

		Sunday	Monday	Tuesday	Wednesday	Thursday	Areas
8:30 - 11:30	A	<u>Advances in Metabolic Engineering</u> (BIOT035)	Protein Expression and Post-Translational Modification (BIOT038)	Advances in Cell Culture Process Development: Cellular (BIOT033)	Advances in Microbial and Algal Fermentation Process Development (BIOT036)	Protein Engineering for Follow-On Biologics: Affinity, Potency, Stability, Immunogenicity, Half-life (BIOT027)	Upstream
	B	Biomolecular Conjugation Engineering (BIOT004)	Novel Biophysical Characterization and Bioanalytical Technologies II (BIOT046)	Formulation Challenges for Biotherapeutics I (BIOT 005)	Stability Challenges during Bioprocessing and Drug Delivery I (BIOT009)	<u>Protein Self Association/ Assembly I</u> (BIOT008)	Downstream
	C		Advances in Cell-based Therapeutics (BIOT016)	Design and Engineering of Novel Therapeutic Modalities I (BIOT018)	Novel Biomaterials for Directing Cell and Tissue Response I (BIOT020)	Emerging Technologies: Nanobiotechnology I (BIOT019)	Biophysical/ Biomolecular
	D	Defining Design Space for Manufacturing Processes: Application of Design of Experiments (DOE) and Risk Based Approaches (BIOT029)	<u>Workshop: FDA Biotech QbD Pilot Program</u> (BIOT031)	<u>Focus on Mabs: Challenges and Case Studies</u> (BIOT013)	Advances in Purification Technology: Emerging Technologies I (BIOT010)	Advances in Purification Technology: Non-Chromatographic Bioseparations (BIOT011)	QbD
	E		Session in Honor of Fred Heineken on the Occasion of His Retirement from NSF (BIOT041)	Recent Advances in Fermentation and Product Separation Technologies for the Production of Fuels and Chemicals from Biomass (BIOT001)	Recent Advances in Microbial Production of Biofuels and Biochemicals I (BIOT002)		Emerging Technologies
1:30 to 12:30pm	LUNCH			Future Program/BIOT Business Meeting	Program Chair's Meeting		Biofuels & Bioproducts
12:30 - 1:30pm	D	E. V. Murphree Award in Industrial & Engineering Chemistry	<u>Future & Impacts of HSC Panel Discussion</u> (BIOT021)	keep open lunch time	Elmer Gaden/Award Lecture		Follow on Biologics
1:30 - 4:30pm	A	Advances in Cell Culture Process Development: Reactors (BIOT034)	Non-mAb Proteins and Non-Conventional Expression Hosts: Downstream Challenges and Case-Studies (BIOT014)	Advances in Biocatalysis (BIOT032)	<u>Host System and Protein Expression Engineering for Follow-on Biologics</u> (BIOT025)	Innovations in Process and Analytics for Development of Follow-on Biologics (BIOT023)	Award Lecture
	B	Novel Biophysical Characterization and Bioanalytical Technologies I (BIOT007)	Molecular Recognition Engineering (BIOT006)	Formulation Challenges for Biotherapeutics II (BIOT045)	Stability Challenges during Bioprocessing and Drug Delivery II (BIOT044)	Protein Self Association/ Assembly II (BIOT048)	
	C	<u>Synthetic Biology</u> (BIOT022)	Advances in Stem Cell Engineering (BIOT017)	Design and Engineering of Novel Therapeutic Modalities II (BIOT049)	Novel Biomaterials for Directing Cell and Tissue Response II (BIOT051)	Nanobiotechnology II (BIOT050)	
	D	Identification of Critical Quality Attributes (CQAs) and Alignment with Critical Process Parameters (CPPs) for Biopharmaceutical Products (BIOT030)	<u>Biochemical Technology in California: Past, Present and Future</u> (BIOT042)	Advances in Purification Technology: Emerging Technologies II (BIOT047)	Process Modeling and Design: Principles and Case Studies (BIOT015)	Advances in Purification Technology: Optimization at the Molecular Level (BIOT012)	
	E			Recent Advances in the Deconstruction of Lignocellulosic Biomass (BIOT003)	Recent Advances in Microbial Production of Biofuels and Biochemicals II (BIOT043)		
5:00 - 6:00 pm	D	Perlman Lecture	Industrial Biotechnology Award/Lecture	Marvin J. Johnson Award/Lecture	BIOT Young Investigator Award/Lecture		
6:00-9:00 pm	Reception	BIOT Reception	Sci/mix free evening	Reception/Poster Session	Reception/Poster Session		

Session with keynote talk

BIOT fundraising dinner