infectious diseases. Ideal for students interested in medicine and genetics.
- *Population Health* – tackle the challenges of providing quality care in the current healthcare system. Quantify health disparities, social determinants of health, and other factors linked to poor outcomes. Ideal for students interested in medicine and public health.
- *Public Health and Virology (PHV)* – Learn about viruses, viral infections, and prophylactic vaccines. Explore how recombinant viruses can be used to develop new, targeted therapeutics. Ideal for students interested in medicine and research.

