

TOPIC CATEGORIES – BIOCHEMISTRY AND MOLECULAR BIOLOGY

GENOME DYNAMICS

DNA REPLICATION, REPAIR AND RECOMBINATION MEETING

2000	-ASBMB	DNA Replication Mechanisms
2001	-ASBMB	DNA Enzymes
2002	-ASBMB	DNA Replication Origins
2003	-ASBMB	Replication Initiation
2004	-ASBMB	Inhibitors of DNA Transactions
2005	-ASBMB	Replicases and Replisomes
2006	-ASBMB	Replication Fork Dynamics
2007	-ASBMB	Telomeres and Telomerase
2008	-ASBMB	Genome Stability and DNA Repair
2009	-ASBMB	Signaling Responses to DNA Damage
2010	-ASBMB	Double-Stranded Breaks and DNA Recombination
2011	-ASBMB	Mechanism of DNA Recombination
2012	-ASBMB	Genome Diversity and DNA Recombination
2013	-ASBMB	DNA Repair Mechanisms
2014	-ASBMB	Regulation of Translesion Synthesis
2015	-ASBMB	Translesion and Error-Prone DNA Polymerases

DNA TOPIC AREA

2020	-ASBMB	DNA Structure
2021	-ASBMB	Probes of DNA Conformation

CHROMATIN REGULATION MEETING

2030	-ASBMB	Chromatin Recognition and Assembly
2031	-ASBMB	Genomic Chromatin
2032	-ASBMB	Histone Modifications
2033	-ASBMB	Chromatin Structure in Gene Activation
2034	-ASBMB	Chromatin Remodeling

- 2035 -ASBMB Chromatin Structure
- 2036 -ASBMB Chromatin Changes in Development

CELL CYCLE TOPIC AREA

- 2040 -ASBMB Cell Cycle and Growth Control
- 2041 -ASBMB Cyclins and Cyclin-Dependent Kinases
- 2042 -ASBMB Checkpoint mechanisms

CHROMOSOMES TOPIC AREA

- 2050 -ASBMB Centromeres and Kinetochores
- 2051 -ASBMB Chromosome Segregation and Aneuploidy
- 2052 -ASBMB Cohesion /Chromosome Condensation
- 2053 -ASBMB Mitotic Spindle
- 2054 -ASBMB Spindle Checkpoint

GENE REGULATION: TRANSCRIPTION INITIATION AND ELONGATION MEETING

- 2060 -ASBMB RNA Polymerase Structure
- 2061 -ASBMB Transcriptional Initiation
- 2062 -ASBMB Transcriptional Assemblies and Mechanisms
- 2063 -ASBMB Dynamics of Transcription
- 2064 -ASBMB Transcriptional Regulation
- 2065 -ASBMB Non-coding RNAs in Gene Regulation and Chromosome Structure

RNA: PROCESSING, TRANSPORT, AND REGULATORY MECHANISMS MEETING

- 2070 -ASBMB Ribonucleoproteins
- 2071 -ASBMB RNA Processing
- 2072 -ASBMB RNA Editing and Modification
- 2073 -ASBMB RNA Modification: Mechanism and Function
- 2074 -ASBMB Alternative RNA Splicing
- 2075 -ASBMB Riboswitches
- 2076 -ASBMB RNA-Based Gene Regulation
- 2077 -ASBMB RNA Transport and Localization

2078	-ASBMB	RNA Turnover
2079	-ASBMB	Riboregulation
2080	-ASBMB	Non-coding RNAs
2081	-ASBMB	RNA Structure and Dynamics
2082	-ASBMB	RNA Folding
2083	-ASBMB	Molecular Recognition of RNA
2084	-ASBMB	Catalytic RNA
2085	-ASBMB	RNA Structure, Function, and Regulation
2086	-ASBMB	Small RNAs
2087	-ASBMB	Molecular Recognition and Enzymology of RNA
2088	-ASBMB	RNA Structure and Translation

MOLECULAR STRUCTURE AND DYNAMICS

PROTEIN SYNTHESIS AND TURNOVER MEETING

2090	-ASBMB	Ribosome and Translation
2091	-ASBMB	tRNA Synthetases: Structure, Mechanism and Evolution
2092	-ASBMB	Protein Targeting
2093	-ASBMB	Genetic Studies of Protein Synthesis
2094	-ASBMB	Mechanisms of Protein Synthesis
2095	-ASBMB	Protein Synthesis in Organelles
2096	-ASBMB	Regulation of Protein Synthesis
2097	-ASBMB	Protein Turnover and Quality Control
2098	-ASBMB	Proteasomes: Structure and Regulation
2099	-ASBMB	Protease: Structure and Regulation
2100	-ASBMB	Proteases in Disease
2101	-ASBMB	Ubiquitin Pathway and Targeting
2102	-ASBMB	Protein Turnover in Cell Regulation

PROTEIN FOLDING, AGGREGATION, AND CHAPERONES MEETING

2110	-ASBMB	Molecular Chaperones: Mechanism and Function
2111	-ASBMB	Protein Folding and Misfolding

2112	-ASBMB	Proteases in Disease
2113	-ASBMB	Protein Aggregation and Amyloid Diseases
2114	-ASBMB	Chaperones

MEMBRANE PROTEINS, ENZYMES AND DRUG DESIGN MEETING

2120	-ASBMB	Protein Interactions in Catalysis
2121	-ASBMB	Enzyme Mechanism
2122	-ASBMB	Regulation and Allostereism
2123	-ASBMB	Macromolecular Folding and Fluctuations
2124	-ASBMB	Multienzyme Complexes
2125	-ASBMB	Structural Enzymology of Membrane Proteins
2126	-ASBMB	Structural Enzymology
2127	-ASBMB	Prediction of Enzyme Function
2128	-ASBMB	Enzymes as Drug Targets
2129	-ASBMB	Enzyme Inhibitors
2130	-ASBMB	Proteolytic Enzymes and Inhibitors
2131	-ASBMB	Energetics and Design
2132	-ASBMB	Nitric Oxide Metabolism
2133	-ASBMB	Enzyme Kinetics
2134	-ASBMB	Role of Dynamics in Enzyme Catalysis
2135	-ASBMB	Photochemical Sensors

CELL SYSTEMS AND METABOLISM

METABOLISM AND DISEASE MECHANISMS MEETING

2140	-ASBMB	Genetic and Metabolic Approaches to Obesity
2141	-ASBMB	Metabolism and Cancer
2142	-ASBMB	Metabolism and Nutrition
2143	-ASBMB	Metabolism and Neurodegeneration
2144	-ASBMB	Aging and Metabolism
2145	-ASBMB	Metabolism and Diabetes
2146	-ASBMB	Metabolic Networks

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| 2147 | -ASBMB | Metabolic Regulation |
| 2148 | -ASBMB | Mitochondria in Health and Disease |
| 2149 | -ASBMB | Nuclear Receptors in Metabolic Syndromes |

SYSTEMS BIOLOGY TOPIC AREA

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|------|--------|-------------------------------------------------------|
| 2150 | -ASBMB | Fluorescence Microscopy Approaches in Systems Biology |
| 2151 | -ASBMB | Genomics and Toxicogenomics |
| 2152 | -ASBMB | Regulatory Networks |
| 2153 | -ASBMB | Computational Approaches in Systems Biology |
| 2154 | -ASBMB | Experimental and Computational Approaches to Systems |
| 2155 | -ASBMB | Subsystems and Simulation |
| 2156 | -ASBMB | Mathematical Biology |
| 2157 | -ASBMB | Microarrays |

PROTEOMICS AND BIOINFORMATICS TOPIC AREA

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|------|--------|------------------------------------------------|
| 2160 | -ASBMB | Global Analysis of Protein Function |
| 2161 | -ASBMB | Protein Profiling in Normal and Disease States |
| 2162 | -ASBMB | Proteomics and Bioinformatics |
| 2163 | -ASBMB | Posttranslational Modifications |
| 2164 | -ASBMB | Surface Plasmon Resonance |
| 2165 | -ASBMB | Functional Proteomic Studies |

METHODS TOPIC AREA

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|------|--------|-------------------------------------------|
| 2170 | -ASBMB | Biophysical Methods |
| 2171 | -ASBMB | Mass Spectroscopy |
| 2172 | -ASBMB | Nanotechnology |
| 2173 | -ASBMB | Protein Chemistry |
| 2174 | -ASBMB | Electrophoresis |
| 2175 | -ASBMB | New Molecular and Cellular Imaging Agents |
| 2176 | -ASBMB | Recombinant DNA Technology |

MEMBRANE DYNAMICS AND ORGANELLE BIOGENESIS MEETING

2180	-ASBMB	Cell Division
2181	-ASBMB	Golgi Structure and Biogenesis
2182	-ASBMB	Membrane Biogenesis
2183	-ASBMB	Organelle Biogenesis
2184	-ASBMB	Organelle Evolution
2185	-ASBMB	Cargo Sorting and Vesicle Targeting
2186	-ASBMB	Intracellular Dynamics
2187	-ASBMB	Mitochondrial Dynamics
2188	-ASBMB	Nuclear Dynamics
2189	-ASBMB	Trafficking Mechanisms and Pathogen Subversion
2190	-ASBMB	Cell Migration
2191	-ASBMB	Membrane Transport
2192	-ASBMB	Diseases of Organelle Misfunction
2193	-ASBMB	Mitochondrial Genetic Diseases
2194	-ASBMB	Mitochondrial Toxicity

BIOENERGETICS TOPIC AREA

2200	-ASBMB	Cytochrome P450
2201	-ASBMB	Flavoproteins
2202	-ASBMB	Oxidative Phosphorylation

SIGNALING

LIPID SIGNALING AND METABOLISM MEETING

2220	-ASBMB	Nuclear Lipid Signaling
2221	-ASBMB	Lipid Storage
2222	-ASBMB	Tissue-Specific Regulation of Lipid Metabolism
2223	-ASBMB	Lipids and Control of Gene Expression
2224	-ASBMB	Lipid Second Messengers
2225	-ASBMB	Lipid Signaling
2226	-ASBMB	Lipid Trafficking

2227	-ASBMB	Regulation of Lipid Metabolism
2228	-ASBMB	Phosphatidylinositol Signaling
2229	-ASBMB	Stress and Lipid Metabolism
2230	-ASBMB	Non-animal Genetic Models of Lipid Metabolism
2231	-ASBMB	Organelle Lipid Biosynthesis
2232	-ASBMB	Lipids and Inflammation
2233	-ASBMB	Chemical Probes of Lipid Systems
2234	-ASBMB	Lipidomics
2235	-ASBMB	Pharmacological Targets in Lipid Metabolism
2236	-ASBMB	Protein-Lipid Interactions
2237	-ASBMB	Structural Biology and Mechanisms of Membrane Lipid Assembly

GLYCOBIOLOGY AND EXTRACELLULAR MATRIX TOPIC AREA

2240	-ASBMB	Glycans in Development and Disease
2241	-ASBMB	Glycans in Pathogenic Protozoa
2242	-ASBMB	Glycobiology and Extracellular Matrix
2243	-ASBMB	Plant Cell Wall Biosynthesis and Function
2244	-ASBMB	Protein-Glycan Functional Interactions

STRUCTURE, FUNCTION, AND BIOGENESIS OF CELL MEMBRANES TOPIC AREA

2250	-ASBMB	Protein-Lipid Interactions As Determinants of Function
2251	-ASBMB	Structure and Function of Transport Proteins and Channels
2252	-ASBMB	Membrane Protein Synthesis, Insertion and Assembly
2253	-ASBMB	Structure, Function, and Biogenesis of Cell Membranes
2254	-ASBMB	Vesicular Trafficking
2255	-ASBMB	Lipid Domains and Lipid Rafts

PRINCIPLES OF RECEPTOR SIGNALING MEETING

2260	-ASBMB	ADAMS and Other Proteases
2261	-ASBMB	Signaling in Disease and Therapy
2262	-ASBMB	Aging
2263	-ASBMB	Apoptosis and Cell Stress

2264	-ASBMB	Biochemical Pharmacology
2265	-ASBMB	Caspases
2266	-ASBMB	Toxins
2267	-ASBMB	Cell Proliferation
2268	-ASBMB	Cytokine and Growth Factor Signaling
2269	-ASBMB	DNA Damage Signaling
2270	-ASBMB	Integration and Organization of Signaling Pathways
2271	-ASBMB	Neurobiology
2272	-ASBMB	Signaling in Bacterial Receptor Systems
2273	-ASBMB	Signaling to the Cytoskeleton
2274	-ASBMB	Transcriptional Regulation and Epigenetic Control
2275	-ASBMB	Signaling to the Nucleus
2276	-ASBMB	Posttranslational Modifications
2277	-ASBMB	G Proteins and Protein Kinases
2278	-ASBMB	GTPases
2279	-ASBMB	Hormone Receptors
2280	-ASBMB	Peptide Hormones

PROTEIN PHOSPHORYLATION AND DEPHOSPHORYLATION TOPIC AREA

2290	-ASBMB	Kinase Cascades
2291	-ASBMB	Phosphatases
2292	-ASBMB	Serine/Threonine Kinase
2293	-ASBMB	Adapter Proteins
2294	-ASBMB	Map Kinases
2295	-ASBMB	Small GTPases
2296	-ASBMB	Tyrosine Kinases
2297	-ASBMB	Receptor Tyrosine Kinase Signaling to Nucleus

SECOND MESSENGERS TOPIC AREA

2300	-ASBMB	Signaling Crosstalk
2301	-ASBMB	Calcium
2302	-ASBMB	Cyclases

2303	-ASBMB	Cyclic AMP
2304	-ASBMB	Cyclic GMP
2305	-ASBMB	Inositol Phosphates and Phosphoinositides
2306	-ASBMB	Nitric Oxide
2307	-ASBMB	Phosphodiesterases
2308	-ASBMB	Other Lipid Second Messengers

CHEMICAL BIOLOGY

DRUG DISCOVERY AND DESIGN MEETING

2310	-ASBMB	Membrane Proteins as Drug Targets
2311	-ASBMB	Chemical Perspectives in Neurobiology
2312	-ASBMB	Chemical Biology of Cell Death
2313	-ASBMB	High Content Approaches
2314	-ASBMB	Chemical Probes and Their Use in Identifying New Therapeutic Targets
2315	-ASBMB	Biosynthesis of Complex Molecules
2316	-ASBMB	Chemistry and Cell Biology of Natural Products
2317	-ASBMB	Mode of Action of Bioactive Natural Products
2318	-ASBMB	New Targets for Drug Discovery: Antibacterials
2319	-ASBMB	New Targets for Drug Discovery: Nuclear Hormone Receptors
2320	-ASBMB	Pharmacogenomics
2321	-ASBMB	Target Identification and Pathway Mining
2322	-ASBMB	Polypharmacology and Drug Repurposing
2323	-ASBMB	Small Molecule Control of Protein Folding and Assembly
2324	-ASBMB	Nucleic Acid- Small Molecule Interactions
2325	-ASBMB	Protein-Small Molecule Interactions
2326	-ASBMB	Small Molecule Tools for Biology

PLANT BIOCHEMISTRY TOPIC AREA

2330	-ASBMB	Integration of Carbon and Nitrogen Metabolism
2331	-ASBMB	Novel Lipid Biosynthesis in Plants
2332	-ASBMB	Proteolysis in Plant Growth and Development

2333 -ASBMB Regulation of Plant Metabolism

MINORITY AFFAIRS – GLOBAL HEALTH

2340 -ASBMB Role of Basic Scientists in Addressing Global Health Issues

2341 -ASBMB HIV: Activation and Antagonism of Host Defense

2342 -ASBMB Clinical and Pharmacogenomic Aspects of HIV and AIDS

2343 -ASBMB Development and Advancement of Minority Scientists in Academia

EDUCATION AND PROFESSIONAL DEVELOPMENT MEETING

2350 -ASBMB Classroom of the Future III

2351 -ASBMB Assessment Tools for Core Knowledge and Skills