# HMX Pro Immunology - Novel Therapies for Chronic Inflammation, Autoimmunity, and Allergy

Advances in our knowledge of the immune system are uncovering connections between inflammation and many different diseases. Understanding how the immune system is activated and regulated is essential for anyone working to develop treatments for autoimmunity, chronic inflammation, and allergy, or to apply these treatments in the clinic.

This course offers a unique way for professionals to learn about cutting-edge therapies to treat chronic inflammation and related diseases from leading Harvard Medical School faculty. Participants will:

- Learn the basics of how inflammation can cause disease
- Gain an understanding of the ways drugs can be used to dampen the inflammatory response, including anti-cytokine therapies and therapies that target immune cells, migration, and signaling
- See examples of how knowledge of the inflammatory response can be used to treat a variety of diseases

### **Topics Covered**

### Overview of Inflammatory Disease

- What is Inflammation?
- The Promise of Treating Chronic Inflammatory Diseases

## The Immunology of Inflammatory

- Autoimmunity, Chronic Inflammation, and Transplants
- Allergies
- · Therapeutic Approaches
- Clinical Linkage: Psoriasis and Rheumatoid Arthritis

### **Anti-Cytokine Therapies**

- Anti-TNF Therapies
- Anti-IL-1 Therapies
- · Anti-IL-6 Therapies
- · Anti-IL-4, IL-5, and IL-13 Therapies
- · Anti IL-17, IL-12, and IL-23 Therapies
- Anti-CD25 Therapies
- Clinical Linkage: Treatment of Psoriasis

# Targeting Immune Cells, Migration, and Signaling

- B Cell Depletion
- Cell Migration Inhibitors
- JAK Inhibitors
- CTLA-4 Agonists
- Anti-IgE and Anti-C5 Therapies
- Novel Therapies
- Clinical Linkage: Treatment of Rheumatoid Arthritis

#### Wrap-up

• The Future of Treating Chronic Inflammatory Diseases The HMX Pro Series offers a new online learning experience designed to get busy professionals up to speed on the latest advances in medicine. Concepts are taught using whiteboard-style videos and animations and reinforced by interactive elements, true-to-life scenarios, and real patient cases to enhance learning.

