### Event at a Glance

**Stream #1**

**UPSTREAM PROCESSING**
- C1A: Optimizing Cell Culture Technology
- C2A: Continuous Processing in Biopharm Manufacturing
- C3A: Host Cell Proteins
- C4A: Rapid Methods to Assess Quality & Stability of Biologics

**Stream #2**

**DOWNSTREAM PROCESSING**
- C2B: Advances in Purification & Recovery
- C3B: Accelerating Analytical Development
- C4B: Optimizing Biologics Formulation and Stability

**Stream #3**

**ANALYTICAL & QUALITY**
- C3C: Process Characterization and Control
- C4C: Gene Therapy Manufacturing
- C5A: Cell Therapy CMC and Analytics
- C5B: Cell Therapy Manufacturing

**Stream #4**

**FORMULATION & STABILITY**
- C6B: Gene Therapy CMC and Analytics
- C7B: Digital Biomanufacturing
- TS4B: Bioprocess Strategies from Development to BLA
- TS5B: Introduction to Analytical Characterization and Method Validation for Protein Therapeutic Drugs

**Stream #5**

**CELL THERAPY**
- TS6B: Introduction Quality by Design (QbD) for Biopharmaceuticals
- TS7B: Comparability for Cell and Gene Therapies
- TS8C: Design of Experiments for Cell and Gene Therapies

**Stream #6**

**GENE THERAPY**
- TS8C: Design of Experiments for Cell and Gene Therapies

**Stream #7**

**MANUFACTURING**
- TS4B: Bioprocess Strategies from Development to BLA
- TS5B: Introduction to Analytical Characterization and Method Validation for Protein Therapeutic Drugs
- TS6B: Introduction Quality by Design (QbD) for Biopharmaceuticals
- TS7B: Comparability for Cell and Gene Therapies

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**Short Courses**

**AUGUST 24-25**

- C1B: Bioproduction: Scale, Bioreactors & Disposables
- C2B: Advances in Purification & Recovery
- C3B: Accelerating Analytical Development

**AUGUST 26-27**

- C2C: Detection, Characterization and Control of Impurities in Biologics
- C4B: Optimizing Biologics Formulation and Stability
- C5B: Cell Therapy Manufacturing

**AUGUST 27-28**

- C1C: Optimizing Cell Line Development
- C2C: Detection, Characterization and Control of Impurities in Biologics
- C3C: Process Characterization and Control

*Separate Registration Required for Short Courses*