

A continuing education course that reviews the biological basis of vaccination as a strategy to control infectious diseases. The course addresses the molecular basis of pathogenesis; with emphasis placed on virus structure/function relationships; host cell interactions; recovery from disease; the immune system and how vaccines work to create immunity; and the essential features of the host-pathogen interaction. Specific examples of important bacterial and viral pathogens along with select agents will be covered and case studies will be provided to promote discussion. **Participants will receive 1.6 CEUs from Texas A&M University upon completion.**

## Course Objectives

- Provide an overview of microbial agents
- Explore structure/function relationship of viruses and bacteria
- Describe different techniques for cultivation and quantitation of microbes
- Discuss epidemiology of infectious diseases
- Review primary roles of immune system in fighting microbial infections
- Examine history, present state, and future of vaccine development
- Discuss how vaccines capitalize on immunological memory to maximize effectiveness
- Present various methods for vaccine delivery, including a discussion on role of adjuvants



**SPECIAL Discount Price\*: \$125**  
**Student Discount Price\*: \$50**

*\*Workshop costs subsidized by federal funds.*

**REGISTER ONLINE: <https://nctmtp.teex.tamus.edu>**

*If you don't already have an account, select "Create Account", be sure to make note of your User Name and Password. Once your account has been created, select "Login".*

*Enroll in your course of choice from the course catalog.*

### ABOUT THE INSTRUCTOR

Dr. David McMurray is a Regents Professor within the Department of Microbial Pathogenesis and Immunology of the Texas A&M Health Science Center College of Medicine. His nearly four decades of research has focused on the impact of vaccination and nutritional status on immune responses and infectious disease, including pulmonary tuberculosis (TB). He has served as an advisor to the World Health Organization (WHO) for nearly ten years, the US-Japan Cooperative Medical Sciences Program for twenty years, and the Aeras Global TB Vaccine Foundation. McMurray is responsible for much of today's current immunology curriculum for the first year medical students and is a member of the College of Medicine Academy of Distinguished Medical Educators.