



## 2023 **BIO**Briefing: Biotech for the Non-Scientist

Boston Convention and Exhibition Center, 415 Summer Street, Boston, MA 02210

Sunday, June 4, 2023 | 9:00 a.m.–3:30 p.m.

### Are you a non-scientist?

#### Take **BIO**Briefing to better engage with industry leaders at **BIO2022**

Join Biotech Primer for an exciting day of learning the science driving today's hottest biopharma innovations. Learn how the industry mimics and manipulates foundational biology to create checkpoint inhibitors, CRISPR, CAR-T, gene therapy, and much more. **BIO**Briefing is ideal for non-scientists who work on the business side of biopharma or provide services to the industry. Join us!

- Achieve greater scientific literacy
- Converse more effectively with industry leaders, clients, scientists, and regulators
- Understand how innovative therapeutics work to cure disease

*Complimentary breakfast will be served, 7:30–8:30 a.m.  
The Course Registration desk will open at 7:30 a.m.*

### Agenda

#### How Biology Is The Basis Of Biotechnology

9:00 a.m.–10:00 a.m.

- Biotechnology Defined
- Cell Types Used in Biotechnology
- Cell Structure and Function
- Cell Signaling Network

#### How DNA And Proteins Are Biotech's Workhorse

10:00–11:00 a.m.

- DNA Structure and Function
- *DNA Isolation and Extraction Lab*
- DNA Codes for Proteins
- Protein Structure and Function
- Post-Translational Modifications
- Industry Applications
  - Kinase Inhibitor
  - Proteomics

#### How Disease Occurs In Your Body

11:00 a.m.–12:00 p.m.

- Genetic Disease
  - Mutation Types and Causes
  - Genetic Variation in Humans
  - Genetic Basis of Disease
- Infectious Disease
  - Pathogens
  - Bacterial Infectious Disease
  - Viral Infectious Disease

Lunch 12:00 p.m.–1:00 p.m.

#### How Your Body Fights Disease

1:00 p.m.–2:00 p.m.

- The Immune System
- B-Cells and Antibodies
- Antigens, Immunogens and Epitopes
- T-Cells

#### How Biologics Fight Disease

2:00 p.m.–3:15 p.m.

- Drug Categories
- Drug characteristics
- Purpose and Mechanisms of Actions
  - Therapeutic antibodies
    - Monoclonal Antibodies
    - Bispecific Antibodies
    - Checkpoint Inhibitors
  - Gene Therapy
  - Gene Editing
    - CRISPR
  - Cell Therapy
    - CAR-T

Wrap-Up 3:15 p.m.–3:30 p.m.

**Professional Development Program Reception**  
4:45 p.m.–6:00 p.m.