



BioBasics: Biotech for the Non-Scientist

Date: April 29-30, 2010

Time: 9:00am-4:30pm

Fee: MassBio Members: \$1160

Non-Members: \$1310

Discount Code: BB1029

Location: One Cambridge Center, 9th floor, Cambridge, MA 02142

Day 1

Industry Overview 9:00-9:45

- Evolution of Biotechnology
- Industry Sectors
- USA & Global Industry Clusters

Biology Basics 9:45-10:30

- Biotechnology Goals
- Cell Structure & Function

DNA 10:45-12:00

- DNA Structure & Function
- Chromosomes & Genes
- Mutations
- Genetic Variation
- Pharmacogenomics

Lunch 12:00-1:00

Gene Expression 1:00-2:30

- DNA to Proteins
- Protein Structure & Function
- Measuring Gene Expression
- RNA Interference

Genomics 2:45-4:30

- How to Study the Genome
- PCR
- Restriction Enzymes
- DNA Fingerprinting
- Microarrays

Day 2

Genetic Engineering 9:00-10:00

- Recombinant DNA
- Plasmids
- Generically Engineered Cells
- Disease Models

Proteomics 10:00-11:00

- How to Study the Proteome
- Microarrays & Chromatography

Stem Cells 11:15-12:30

- Properties of Stem Cells
- Types of Stem Cells
- Promises & Challenges

Lunch: 12:30-1:30

Immune Response 1:30-2:30

- Inflammation
- T & B Cells
- Monoclonal Antibodies
- Vaccines

Drug Discovery & Development 2:45-4:30

- Drug Discovery Timeline
- Rational Drug Discovery
- Target Validation
- Pharmacogenomics
- Preclinical and Clinical Trials
- Generics & Biosimilars

Deliverables: A reference manual containing all of the slides used in the class, additional scientific information and a glossary of biotech terms. A continental breakfast and lunch will be served.

In addition, participants will be given access for 60 days to BioPrinciples Online, an 8-hr, highly interactive online course on the basics of biotech. This online course costs \$595 if purchased alone.

Questions? Contact BioTech Primer at 410-377-4429 or info@BiotechPrimerInc.com

To Register: www.BiotechPrimerInc.com and click on "Registration"