



2024 **BIO**Briefing: Biotech for the Non-Scientist

San Diego Convention Center, 111 Harbor Drive, San Diego, CA 92101

Course Schedule

Sunday, June 2, 2024, 9:00 a.m. – 3:30 p.m.

Are you a non-scientist?

Take **BIO**Briefing to better engage with industry leaders at **BIO2024**

Join Biotech Primer for an exciting day of learning the science driving today's hottest biopharma innovations. Learn how the industry mimics and manipulates DNA and proteins to create ADCs, PRIME and BASE editors, CAR-M, CAR-Til 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.

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

How Biology is the Basis of Biotechnology

9:30 a.m. – 10:00 a.m.

- Biotechnology Defined
- Cell Types Used in Biotechnology
- Cell Structure and Function
- Cell Signaling Network
- Drug Targets
- Agonist and Antagonist Drugs

How DNA and Proteins are Biotech's Workhorse

10:00 a.m. – 11:00 a.m.

- DNA Structure and Function
- *Lab: DNA Isolation and Extraction*
- DNA Codes for Proteins
- Protein Structure and Function
- Post-Translational Modifications
- Kinase Inhibitors and Cancer
- The Proteome and AI
- First AI-Generated Medicines

How Disease Occurs in Your Body

11:00 a.m. – 12:00 p.m.

- Genetic Disease
 - Mutation Types and Causes
 - Genetic Variation in Humans
 - *Lab: Taste Test*
 - 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: Helper, Cytokine
- Immune Challenges: Cytokine Storms

How Drugs Fight Disease

2:00 p.m. – 3:15 p.m.

- Small and Large Molecule Drugs
- Drug Modalities
- The Drug Regulatory Agencies
- Innovator Drugs, Generics, and Biosimilars
- Therapeutic Antibodies
 - Monoclonal Antibodies
 - Antibody Drug Conjugates
 - Bispecific Antibodies
 - Checkpoint Inhibitors
- Gene Therapy
 - Gene Editing: CRISPR, PRIME, BASE
- Cell Therapy: CAR-T, CAR-NK, CAR-MA, CAR-Til
 - Autologous vs Allogeneic Cell Therapies

Wrap-Up

3:15 p.m. – 3:30 p.m.

BIO Professional Development Program Reception

4:45 p.m. – 6:00 p.m.