

Audience-based Learning Objectives

The **three overarching learning objectives** that apply to any audience are:

- Develop the skills to think critically about risks and risk mitigation strategies needed in their own scientific environment;
- Enhance the ability to identify strategies and approaches that minimize identified risk while continuing to maintain the high-quality and utility of the scientific activity; and
- Apply the risk analysis framework to their own or their peers' scientific activities.

The following are specific learning objectives for the case study exercise for different audiences.

Students: The objectives are to:

- educate students about the risks they might encounter during the course of a research project; and
- provide them with the critical thinking skills needed to identify, assess, manage, and communicate risks.

Junior faculty: The objectives are to:

- train junior faculty in identifying, assessing, managing, and communicating risks of their own and their students' research; and
- provide them with the skills and knowledge to train their staff and students in analyzing and mitigating risks associated with their research.

Senior faculty: The objectives are to:

- train senior faculty in identifying, assessing, managing, and communicating risks of their own, their peers', and their students' research; and
- provide them with the skills and knowledge to train their staff, junior colleagues, and students in analyzing and mitigating risks associated with their research.

Clinicians and Public Health Scientists: The objectives are to:

- train public health scientists in identifying, assessing, managing, and communicating risks of the epidemiologic and diagnostic work conducted in their laboratories or in the field; and
- provide them with the skills and knowledge to train their staff, junior colleagues, and students in analyzing and mitigating risks associated with laboratory and field studies.

Veterinarians: The objectives are to:

- train veterinarians in identifying, assessing, managing, and communicating risks of the epidemiologic and diagnostic work conducted in their laboratories or in the field; and
- provide them with the skills and knowledge to train their staff, junior colleagues, and students in analyzing and mitigating risks associated with laboratory and field studies.

Ethics Committee or other Research Reviewer: The objectives are to:

- train members of ethics committees or other reviewers of research in identifying, assessing, managing, and communicating risks of research or diagnostic analysis which they must review; and
- provide them with the skills and knowledge to train their colleagues in analyzing and suggesting risk management approaches to the scientist wishing to conduct the research.

Institutional Administrators: The objectives are to:

- Train institutional officials in identifying, assessing, managing, and communicating risks of research or diagnostic analysis which they might oversee; and
- provide them with the skills and knowledge to train their staff, faculty, and students in analyzing and suggesting risk management approaches to the scientist wishing to conduct the research.