



# MEDI 501: Principles of Preclinical Translational Science

## A CASE STUDY FROM CANCER DRUG DISCOVERY AND DEVELOPMENT



### BACKGROUND

The [National Center for Advancing Translational Sciences \(NCATS\)](#), part of the [National Institutes of Health \(NIH\)](#), and the [Foundation for Advanced Education in the Sciences \(FAES\)](#) have partnered to offer an online course in the principles of translational science.

**Translation** is the process of turning observations in the laboratory, clinic and community into interventions that improve the health of individuals and the public — from diagnostics and therapeutics to medical procedures and behavioral changes.

**Translational Science** is an emerging field that seeks to identify broadly generalizable scientific and operational principles for translational research. Translational science examines translational research from a systems perspective to develop approaches that can improve the efficiency and effectiveness of translational research endeavors, broadly.

In this course, students will learn key principles of translational science, taught by way of a case study of a highly successful translational research partnership involving NCATS, the National Cancer Institute (NCI), Northwestern University and the University of Kansas. The partnership produced a promising potential drug shown to inhibit metastasis in animal models, which is being examined in a first-in-human clinical trial in 2020.



### COURSE LEARNING OBJECTIVES

- Understand the definitions and goals of translational research and translational science and how they differ.
- Identify a range of scientific and operational principles that can be applied to enhance preclinical translational research projects.
- Learn about the research process necessary to enable a scientific discovery to produce an effective compound that can be used in humans.
- Learn about the varied roles of different disciplines, as well as agencies — including industry, government agencies, and academic faculty and institutions — in advancing translational research and how to facilitate effective interagency and team-based partnerships.



### WHO SHOULD TAKE THIS COURSE

- Individuals interested in exploring translational science as a research area or career path
- Individuals interested in learning scientific, operational, and partnership principles for effective translational research
- Faculty involved in translational science education and training programs



### DETAILS

**Registration** is now open. Visit <https://faes.org>.

**Dates:** September 8 – October 23, 2020

**Fee:** The fee for this initial offering of the course is \$50 per person.

**Learn more about the course and register:**  
<https://faes.org>.