

BIOENGINEERING GUIDE

2025 / AIChE
ANNUAL
MEETING

NOVEMBER 2 - 6, 2025

John B. Hynes Veterans Memorial
Convention Center
Marriott Copley Place
Sheraton Back Bay



CHEMICAL
ENGINEERING
REIMAGINED

WE RECOGNIZE THIS YEAR'S AWARD WINNERS



JAMES E. BAILEY AWARD



DANIEL G. ANDERSON
MASSACHUSETTS INSTITUTE
OF TECHNOLOGY



D.I.C. WANG AWARD FOR EXCELLENCE IN BIOCHEMICAL ENGINEERING



COSTAS D. MARANAS
THE PENNSYLVANIA
STATE UNIVERSITY



JUNE WISPELWEY BIO LEADERSHIP FELLOWSHIP



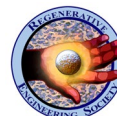
KARMELLA ANN HAYNES
EMORY UNIVERSITY



BIOTECHNOLOGY PROGRESS PUBLICATION AWARD



MACIEK ANTONIEWICZ
UNIVERSITY OF MICHIGAN



CATO T. LAURENCIN REGENERATIVE ENGINEERING SOCIETY FOUNDER'S AWARD



NICHOLAS PEPPAS
UNIVERSITY OF TEXAS AT AUSTIN

AWARD SESSIONS, PLENARIES AND RECEPTIONS

MONDAY, NOVEMBER 3, 2025

11:00 AM - 12:20 PM	Featured Session: Development of a Novel Platform to Deliver Large Volume Synthetic Peptides: The Commercialization of Tirzepatide Location: John B. Hynes Veterans Memorial Convention Center, 302
1:45 PM - 3:15 PM	The Langer Prize for Innovation and Entrepreneurial Excellence Award Presentation and Lecture by Mark Blenner Location: Ballroom A (Third Level, Hynes Convention Center)
6:15 PM - 7:00 PM	Cato T. Laurencin Regenerative Engineering Founder's Award Lecture by Nicholas Peppas Location: Ballroom A (Third Level, Hynes Convention Center)
7:00 PM - 8:15 PM	Cato T. Laurencin Regenerative Engineering Founder's Award Reception Location: Ballroom A (Third Level, Hynes Convention Center)

TUESDAY, NOVEMBER 4, 2025

11:15 AM - 12:15 PM	Andreas Acrivos Award for Professional Progress in Chemical Engineering Lecture by Ali Khademhosseini Location: Ballroom A (Third Level, Hynes Convention Center)
6:10 PM - 7:20 PM	SBE Award Session featuring the 2025 James E. Bailey Award & D.I.C. Wang Award Lectures, Biotechnology Progress Award, & June C. Wispelwey Fellowship Award. Location: Ballroom A (Third Level, Hynes Convention Center)
7:20 PM - 8:20 PM	SBE Hospitality Reception Location: Ballroom A (Third Level, Hynes Convention Center)

SBE conferences cover the bioengineering field.

SBE conferences bring you the latest developments from fundamental and emerging fields of bioengineering. Engage with an international community of researchers and innovators with diverse backgrounds, expertise and skillsets.

Discover these SBE conferences and be part of a community dedicated to advancing the integration of biology with engineering:

- Synthetic Biology: Engineering, Evolution and Design (SEED)
- International Mammalian Synthetic Biology Workshop (mSBW)
- Commercializing Industrial Biotechnology Conference (CIB)
- Genome Engineering Conference
- Cell Free Systems Conference
- International Conference on Microbiome Engineering (ICME)
- AfroBiotech Conference
- Optogenetic Technologies and Applications Conference
- Quantum Computing Applications in Chemical & Biochemical Engineering Workshop
- International Conference on Biomolecular Engineering (ICBE)
- RNA Technology Conference
- International Conference on Accelerating Biopharmaceutical Development (AccBio)

Grow your network, present your research, and collaborate on breakthroughs.

SBE's meeting formats encourage close interactions and discussions between researchers of all expertise levels and disciplines, including faculty, industry program leads, students, post-docs, and industry scientists and engineers.



View the complete list of conferences and join your bioengineering community.



Follow us on LinkedIn to stay connected and informed about SBE activities.

ADD TO YOUR MEMBERSHIP

Established by AIChE, the **Society for Biological Engineering** is a community for engineers and applied scientists integrating biology with engineering.

Be a part of a vibrant community who share your passions.

As a member of SBE, you will enjoy a vast array of opportunities to communicate with leading international engineers, researchers, academics and scientists. Connect for ideas, inspiration, and technical information.



- Gain an international professional network
- Receive discounts on leading biological engineering conferences
- Access first-hand information from academic and industrial experts
- Enjoy SBE's monthly e-newsletter Connections
- Read through a semi-annual BioSupplement to Chemical Engineering Progress (CEP)
- Realize a voice in education, employment and technology advancement topics
- Watch webinars featuring cutting edge topics covered by the current experts

Join today!

www.aiche.org/sbe/membership

Managing Board

SBE is governed by a Managing Board of industrial and academic leaders, which sets the course for the society.

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ADD TO YOUR MEMBERSHIP



The **FP&BE** division ("Division 15") provides engineers and scientists interested in the field of food, pharmaceuticals, and bioengineering with places to join and to discuss. It also supplies technical publications and information in these fields, including papers at national Institute meetings.

In addition, the division coordinates the Institute's activities in the fields of food, pharmaceuticals, and bioengineering with the activities of other related societies. Further, the FP&BE encourages the focus of biological sciences in chemical engineering curricula and promotes the application of sanitary design principles for process equipment and installations.

More information at: www.aiche.org/fpbe



The **Pharmaceutical Discovery, Development and Manufacturing Forum (PD2M)** promotes the interchange of ideas, concepts, know-how, and experiences in Pharmaceutical Discovery, Development and Manufacturing with other groups within and outside of the Institute.

More information at: www.aiche.org/pd2m



The **International Metabolic Engineering Society (IMES)**, seeks to promote and advance metabolic engineering as an enabling science for bio-based production of materials, pharmaceuticals, food ingredients, chemicals and fuels.

More information at: www.aiche.org/imes



The mission of **The Regenerative Engineering Society** is to promote and advance regenerative engineering, a new field defined as the Convergence of Advanced Materials Sciences, Stem Cell Science, Physics, Developmental Biology and Clinical Translation for the regeneration of complex tissues and organ systems.

More information at: www.aiche.org/resociety

HIGHLIGHTS

FEATURED PROGRAMMING Be sure to attend these conference highlights –

SUNDAY, NOVEMBER 2, 2025

Area Plenary: Bionanotechnology (Invited Talks)

3:30 PM – 6:00 PM

Sheraton Boston, 3 Commonwealth

MONDAY, NOVEMBER 3, 2025

Area Plenary: Leaders in Biomaterials

8:30 AM – 10:00 AM

Sheraton Boston, 2 Constitution Ballroom A

Featured Session: Development of a Novel Platform to Deliver Large Volume Synthetic Peptides: The Commercialization of Tirzepatide

11:00 AM - 12:20 PM

John B. Hynes Veterans Memorial Convention Center, 302

The Langer Prize for Innovation and Entrepreneurial Excellence Award Presentation and Lecture by Mark Blenner

1:45 PM - 3:15 PM

Ballroom A (Third Level, Hynes Convention Center)

Regenerative Engineering Society III

3:30 PM – 6:00 PM

Hynes Convention Center, Exec Boardroom 300

Pharmaceutical Discovery, Development, and Manufacturing Forum Awards Ceremony

6:15 PM – 8:00 PM

Hynes Convention Center, 309

Cato T. Laurencin Regenerative Engineering Founder's Award Lecture and Reception

6:15 PM – 8:30 PM

Hynes Convention Center Ballroom A

TUESDAY, NOVEMBER 4, 2025

Andreas Acrivos Award for Professional Progress in Chemical Engineering Lecture: Engineering in Precision Medicine

11:15 AM – 12:15 PM

Hynes Convention Center Ballroom A

Ali Khademhosseini, *Terasaki Institute for Biomedical Innovation*

Division Plenary: Food, Pharmaceutical, and Bioengineering Division (Invited Talks)

3:30 PM – 6:00 PM

Hynes Convention Center, 306

SBE Awards Session

6:15 PM – 8:10 PM

Hynes Convention Center Ballroom A

James E. Bailey Award Lecture:

Engineering Materials for Genetic Medicine

Daniel G. Anderson, *Massachusetts Institute of Technology*

D.I.C. Wang Award Lecture:

Optimization and AI-guided Explorations in Biochemical Engineering

Costas D. Maranas, *The Pennsylvania State University*
SBE's Hospitality Reception

WEDNESDAY, NOVEMBER 5, 2025

Plenary Session: Pharmaceutical Discovery, Development and Manufacturing Forum

8:00 AM – 10:30 AM

Hynes Convention Center, 302

John M. Prausnitz AIChE Institute Award Lecture

11:15 AM – 12:15 PM

Hynes Convention Center Ballroom A

Process Engineering at the Dawn of AI

James Rawlings, *University of California, Santa Barbara*

BIOENGINEERING PROGRAM GRID

Property Key

Hynes Convention Center = **HCC** | Marriott Boston Copley = **MBC** | Sheraton Boston = **SB**

TIME	SESSION #	SESSION	PROPERTY	ROOM
FRIDAY OCT. 31ST				
6:10 PM - 6:55 PM		STEM Ambassadors - Exposing STEM to Future Generations	HCC	105 (Plaza Level)
SATURDAY NOV. 1ST				
11:00 AM - 11:45 AM		AI in the Workplace	HCC	312 (Third Level)
11:00 AM - 11:45 AM		Materials Engineering and Sciences in AIChE	HCC	202 (Second Level)
11:00 AM - 11:45 AM		Mixing in Aerobic Fermentation Processes	HCC	311 (Third Level)
11:00 AM - 11:45 AM		Sponsored Workshop - Merck EMD	HCC	310 (Third Level)
11:00 AM - 11:45 AM		Sponsored Workshop - TBD Rm 201	HCC	201 (Second Level)
11:00 AM - 11:45 AM		Survive and Advance with Confidence: Navigating the Ph.D. Labyrinth	HCC	309 (Third Level)
12:45 PM - 1:30 PM		Navigating Dynamic Careers in Catalysis & Reaction Engineering	HCC	202 (Second Level)
12:45 PM - 1:30 PM		The World of Particle Technology	HCC	311 (Third Level)
1:40 PM - 2:25 PM		Food, Pharmaceutical & Bioengineering Division Student Workshop	HCC	202 (Second Level)
SUNDAY NOV. 2ND				
9 AM - 4:30PM		Circular Bioeconomy Workshop	MBC	Salon HI (Fourth Floor)
3:30 PM - 6:00 PM	16	Electrochemical Advances to Enable Efficient Oxygen, Hydrogen and Water Reactions	SB	Fairfax A (3)
3:30 PM - 6:00 PM	22	Advances in Biosensing for Diagnostic Applications	HCC	310 (Third Level)
3:30 PM - 6:00 PM	23	Biomufacturing of Food and Bioproducts	HCC	305 (Third Level)
3:30 PM - 6:00 PM	24	Biomolecular Engineering: Synthetic Biology and Genetic Engineering	HCC	306 (Third Level)
3:30 PM - 6:00 PM	25	Drug and Gene Delivery: Lipid Nanoparticles	HCC	303 (Third Level)
3:30 PM - 6:00 PM	26	Metabolic Engineering- General Topics	HCC	301 (Third Level)
3:30 PM - 6:00 PM	27	Advanced Separations Processes in Bioprocessing and Biomaterials	MBC	Exeter (Third Floor)
3:30 PM - 6:00 PM	28	Catalytic and Thermochemical Conversion of Lignocellulosic Materials	MBC	Dartmouth (Third Floor)
3:30 PM - 6:00 PM	30	Accelerated Discovery of Inorganic Materials: High-Throughput Experiments, Modeling, and Data Science	SB	Constitution Ballroom B (2)

This program is as of October 7, 2024. An up-to-date program is available at aiche.org/annual and in the AIChEvents app.

BIOENGINEERING PROGRAM GRID

3:30 PM - 6:00 PM	32	Biomaterials Science and Engineering: Faculty Candidates	SB	Constitution Ballroom A (2)
3:30 PM - 6:00 PM	36	Area Plenary: Bionanotechnology (Invited Talks)	SB	Commonwealth (3)
3:30 PM - 6:00 PM	41	Continuous Processing in Drug Product	HCC	308 (Third Level)
3:30 PM - 6:00 PM	42	Data-driven approaches, ML/AI and model uncertainty to better process understanding	HCC	309 (Third Level)
3:30 PM - 6:00 PM	44	Adsorption Applications for Sustainable Energy and Chemicals	HCC	203 (Second Level)
3:30 PM - 6:00 PM	45	Desalination and Ion Transport in Membranes	HCC	201 (Second Level)
3:30 PM - 6:00 PM	46	Modeling, Simulations, and Techno-Economic Analysis of Membrane Processes	HCC	204 (Second Level)
3:30 PM - 6:00 PM	47	Decarbonization by Biomass: Technology, Policy, and Sustainability	HCC	208 (Second Level)
3:30 PM - 6:00 PM	49	49 Production of Low-carbon Fuels from Biomass: Design, Simulation, and Economic Analysis	HCC	206 (Second Level)
MONDAY NOV. 3RD				
8:00 AM - 10:30 AM	51	Carbon Dioxide Upgrading II: Reaction Mechanisms	HCC	101 (Plaza Level)
8:00 AM - 10:30 AM	52	Electrocatalysis II: Fundamental governing principles of electrocatalysis	HCC	103 (Plaza Level)
8:00 AM - 10:30 AM	53	Environmental and Automotive Catalysis	HCC	200 (Second Level)
8:00 AM - 10:30 AM	54	Microporous and Mesoporous Materials II: Catalyst Structure	HCC	104 (Plaza Level)
8:00 AM - 10:30 AM	55	Nitrogen Chemistry I: Ammonia	HCC	107 (Plaza Level)
8:00 AM - 10:30 AM	56	Pioneers of Catalysis and Reaction Engineering (Invited Talks)	HCC	102 (Plaza Level)
8:00 AM - 10:30 AM	58	Automated Molecular and Materials Discovery: Integrating Machine Learning, Simulation, and Experiment	HCC	210 (Second Level)
8:00 AM - 10:30 AM	71	Cell Engineering and Biomaterials in Pharmaceutical Manufacturing Applications	HCC	310 (Third Level)
8:00 AM - 10:30 AM	72	Drug and Gene Delivery: Nucleic Acid Delivery	HCC	311 (Third Level)
8:00 AM - 10:30 AM	73	Engineered Biomimetic Models	HCC	306 (Third Level)
8:00 AM - 10:30 AM	74	Synthetic Biology and Metabolic Engineering for Functional Bioproducts, Part I	HCC	305 (Third Level)
8:00 AM - 10:30 AM	75	Advances in Biotechnologies for Lignocellulose Conversion and Valorization	MBC	Exeter (Third Floor)

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BIOENGINEERING PROGRAM GRID

8:00 AM - 10:30 AM	76	Applications of Computational Methods in Biomass Utilization	MBC	Dartmouth (Third Floor)
8:00 AM - 10:30 AM	77	Advances in Biofuels Production and Alternative Fuels I	HCC	207 (Second Level)
8:00 AM - 10:30 AM	78	Efficient Processing of Lignin to Bioproducts and Biofuels	MBC	Clarendon (Third Floor)
8:00 AM - 10:30 AM	80	Area Plenary: Leaders in Biomaterials (Invited Talks)	SB	Constitution Ballroom A (2)
8:00 AM - 10:30 AM	81	Biopolymers I: Peptide/Protein-Based Hydrogels, Biopolymer Mechanics, and Structure–Property Relationships	SB	Back Bay Ballroom D (2)
8:00 AM - 10:30 AM	82	Composites for Sustainable Applications and Ecosystem	SB	Constitution Ballroom B (2)
8:00 AM - 10:30 AM	85	Synthesis and Application of Inorganic Materials I: Synthesis	SB	Back Bay Ballroom B (2)
8:00 AM - 10:30 AM	86	Bionanotechnology for Sensors and Imaging	SB	Berkeley (Sheraton) (3)
8:00 AM - 10:30 AM	92	Advances in Design and Automation of Pharmaceutical Processes and PATs for Robust Control	HCC	313 (Third Level)
8:00 AM - 10:30 AM	93	Advances in Drug Discovery Processes (including HTE)	HCC	308 (Third Level)
8:00 AM - 10:30 AM	94	Enabling Technologies Relevant to Drug Substance	HCC	309 (Third Level)
8:00 AM - 10:30 AM	97	Advances in Bioseparations I	HCC	206 (Second Level)
8:00 AM - 10:30 AM	101	Design for a Circular Economy	MBC	Suffolk (Third Floor)
8:00 AM - 10:30 AM	104	Reactor Engineering for Biomanufacturing	MBC	Salon AB (Fourth Floor)
8:35 AM - 5:00 PM		National Science Foundation’s Information and Education Suite - Registration	HCC	Exhibit Hall D (Second Level)
10:00 AM - 12:30 PM		Undergraduate Student Poster Session: Catalysis and Reaction Engineering	HCC	Exhibit Hall C (second level)
10:00 AM - 12:30 PM		Undergraduate Student Poster Session: Environmental	HCC	Exhibit Hall C (second level)
10:00 AM - 12:30 PM		Undergraduate Student Poster Session: Food, Pharmaceutical, and Biotechnology	HCC	Exhibit Hall C (second level)
10:00 AM - 12:30 PM		Undergraduate Student Poster Session: Separations	HCC	Exhibit Hall C (second level)

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BIOENGINEERING PROGRAM GRID

11:00 AM - 12:20 PM	112	Featured MPC Session: Development of a Novel Platform to Deliver Large Volume Synthetic Peptides: The Commercialization of Tirzepatide	HCC	302 (Third Level)
12:30 PM - 3:00 PM	116	Electrocatalysis III: Engineering active sites for oxygen electrocatalysis	HCC	103 (Plaza Level)
12:30 PM - 3:00 PM	121	Recent Advances in Molecular Simulation Methods	HCC	209 (Second Level)
12:30 PM - 3:00 PM	126	10E Advances in Machine Learning and Intelligent Systems I	HCC	111 (Plaza Level)
12:30 PM - 3:00 PM	129	Biomolecules at Interfaces	SB	Hampton (3)
12:30 PM - 3:00 PM	130	Development of Intermolecular Potential Models	HCC	205 (Second Level)
12:30 PM - 3:00 PM	132	Plenary Session on New Frontiers for Fluids & Transport Studies (Invited Talks)	HCC	Executive Boardroom 300 (Third Level)
12:30 PM - 3:00 PM	134	Biosensors for Nucleic Acids or Chemicals	HCC	310 (Third Level)
12:30 PM - 3:00 PM	135	Cell and Tissue Engineering: Cancer and the Tumor Immune Microenvironment	HCC	306 (Third Level)
12:30 PM - 3:00 PM	137	Faculty Candidate Session: Food, Pharmaceuticals, and Bioengineering I	HCC	303 (Third Level)
12:30 PM - 3:00 PM	138	Synthetic Biology and Metabolic Engineering for Functional Bioproducts, Part II	HCC	305 (Third Level)
12:30 PM - 3:00 PM	142	Ionic Liquids: Novel Separation, Catalytic reaction and Electrochemical Processes	MBC	Clarendon (Third Floor)
12:30 PM - 3:00 PM	145	Bio-inspired Composites	SB	Constitution Ballroom B (2)
12:30 PM - 3:00 PM	146	Biomaterials for Immune Engineering	SB	Constitution Ballroom A (2)
12:30 PM - 3:00 PM	147	Biopolymers II: Sequence–Function Relationships, Bioelectronics, and Functional Behavior in Peptide/ Protein Systems	SB	Back Bay Ballroom D (2)
12:30 PM - 3:00 PM	149	Synthesis and Application of Inorganic Materials II: Application	SB	Back Bay Ballroom B (2)
12:30 PM - 3:00 PM	151	Nanoscale Science Engineering Forum (NSEF): Faculty Candidate	SB	Berkeley (Sheraton) (3)
12:30 PM - 3:00 PM	159	Concept to Commercialization: Considerations for Process Design and Scale Up - Session 1 (Invited Talks)	MBC	Arlington (Third Floor)
12:30 PM - 3:00 PM	160	Process Development: Design, Risk Reduction, Implementation and Operations	MBC	Berkeley (Marriott) (Third Floor)
12:30 PM - 3:00 PM	161	Advances in Bioseparations II	HCC	206 (Second Level)

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BIOENGINEERING PROGRAM GRID

12:30 PM - 3:00 PM	167	Advances in Biorefinery Strategies	MBC	Boylston (First Floor)
12:30 PM - 3:00 PM	168	AI, Machine Learning, and Computational Approaches in Medicine Part 2	SB	Republic Ballroom B (2)
1:45 PM - 3:15 PM	175	The Langer Prize for Innovation and Entrepreneurial Excellence Award Presentation and Lecture	HCC	Ballroom A (Third Level)
1:45 PM - 3:15 PM		The Langer Prize for Innovation and Entrepreneurial Excellence Award Reception	HCC	Ballroom A (Third Level)
3:30 PM - 5:00 PM	181	15A Poster session: Food and Bioprocess Engineering	HCC	Exhibit Hall C (Second Level)
3:30 PM - 5:00 PM	182	15C Poster Session: Bioengineering	HCC	Exhibit Hall C (Second Level)
3:30 PM - 5:00 PM	183	15D Poster session: Engineering Fundamentals in Life Science	HCC	Exhibit Hall C (Second Level)
3:30 PM - 5:00 PM	184	Poster Session: Materials Engineering & Sciences (08B - Biomaterials)	HCC	Exhibit Hall C (Second Level)
3:30 PM - 5:00 PM	191	Poster Session: Pharmaceutical Discovery, Development, and Manufacturing	HCC	Exhibit Hall C (Second Level)
3:30 PM - 6:00 PM	194	Biomass Conversion and Biorefining I: Catalytic Processes for Biomass Conversion and Upgrading	HCC	104 (Plaza Level)
3:30 PM - 6:00 PM	223	Bioprocess & Cell Line Development	HCC	309 (Third Level)
3:30 PM - 6:00 PM	224	Predictive Scale-Up/Scale-Down for Bioprocessing	HCC	308 (Third Level)
3:30 PM - 6:00 PM	225	Concept to Commercialization: Considerations for Process Design and Scale Up - Session 2 (Invited Talks)	MBC	Arlington (Third Floor)
3:30 PM - 6:00 PM	226	Manufacturing Technology Improvements for Chemical/Pharmaceutical/Energy Industries	MBC	Berkeley (Marriott) (Third Floor)
3:30 PM - 6:00 PM	235	Biological Processing of Renewable and Recyclable Feedstocks	MBC	Provincetown (Fourth Floor)
3:30 PM - 6:00 PM	237	Sustainable Design and Modeling of Biorefineries	MBC	Salon AB (Fourth Floor)
3:30 PM - 6:00 PM	238	Advances in Eco-manufacturing with Biomass	MBC	Boylston (First Floor)
3:30 PM - 6:00 PM	239	Engineering Cancer: Chemical Engineering Contributions to Cancer Biology and Treatment	SB	Republic Ballroom B (2)
6:15 PM - 8:00 PM		Pharmaceutical Discovery, Development, and Manufacturing Forum (PD2M) Awards Ceremony	HCC	309 (Third Level)
7:30 PM - 9:30 PM		University of Nebraska-Lincoln Chemical and Biomolecular Engineering Reception	HCC	210 (Second Level)
8:00 PM - 9:30 PM		University of Notre Dame Department of Chemical and Biomolecular Engineering Reception	SB	Independence Ballroom East (2)

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BIOENGINEERING PROGRAM GRID

TUESDAY NOV. 4TH				
8:00 AM - 10:30 AM	250	Biomass Conversion and Biorefining II: Upgrading Biomass-Derived Platform Molecules and Lignin	HCC	104 (Plaza Level)
8:00 AM - 10:30 AM	272	Biorenewable Resource Engineering for Food, Health and Environmental Applications, Part I	HCC	308 (Third Level)
8:00 AM - 10:30 AM	274	Emerging Tools and Sensors for Molecular, Cellular, and Organismal Biology	HCC	313 (Third Level)
8:00 AM - 10:30 AM	275	Engineered Biomimetic Cell and Tissue Models II	HCC	306 (Third Level)
8:00 AM - 10:30 AM	276	Faculty Candidate Session: Food, Pharmaceuticals, and Bioengineering II	HCC	303 (Third Level)
8:00 AM - 10:30 AM	277	Tissue Engineering	HCC	309 (Third Level)
8:00 AM - 10:30 AM	287	Structural Design of Biomaterials for Tissue Engineering	SB	Constitution Ballroom A (2)
8:00 AM - 10:30 AM	301	Nucleation and Growth	HCC	201 (Second Level)
8:00 AM - 10:30 AM	302	Process Innovation in Bioseparations	HCC	206 (Second Level)
8:00 AM - 10:30 AM	304	Life Cycle Analysis of Bio-Based Fuels, Energy, and Chemicals	MBC	Provincetown (Fourth Floor)
9:00 AM - 5:00 PM		National Science Foundation's Information and Education Suite	HCC	Exhibit Hall D (Second Level)
12:30 PM - 3:00 PM	318	Biomass Conversion and Biorefining III: Biomass Conversion Processes: Pyrolysis, Gasification, Solvothermal, and Hydrothermal Methods	HCC	104 (Plaza Level)
12:30 PM - 3:00 PM	341	Biophysical Cues Mediating Cell Migration, Growth, and Differentiation	HCC	306 (Third Level)
12:30 PM - 3:00 PM	342	Biorenewable Resource Engineering for Food, Health and Environmental Applications, Part II	HCC	305 (Third Level)
12:30 PM - 3:00 PM	343	Biosensors for Proteins and Cells	HCC	301 (Third Level)
12:30 PM - 3:00 PM	344	Faculty Candidate Session: Food, Pharmaceuticals, and Bioengineering III	HCC	303 (Third Level)
12:30 PM - 3:00 PM	345	Fundamentals of Biocatalyst Design and Engineering	HCC	310 (Third Level)
12:30 PM - 3:00 PM	356	Bionanotechnology for Gene and Drug Delivery	SB	Berkeley (Sheraton) (3)
12:30 PM - 3:00 PM	367	Crystallization and Precipitation of Pharmaceutical and Biological Molecules I	HCC	201 (Second Level)
12:30 PM - 3:00 PM	368	Developments in Extractive Separations: Solvents	HCC	209 (Second Level)
12:30 PM - 3:00 PM	369	Frontiers in New Materials and Membranes for Bioseparations	HCC	206 (Second Level)

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BIOENGINEERING PROGRAM GRID

3:30 PM - 6:00 PM	404	Biomass Conversion and Biorefining IV: Modeling, Optimization, and Theoretical Studies in Biomass Conversion	HCC	104 (Plaza Level)
3:30 PM - 6:00 PM	415	Fluids & Transport in Biological Materials	HCC	301 (Third Level)
3:30 PM - 6:00 PM	420	Division 15 Plenary: Food, Pharmaceutical, and Bioengineering Division (Invited Talks)	HCC	306 (Third Level)
3:30 PM - 6:00 PM	423	Integrated Biorefineries: Technologies and TEA/LCA	HCC	209 (Second Level)
3:30 PM - 6:00 PM	432	Tissue Engineering Biomaterials for Directing Cell Behavior	SB	Back Bay Ballroom D (2)
3:30 PM - 6:00 PM	438	Nano- and Microparticles for Pharmaceutical, Biomedical and Food Applications	SB	Independence Ballroom West (2)
3:30 PM - 6:00 PM	442	Process models for drug substance, drug product, and biopharmaceuticals Part 2	HCC	313 (Third Level)
3:30 PM - 6:00 PM	445	Crystallization and Precipitation of Pharmaceutical and Biological Molecules II	HCC	201 (Second Level)
3:30 PM - 6:00 PM	449	Medical Devices	SB	Republic Ballroom B (2)
6:10 PM - 8:10 PM	457	SBE Lectures: James E. Bailey Award & D.I.C. Wang Lectures	HCC	Ballroom A (Third Level)
7:10 PM - 8:10 PM		SBE Hospitality Suite	HCC	Ballroom A (Third Level)
WEDNESDAY NOV. 5TH				
8:00 AM - 10:30 AM	473	Active Synthetic and Biological Systems	HCC	308 (Third Level)
8:00 AM - 10:30 AM	474	Data Science in Flow & Transport Phenomena	HCC	Executive Boardroom 300 (Third Level)
8:00 AM - 10:30 AM	475	Directed and Self Assembly of Colloids	SB	Hampton (3)
8:00 AM - 10:30 AM	479	Environmental Impacts of the Pharmaceutical Industry	MBC	Boylston (First Floor)
8:00 AM - 10:30 AM	480	Water Reuse and Recycling	MBC	Tremont (First Floor)
8:00 AM - 10:30 AM	481	Advancement of Biomanufacturing and a Discussion with NSF Leaders	HCC	303 (Third Level)
8:00 AM - 10:30 AM	482	Advances in Biocatalytic Reaction and Bioprocess Engineering	HCC	310 (Third Level)
8:00 AM - 10:30 AM	483	Drug and Gene Delivery: Overcoming Biological Barriers	HCC	306 (Third Level)
8:00 AM - 10:30 AM	484	From Microbial Production to Protein Function: Innovations in Expression, Prediction, and Engineering	HCC	313 (Third Level)

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BIOENGINEERING PROGRAM GRID

8:00 AM - 10:30 AM	485	Microbiome and Microbial Consortia in Food, Health, and Bioprocessing	HCC	305 (Third Level)
8:00 AM - 10:30 AM	486	Next Generation Agriculture and Plant Biotechnology: Agricultural Sensing Technologies	HCC	301 (Third Level)
8:00 AM - 10:30 AM	487	Cell and Tissue Engineering: Stem Cell Technologies	HCC	309 (Third Level)
8:00 AM - 10:30 AM	488	Biodegradable Polymers from Renewable & Waste Resources and Biocomposites from Industrial Coproduces and Natural Fibers	MBC	Exeter (Third Floor)
9:00 AM - 1:00 PM		National Science Foundation's Information and Education Suite	HCC	Exhibit Hall D (Second Level)
12:30 PM - 3:00 PM	540	Bioprocess Engineering, Experimental and Computational Design, and Scale-up	HCC	305 (Third Level)
12:30 PM - 3:00 PM	541	Drug and Gene Delivery: Targeted Drug Delivery	HCC	306 (Third Level)
12:30 PM - 3:00 PM	542	Emerging Platforms for Studying Health and Disease	HCC	302 (Third Level)
12:30 PM - 3:00 PM	543	Genomic & Genetic Engineering Technologies	HCC	310 (Third Level)
12:30 PM - 3:00 PM	544	Next Generation Agriculture and Plant Biotechnology: Emerging Leaders in Materials Science and Bioengineering	HCC	301 (Third Level)
12:30 PM - 3:00 PM	545	Sustainable biomass pretreatment and fractionation processes	MBC	Exeter (Third Floor)
12:30 PM - 3:00 PM	549	Biomaterials: Graduate Student Award Session (Invited Talks)	SB)	Constitution Ballroom A (2)
12:30 PM - 3:00 PM	551	Emerging Biomaterials in Biomedical and Energy Applications	SB	Back Bay Ballroom D (2)
3:30 PM - 6:00 PM	595	10D: Applied Math for Biological and Biomedical Systems	HCC	111 (Plaza Level)
3:30 PM - 6:00 PM	607	Drug and Gene Delivery: Data and Computation	HCC	306 (Third Level)
3:30 PM - 6:00 PM	608	Next Generation Agriculture and Plant Biotechnology: Engineering Delivery Vehicles for Agriculture	HCC	301 (Third Level)
3:30 PM - 6:00 PM	609	Novel Process Technologies in Food and Biomanufacturing	HCC	305 (Third Level)
3:30 PM - 6:00 PM	610	Synthetic Biology Toolkits, Biotechnology, & Applications	HCC	310 (Third Level)
3:30 PM - 6:00 PM	611	Systems Biology: Immunology and Infection	HCC	302 (Third Level)
3:30 PM - 6:00 PM	615	Emerging Biomaterials: Synthesis and Characterization	SB	Back Bay Ballroom D (2)
3:30 PM - 6:00 PM	619	Bionanotechnology for Sensors and Imaging II	SB	Commonwealth (3)

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BIOENGINEERING PROGRAM GRID

THURSDAY NOV. 6TH				
8:00 AM - 10:30 AM	653	Biomolecular Engineering: Extracellular Vesicles, Exosomes, and Bio-Sensing Interfaces	HCC	306 (Third Level)
8:00 AM - 10:30 AM	654	Cellular, Protein, & RNA Systems Engineering	HCC	310 (Third Level)
8:00 AM - 10:30 AM	655	Systems Biology: Cancer and Cardiac Signaling Networks	HCC	303 (Third Level)
8:00 AM - 10:30 AM	656	Advances in Biomass-derived Carbonaceous Materials: Fabrication, Characterization and Applications	SB	Constitution Ballroom B (2)
11:30 AM - 2:00 PM	686	Biomolecular Engineering: Therapeutic Engineering and Disease Modeling	HCC	306 (Third Level)
11:30 AM - 2:00 PM	687	Engineered Protein-Protein Interactions	HCC	301 (Third Level)
11:30 AM - 2:00 PM	688	Metabolic Engineering for Non-traditional Feedstock Utilization	HCC	310 (Third Level)
11:30 AM - 2:00 PM	689	Systems Biology: Metabolism and Stress	HCC	303 (Third Level)
11:30 AM - 2:00 PM	690	Modifications, Functionalization and Processing of Biomaterials	SB	Constitution Ballroom B (2)
11:30 AM - 2:00 PM	692	Biomimicry & Bioinspired Materials	SB	Back Bay Ballroom D (2)
2:30 PM - 5:00 PM	714	Biomolecular Engineering: Biophysical Environments and Cell-Material Interactions	HCC	306 (Third Level)
2:30 PM - 5:00 PM	715	Computational, Structural and Biophysical Protein Engineering	HCC	301 (Third Level)
2:30 PM - 5:00 PM	716	Process Optimization and Analytical Strategies in Biomanufacturing	HCC	310 (Third Level)
2:30 PM - 5:00 PM	717	Systems Biology: Metabolism and Synthetic Biology for the Bio-Economy	HCC	303 (Third Level)
2:30 PM - 5:00 PM	718	Synthesis and Characterization of Biomass-Derived Nanomaterials	SB	Constitution Ballroom B (2)
2:30 PM - 5:00 PM	719	Biomaterials for Drug Delivery	SB	Back Bay Ballroom D (2)

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