

2016 Themes and Topics List

Theme A: Development

A.01. Neurogenesis and Gliogenesis

- A.01.a. Nervous system patterning and developmental cell death
- A.01.b. Proliferation: Self-renewal and cell cycle
- A.01.c. Proliferation: Molecular mechanisms
- A.01.d. Cell lineage
- A.01.e. Mechanisms of cell fate
- A.01.f. Cell migration: Molecular mechanisms
- A.01.g. Cell migration: Cellular dynamics
- A.01.h. Neuronal differentiation
- A.01.i. Glial differentiation and interaction with neurons

A.02. Postnatal Neurogenesis

- A.02.a. Postnatal neurogenesis: Temporal and spatial patterns
- A.02 b. Postnatal neurogenesis: Molecular mechanisms
- A.02 c. Postnatal neurogenesis: Environmental and pharmacological regulation

A.03. Stem Cells and Reprogramming

- A.03.a. Induced pluripotent stem cells and models of disease
- A.03.b. Neural differentiation of pluripotent stem cells

A.04. Transplantation and Regeneration

- A.04.a. Transplantation
- A.04.b. Regeneration: PNS
- A.04.c. Regeneration: CNS

A.05. Axon and Dendrite Development

- A.05.a. Axon growth and guidance: Cytoskeletal dynamics
- A.05.b. Axon growth and guidance: Adhesion molecules
- A.05.c. Axon growth and guidance: Intrinsic mechanisms
- A.05.d. Axon growth and guidance: Extrinsic mechanisms
- A.05.e. Dendritic growth and branching

A.06. Synaptogenesis and Activity-Dependent Development

- A.06.a. Synapse formation
- A.06.b. Synapse maturation and remodeling
- A.06.c. Neural circuit maturation and remodeling
- A.06.d. Development of excitability
- A.06.e Other activity-dependent processes

A.07. Developmental Disorders

- A.07.a. Autism: Behavioral analysis
- A.07.b. Autism: Genetic models
- A.07.c. Autism: Synaptic and cellular mechanisms
- A.07.d. Autism: Environment and pathology
- A.07.e. Autism: Physiology and systems
- A.07.f. Rett syndrome
- A.07.g. Fragile X
- A.07.h. Down syndrome
- A.07.i. Angelman and other developmental disorders
- A.07.j. ADHD, SLI, dyslexia and other specific disorders of neurobehavior
- A.07.k. Animal models and mechanisms

A.08. Development of Motor, Sensory, and Limbic Systems

- A.08.a. Motor systems

	A.08.b. Sensory systems
	A.08.c. Limbic system
A.09. Adolescent Development	
	A.09.a. Animal models
	A.09.b. Human imaging
	A.09.c. Mechanisms of vulnerability
A.10. Development and Evolution	
	A.10.a. Comparative anatomy and evolution
	A.10.b. Evolution of developmental mechanisms
Theme B: Neural Excitability, Synapses, and Glia	
B.01. Neurotransmitters and Signaling Molecules	
	B.01.a. Amino acids
	B.01.b. Monoamines
	B.01.c. Acetylcholine
	B.01.d. Retrograde messengers
	B.01.e. Opiates, cytokines, and other neuropeptides
	B.01.f. Neurotrophins
	B.01.g. Invertebrate neurotransmitters
B.02. Ligand-Gated Ion Channels	
	B.02.a. Nicotinic acetylcholine receptors in brain: Physiology and function
	B.02.b. Nicotinic acetylcholine receptors: Structure and regulation
	B.02.c. NMDA receptors
	B.02.d. Non-NMDA receptors
	B.02.e. GABA(A) receptors
	B.02.f. Glycine receptors & other ligand gated ion channels
	B.02.g. TRP channels
B.03. G-Protein Coupled Receptors	
	B.03.a. Metabotropic glutamate and GABA B receptors
	B.03.b. Other metabotropic receptors
	B.03.c. Peptide receptors
	B.03.d. Opioid receptors
	B.03.e. Purine receptors
B.04. Ion Channels	
	B.04.a. Sodium channels
	B.04.b. Calcium channels
	B.04.c. Potassium channels
	B.04.d. HCN and non-selective cation channels
	B.04.e. Other ion channels
B.05. Transporters	
	B.05.a. Glutamate
	B.05.b. Monoamine
	B.05.c. Other
B.06. Neurotransmitter Release	
	B.06.a. Vesicle docking, fusion, recycling, biogenesis
	B.06.b. Presynaptic organization and structure
B.07. Synaptic Transmission	
	B.07.a. Postsynaptic organization and structure
	B.07.b. Synaptic integration
	B.07.c. Electrical synapses and gap junctions
	B.07.d. Modulation: Peptides and amines

	B.07.e. Modulation: ACh, amino acids and GABA
	B.07.f. Modulation: Mechanisms of action
	B.07.g. Modulation: Pharmacology
B.08. Synaptic Plasticity	
	B.08.a. Short-term plasticity
	B.08.b. LTP: Kinases and intracellular signaling
	B.08.c. LTP: Pre- and Postsynaptic mechanisms
	B.08.d. Long-term depression (LTD)
	B.08.e. Spike-timing dependent plasticity
	B.08.f. Homeostatic plasticity
	B.08.g. Structural plasticity
	B.08.h. Transcription and translation in plasticity
	B.08.i. Other
B.09. Intrinsic Membrane Properties	
	B.09.a. Neural oscillators and activity-dependent plasticity of intrinsic membrane properties
	B.09.b. Modulation of neuronal firing properties
	B.09.c. Dendritic excitability and synaptic integration
B.10. Network Interactions	
	B.10.a. Signal propagation
	B.10.b. Oscillations and synchrony: Unit studies
	B.10.c. Oscillations and synchrony: EEG studies
	B.10.d. Oscillations and synchrony: Other
B.11. Epilepsy	
	B.11.a. Genetics
	B.11.b. Channels
	B.11.c. Synaptic mechanisms
	B.11.d. Networks
	B.11.e. Post-seizure modifications
	B.11.f. In vivo and behavior
	B.11.g. Animal Models
	B.11.h. Anticonvulsant and antiepileptic therapies
	B.11.i. Human Studies
B.12. Glial Mechanisms	
	B.12.a. Astrocytes
	B.12.b. Microglia
	B.12.c. Oligodendrocytes
	B.12.d. Glia-neuron Interactions
	B.12.e. In vivo approaches
B.13. Demyelinating Disorders	
	B.13.a. Molecular and cellular mechanisms
	B.13.b. Therapeutics
	B.13.c. Human and animal studies
B.14. Neuro-Oncology	
	B.14.a. Neuro-oncology
Theme C: Neurodegenerative Disorders and Injury	
C.01. Brain Wellness and Aging	
	C.01.a. Brain wellness
	C.01.b. Metabolism and energetics
	C.01.c. Molecular mechanisms and oxidative stress
	C.01.d. Physiological and molecular correlates

C.02. Alzheimer's Disease and Other Dementias	
	C.02.a. Physiological functions and processing of APP and APP metabolites
	C.02.b. APP/Abeta: Animal models
	C.02.c. APP/Abeta: Cellular models
	C.02.d. Tau: Animal models
	C.02.e. Tau: Related cellular models
	C.02.f. Tau: Biochemistry
	C.02.g. APP-Abeta/tau models
	C.02.h. In vivo Abeta toxicity
	C.02.i. In vitro Abeta toxicity
	C.02.j. Abeta biochemistry
	C.02.k. Alzheimer's disease: Genetic analyses
	C.02.l. Alzheimer's Disease: Biochemical approaches in animals
	C.02.m. Alzheimer's disease: In vivo approaches in humans
	C.02.n. Alzheimer's disease: In vitro therapeutics
	C.02.o. Alzheimer's disease: Neuroinflammation and immune actions
	C.02.p. Beta and gamma secretase, BACE and presenilin
	C.02.q. Abeta metabolism
	C.02.r. Anti-Abeta treatments
	C.02.s. ApoE and cholesterol
	C.02.t. Tauopathies
	C.02.u. Abnormal pathological proteins excluding tau and Abeta
	C.02.v. Cognitive function
	C.02.w. Neuropharmacology and neurotransmitters
	C.02.x. Synaptic biology related to Alzheimer's disease
	C.02.y. Genetics and functional genomics
	C.02.z. Imaging and biomarkers
C.03. Parkinson's Disease	
	C.03.a. Human studies
	C.03.b. Degeneration models
	C.03.c. Transgenic and related mouse models
	C.03.d. Rat and mouse toxin and behavior models
	C.03.e. Mechanisms and degeneration treatment
	C.03.f. Clinical therapies
	C.03.g. Animal therapies
	C.03.h. Cellular mechanisms
	C.03.i. Circuit mechanisms
	C.03.j. Dopamine and non-dopamine pathways
	C.03.k. Mechanisms of cell death and dysfunction
	C.03.l. Neuroprotective mechanisms
C.04. Movement Disorders	
	C.04.a. Huntington's disease: Mechanisms and more
	C.04.b. Huntington's disease: Animal models
	C.04.c. Repeat expansion diseases: Non-Huntington's disease
	C.04.d. Ataxias
	C.04.e. Dystonia
	C.04.f. Other movement disorders
C.05. Neuromuscular Diseases	
	C.05.a. Motor neuron disease: Cellular mechanisms
	C.05.b. Motor neuron disease: In vitro studies

	C.05.c. Motor neuron disease: Animal models
	C.05.d. Motor neuron disease: Therapeutics
	C.05.e. Other neuromuscular diseases
C.06. Neurotoxicity, Inflammation, and Neuroprotection	
	C.06.a. Cell death mechanisms: Apoptosis and mitochondria
	C.06.b. Cell death mechanisms: Excitotoxicity and calcium
	C.06.c. Cell death mechanisms: Oxidative stress
	C.06.d. Neuroprotective mechanisms
	C.06.e. Neurotoxicity and neurodegeneration
	C.06.f. Neuroinflammation: Cellular and molecular mechanisms
	C.06.g. Neuroinflammation: Neurodegeneration
	C.06.h. Neuroinflammation: Animal models
	C.06.i. Neuroinflammation: HIV and infections
C.07. Ischemia	
	C.07.a. Cellular mechanisms
	C.07.b. Molecular mechanisms
	C.07.c. Ischemia: Perinatal
	C.07.d. Ischemia: Recovery
	C.07.e. Ischemia and Hemorrhage: Animal Models
	C.07.f. Inflammation
	C.07.g. Neuroprotection: In vivo studies
	C.07.h. Neuroprotection: In vitro studies
	C.07.i. Cell based therapies
	C.07.j. Human and translational studies
C.08. Stroke	
	C.08.a. Stroke recovery: Pharmacological approaches to therapy
	C.08.b. Stroke recovery: Non-pharmacological approaches to therapy
	C.08.c. Stroke imaging and diagnostic studies
	C.08.d. Stroke, damage, or disease: Assessment and treatment
	C.08.e. Stroke, damage, or disease: Mechanisms of abnormal movement
C.09. Brain Injury and Trauma	
	C.09.a. Brain: Cellular and molecular mechanisms
	C.09.b. Brain: Animal models
	C.09.c. Brain: Human studies
	C.09.d. Brain: Therapeutic strategies
	C.09.e. Spinal cord: Cellular and molecular mechanisms
	C.09.f. Spinal cord: Animal models and human studies
	C.09.g. Spinal cord: Therapeutic strategies: In vivo
	C.09.h. Peripheral nerve trauma, crush and toxic injury
	C.09.i. Spinal cord: Therapeutic strategies: In vitro studies
	C.09.j. Acute therapy
Theme D: Sensory Systems	
D.01. Sensory Disorders	
	D.01.a. Visual and auditory
	D.01.b. Somatosensory and pain
D.02. Somatosensation: Pain	
	D.02.a. Pain transduction: TRP channels
	D.02.b. Nociceptors: Molecular and pharmacological studies
	D.02.c. Nociceptors: Anatomical and physiological studies
	D.02.d. Spinal cord processing: Anatomy and physiology

	D.02.e. Spinal cord processing: Pharmacology
	D.02.f. Trigeminal processing
	D.02.g. Thalamic and cortical processing
	D.02.h. Descending modulation
	D.02.i. Treatments for persistent pain
	D.02.j. Pain models: Pharmacology
	D.02.k. Pain models: Behavior
	D.02.l. Pain models: Physiology
	D.02.m. Inflammatory pain
	D.02.n. Mechanisms of neuropathic pain
	D.02.o. Visceral pain
	D.02.p. Musculoskeletal pain
	D.02.q. Pain imaging and perception
	D.02.r. Opioid receptor pharmacology and signaling mechanisms
	D.02.s. Other analgesics
D.03. Somatosensation: Touch	
	D.03.a. Receptors and cellular and molecular mechanisms of transduction
	D.03.b. Plasticity and reorganization
	D.03.c. Local cortical circuits
	D.03.d. Functional organization
	D.03.e. Thalamocortical processes
	D.03.f. Stimulus feature receptive fields and response properties
	D.03.g. Stimulus feature neural coding
	D.03.h. Functional studies
D.04. Olfaction and Taste	
	D.04.a. Olfactory receptor cells and transduction
	D.04.b. Olfactory coding: Second order regions (olfactory bulb and antennal lobe)
	D.04.c. Olfaction: Higher-order circuits
	D.04.d. Olfaction: Behavior, perception, and its relation to neurophysiology
	D.04.e. Taste
D.05. Audition	
	D.05.a. Mechanoreceptors and cochlea
	D.05.b. Auditory processing: Sound localization and binaural interactions
	D.05.c. Auditory processing: Temporal, frequency, and spectral processing
	D.05.d. Auditory processing: Vocalizations and natural sounds
	D.05.e. Auditory processing: Circuits, synapses, and neurotransmitters
	D.05.f. Auditory processing: Adaptation, learning, and memory
	D.05.g. Auditory processing: Neural coding, experiment, and theory
	D.05.h. Auditory processing: Perception, cognition, and action
D.06. Vision	
	D.06.a. Retina: Photoreceptors
	D.06.b. Retinal circuitry
	D.06.c. Subcortical visual pathways
	D.06.d. Striate cortex: Circuitry and organization
	D.06.e. Striate cortex: Response properties
	D.06.f. Striate cortex: Plasticity
	D.06.g. Extrastriate cortex
	D.06.h. Processing of contrast, form, and color
	D.06.i. Visual motion
	D.06.j. Representation of objects

	D.06.k. Representation of faces and bodies
	D.06.l. Visual learning, memory, and categorization
	D.06.m. Spatial and feature-based attention
	D.06.n. Visual cognition: Decision making
D.07. Vestibular System	
	D.07.a. Vestibular hair cells, end organs, and nerve
	D.07.b. Vestibular central physiology and anatomy
	D.07.c. Vestibular perception, posture, and spatial orientation
D.08. Visual Sensory-motor Processing	
	D.08.a. Eye movements and perception
	D.08.b. Sensorimotor transformation: Behavior and whole animal
	D.08.c. Sensorimotor transformation: Higher order functional organization
	D.08.d. Sensorimotor transformation: Neurophysiology
	D.08.e. Visually-guided reaching
D.09. Multisensory Integration	
	D.09.a. Cross-modal processing: Spatial factors
	D.09.b. Cross-modal processing: Temporal factors
	D.09.c. Cross-modal processing: Neural circuitry and development
	D.09.d. Cross-modal processing: In humans
Theme E: Motor Systems	
E.01. Eye Movements	
	E.01.a. Eye movements: Central mechanisms
	E.01.b. Eye movements: Saccades
	E.01.c. Eye movements: Perception and neural mechanisms
E.02. Cerebellum	
	E.02.a. Cerebellum: Anatomy and in vitro models
	E.02.b. Cerebellum: Cortex and nuclei
	E.02.c. Cerebellum: Plasticity and climbing fibers
	E.02.d. Cerebellum: Human studies
E.03. Basal Ganglia	
	E.03.a. Transmitters and neuromodulation
	E.03.b. Cellular physiology
	E.03.c. Small networks and plasticity
	E.03.d. Systems physiology
	E.03.e. Systems behavior
E.04. Voluntary Movements	
	E.04.a. Finger and grasp control: Normal human behavior
	E.04.b. Finger and grasp control: Age, pathology, and physiology
	E.04.c. Reaching control: Action and sensation
	E.04.d. Reaching control: Movement selection and strategy
	E.04.e. Reaching control: Motor learning
	E.04.f. Interlimb and bimanual control
	E.04.g. Cortical planning and execution: Behavior
	E.04.h. Cortical planning and execution: Neurophysiology
	E.04.i. Cortical planning and execution: Neuroimaging
	E.04.j. Oral motor and speech
	E.04.k. Plasticity
E.05. Brain-Machine Interface	
	E.05.a. Neurophysiology: Non-invasive mechanisms
	E.05.b. Neurophysiology: Implanted electrodes and other direct interactions with neurons

	E.05.c. Neuroprosthetics: Control of real and artificial arm, hand, other grasping devices
	E.05.d. Neuroprosthetics: Other motor sensory interfaces (e.g., artificial vision)
E.06. Posture and Gait	
	E.06.a. Posture and gait: Kinematics, muscle activity, exercise and fatigue, and biomechanics
	E.06.b. Posture and gait: Afferent control
	E.06.c. Posture and gait: Higher order control, multi-task integration, and theory
	E.06.d. Posture and gait: Aging, injury, and disease
	E.06.e. Reflexes and reflex modulation
E.07. Rhythmic Motor Pattern Generation	
	E.07.a. Cellular properties: Interneurons and motor neurons
	E.07.b. Connectivity
	E.07.c. Neuromodulation
	E.07.d. Afferent and descending control
	E.07.e. Models
E.08. Respiratory Regulation	
	E.08.a. Respiratory regulation: Central respiratory chemoreception
	E.08.b. Respiratory regulation: Respiratory rhythm and pattern generation
	E.08.c. Respiratory regulation: Hypoxia and obstructive sleep apnea
E.09. Spinal Cord Injury and Plasticity	
	E.09.a. Spinal cord injury: Posture and locomotion
	E.09.b. Spinal cord injury: Recovery
	E.09.c. Spinal cord injury: Training, rehabilitation, and repair
	E.09.d. Plasticity: Neurophysiology
	E.09.e. Plasticity: Neurotransmitters and molecular biology
E.10. Motor Neurons and Muscle	
	E.10.a. Motor neurons: Activity, sensory, and central control: Exercise, injury, and disease
	E.10.b. Motor neurons: Development, identification, intrinsic properties, and modulation
	E.10.c. Motor unit recordings, kinematics, and EMG
	E.10.d. Motorneuron-muscle interface
	E.10.e. Muscle physiology and biochemistry
Theme F: Integrative Physiology and Behavior	
F.01. Neuroethology	
	F.01.a. Sensory and motor systems
	F.01.b. Vocal/social communication: Avian
	F.01.c. Vocal/social communication: Non-avian
F.02. Behavioral Neuroendocrinology	
	F.02.a. Sexual behavior
	F.02.b. Parental behavior
	F.02.c. Social behavior
	F.02.d. Defensive behavior and aggression
	F.02.e. Hormones and cognition
F.03. Neuroendocrine Processes	
	F.03.a. HPG axis: GnRH cells and gonadotrophins
	F.03.b. HPG axis: Neural control
	F.03.c. Neuroendocrine anatomy and physiology
	F.03.d. Neurosteroids
	F.03.e. Steroids and plasticity
	F.03.f. Sexual differentiation
F.04. Stress and the Brain	
	F.04.a. Stress and neuroimmunology

	F.04.b. Cellular actions of stress
	F.04.c. Early-life Stress: Neural, neurochemical, and physiologic effects
	F.04.d. Early-life Stress: Molecular mechanisms and cellular effects
	F.04.e. Early-life Stress: Effects on anxiety, social function, and depression
	F.04.f. Early-life Stress: Adolescence
	F.04.g. Stress-modulated pathways: Cortex, hippocampus, and striatum
	F.04.h. Stress-modulated pathways: Hypothalamus, amygdala, and bed nucleus
	F.04.i. Stress-modulated pathways: Brainstem and other
	F.04.j. Stress and cognition
F.05. Neuroimmunology	
	F.05.a. Regulating systems
	F.05.b. Behavioral effects
F.06. Brain Blood Flow, Metabolism, and Homeostasis	
	F.06.a. Energy metabolism
	F.06.b. Blood flow
	F.06.c. Blood brain barrier
	F.06.d. Functional imaging
F.07. Autonomic Regulation	
	F.07.a. Cardiovascular regulation
	F.07.b. Thermoregulation
	F.07.c. Gastrointestinal, renal/urinary, and reproductive regulation
F.08. Biological Rhythms and Sleep	
	F.08.a. Entrainment and phase shifts
	F.08.b. Molecular biology and physiology of clocks
	F.08.c. Sleep: Molecular, cellular, and pharmacology
	F.08.d. Sleep: Regulators
	F.08.e. Sleep: Systems
	F.08.f. Sleep: Behavior
	F.08.g. SCN anatomy, physiology, neurochemistry
F.09. Thirst and Water Balance	
	F.09.a. Thirst and water balance
F.10. Food Intake and Energy Balance	
	F.10.a. Integration of peripheral signals: Regulators
	F.10.b. Integration of peripheral signals: Systems
	F.10.c. Central pathways: Anatomy and development
	F.10.d. Neuropeptide regulators
	F.10.e. Monoamines, amino acids, and other regulators
Theme G: Motivation and Emotion	
G.01. Appetitive and Aversive Learning	
	G.01.a. Appetitive and incentive learning and memory
	G.01.b. Fear and aversive learning and memory: Acquisition
	G.01.c. Fear and aversive learning and memory: Modulation
	G.01.d. Fear and aversive learning and memory: Development
	G.01.e. Fear and aversive learning and memory: Extinction
	G.01.f. Fear and aversive learning and memory: Amygdala and extended amygdala circuits
	G.01.g. Fear and aversive learning and memory: Hippocampal related circuits
G.02. Motivation	
	G.02.a. Reward: Dopamine
	G.02.b. Reward: Motivational mechanisms
	G.02.c. Reward: Neuropharmacology

	G.02.d. Motivation: Neurocircuitry
	G.02.e. Motivation: Risk taking
	G.02.f. Motivation: Social communication and behavior
G.03. Emotion	
	G.03.a. Human Emotion
	G.03.b. Emotion: Neurocircuitry
	G.03.c. Emotion: Fear, anxiety, and pain
	G.03.d. Emotion: Postive emotional states
	G.03.e. Emotion: Negative emotional states
	G.03.f. Emotion: Information processing
G.04. Mood Disorders: Depression and Bipolar Disorders	
	G.04.a. Depression: Human postmortem studies
	G.04.b. Depression: Human imaging and behavioral studies
	G.04.c. Depression: Animal models
	G.04.d. Bipolar disorder: Human studies
	G.04.e. Bipolar disorder: Preclinical models
	G.04.f. Treatment and drug discovery: Depression
	G.04.g. Treatment and drug discovery: Bipolar
G.05. Anxiety Disorders	
	G.05.a. Human Studies
	G.05.b. Preclinical models
	G.05.c. Therapeutic approaches
G.06. Post-traumatic Stress Disorder	
	G.06.a. Human studies
	G.06.b. preclinical models
	G.06.c. Therapeutic approaches
G.07. Other Psychiatric Disorders	
	G.07.a. OCD and repetitive behaviors
	G.07.b. Eating disorders
	G.07.c. Other disorders
G.08. Drugs of Abuse and Addiction	
	G.08.a. Addictive drugs: Developmental effects
	G.08.b. Addictive drugs: Drug tolerance and dependence
	G.08.c. Addictive drugs: Toxicity and Developmental Effects
	G.08.d. Addiction: Genetics
	G.08.e. Addiction treatment: Translational and clinical studies
	G.08.f. Learning, memory, and addiction
	G.08.g. Alcohol: Intake and preference
	G.08.h. Alcohol: Other behavioral effects
	G.08.i. Alcohol: Neural mechanisms
	G.08.j. Amphetamines: Reinforcement, seeking, and reinstatement
	G.08.k. Amphetamines: Other behavioral effects
	G.08.l. Amphetamines: Neural mechanisms of addiction
	G.08.m. Cannabinoids: Neural mechanisms and addiction
	G.08.n. Cocaine reinforcement, seeking, and reinstatement
	G.08.o. Cocaine: Other behavioral studies
	G.08.p. Cocaine: Neural mechanisms of addiction
	G.08.q. Opioid reinforcement, seeking, and reinstatement
	G.08.r. Opioids: Neural mechanisms of addiction
	G.08.s. Nicotine: Reinforcement, seeking, and reinstatement

	G.08.t. Nicotine: Neural mechanisms of addiction
Theme H: Cognition	
H.01. Animal Cognition and Behavior	
	H.01.a. Functional mechanisms of attention
	H.01.b. Pharmacology and genetics of attention
	H.01.c. Decision making: Prefrontal cortex
	H.01.d. Decision making: Corticolimbic circuits
	H.01.e. Decision making: Pharmacology and genetics
	H.01.f. Executive function: Learning and memory
	H.01.g. Executive function: Network activity
	H.01.h. Executive function: Models of Disorders
	H.01.i. Executive function: Inhibitory control
	H.01.j. Memory consolidation and reconsolidation: Behavior
	H.01.k. Memory consolidation and reconsolidation: Molecular mechanisms
	H.01.l. Memory consolidation and reconsolidation: Neural Circuit mechanisms
	H.01.m. Learning and memory: Cortical circuits
	H.01.n. Learning and memory: Hippocampal circuits
	H.01.o. Learning and memory: Gamma and theta rhythms
	H.01.p. Learning and memory: Genes, signaling, and neurogenesis
	H.01.q. Learning and memory: Physiology
	H.01.r. Learning and memory: Pharmacology
	H.01.s. Learning and memory: Aging
	H.01.t. Learning and memory: Invertebrates
	H.01.u. Cortical and hippocampal circuits: Timing and temporal processing
	H.01.v. Cortical and hippocampal circuits: Spatial navigation
	H.01.w. Thalamic and brainstem circuits
	H.01.x. Cortical and striatal circuits
	H.01.y. Associative, nonassociative, and skill learning
H.02. Human Cognition and Behavior	
	H.02.a. Perception and imagery
	H.02.b. Human learning: Perceptual and spatial learning
	H.02.c. Human learning: Motor and sequence learning
	H.02.d. Human learning: Feedback, reinforcement and reward
	H.02.e. Human long-term memory: Medial temporal lobe
	H.02.f. Human long-term memory: Retrieval
	H.02.g. Human long-term memory: Encoding
	H.02.h. Human long-term memory: Encoding-retrieval interactions
	H.02.i. Functional mechanisms of attention
	H.02.j. Attentional networks
	H.02.k. Executive function
	H.02.l. Language
	H.02.m. Working memory
	H.02.n. Decision making and reasoning: Cognition and computational models
	H.02.o. Decision making and reasoning: Neural mechanisms
	H.02.p. Cognitive development
	H.02.q. Cognitive aging
	H.02.r. Individual differences
	H.02.s. Timing and temporal processing
	H.02.t. Social cognition: Behavior and pharmacology
	H.02.u. Social cognition: Neural processes and disorders

H.03. Schizophrenia	
	H.03.a. Neuropathology
	H.03.b. Genetics and genomics
	H.03.c. Epidemiology
	H.03.d. Behavior and symptoms
	H.03.e. Circuits and systems
	H.03.f. Animal models: Developmental
	H.03.g. Animal models: Pharmacological
	H.03.h. Biochemical studies
	H.03.i. Experimental therapeutics
Theme I: Techniques	
I.01. Molecular, Biochemical, and Genetic Techniques	
	I.01.a. Biochemical techniques
	I.01.b. Molecular techniques
	I.01.c. Genetic techniques
I.02. Systems Biology and Bioinformatics	
	I.02.a. Genomics, proteomics, and systems biology
	I.02.b. Bioinformatics
I.03. Anatomical Methods	
	I.03.a. Staining, tracing, and imaging techniques: Light microscopy
	I.03.b. Staining, tracing, and imaging techniques: Trans-synaptic tracing
	I.03.c. Staining, tracing, and imaging techniques: Electron microscopy
	I.03.d. Staining, tracing, and imaging techniques: Novel probes
I.04. Physiological Methods	
	I.04.a. Optical methods
	I.04.b. Optogenetics
	I.04.c. Electrophysiology: Cellular
	I.04.d. Electrophysiology: Neural networks
	I.04.e. Electrophysiology: Electrode arrays
	I.04.f. Electrophysiology: Stimulating neurons
	I.04.g. Novel assays
I.05. Biomarker and Drug Discovery	
	I.05.a. Affective disorders and schizophrenia
	I.05.b. Neurodegenerative diseases (AD, PD, MS, stroke)
	I.05.c. Pain, headache and migraine
	I.05.d. Drug delivery
	I.05.e. Gene therapy
I.06. Computation, Modeling, and Simulation	
	I.06.a. Cellular models
	I.06.b. Network models: Theory
	I.06.c. Network models: Experimentation
	I.06.d. Computational tools
I.07. Data Analysis and Statistics	
	I.07.a. Data analysis and statistics: Human data
	I.07.b. Data analysis and statistics: Proteomics
	I.07.c. Data analysis and statistics: Neuronal networks
	I.07.d. Software tools
Theme J: History and Education	
J.01. History of Neuroscience	
	J.01.a. History of neuroscience

J.02. Teaching of Neuroscience	
	J.02.a. K-12
	J.02.b. College
	J.02.c. Graduate and professional
J.03. Public Awareness of Neuroscience	
	J.03.a. Outreach activities
J.04. Ethical and Policy Issues in Neuroscience	
	J.04.a. Ethical and policy issues in neuroscience