

# **Neuroscience 2018 - CME Supplemental Program**

Accreditation Statement: The Society for Neuroscience (SfN) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

#### List of Activities and Credit Designation Statement

#### Symposia

The Society for Neuroscience designates this live activity for a maximum of 2.5 AMA PRA Category 1 credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### Minisymposia

The Society for Neuroscience designates this live activity for a maximum of 2.5 AMA PRA Category 1 credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **Basic-Translational-Clinical Roundtables**

The Society for Neuroscience designates this live activity for a maximum of 2.5 AMA PRA Category 1 credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **Albert and Ellen Grass Lecture**

The Society for Neuroscience designates this live activity for a maximum of 1.25 AMA PRA Category 1 credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **Presidential Special Lectures**

The Society for Neuroscience designates this live activity for a maximum of 1.25 AMA PRA Category 1 credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### **Special Lectures**

The Society for Neuroscience designates this live activity for a maximum of 1.25 AMA PRA Category 1 credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

A meeting attendee seeking CME credit may use a combination of the activities described above to gain a maximum of 35 AMA PRA Category 1 credits<sup>TM</sup>.

#### **Target Audience**

The Society's educational activities are directed at a wide range of scientists of which a portion is physicians and physicianresearchers. The physician population in this audience includes, but is not limited to, neurologists, psychiatrists, neurosurgeons, anesthesiologists, ophthalmologists, neuropathologists, neuropharmacologists, and clinical neurophysiologists.

## **Learning Objectives**

#### **Global Learning Objective**

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries in the basic science that underlies clinical medicine.

**Statement of Need:** It is important that physicians comprehend the basic science that underlies clinical medicine. The Society for Neuroscience annual meeting is the premier venue for this educational opportunity. Physicians learn about the most up-to-date, cutting-edge discoveries regarding the brain and nervous system.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will integrate the most up-to-date information and research on the mechanism, treatment, and diagnosis of conditions related to neurological and psychiatric disorders into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

## **Theme A: Development**

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries on nerve generation and regeneration, stem cells, axon guidance, growth factors, and synapse formation. In addition, the role for non-neuronal cells (called glia) and its development in the neuron network are not yet well-appreciated.

**Statement of Need:** Physicians require knowledge of the most up-to-date research on nerve generation and regeneration, stem cells, axon guidance, growth factors, and synapse formation, as well as the role for non-neuronal cells. Developmental mechanisms of the nervous system frequently provide key insights into molecular causes of brain damage, stroke, mental disorders, and neurodegenerative diseases. Therefore, these topics provide essential information for the development of treatments for neurological and psychiatric disorders.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will integrate the most up-to-date information and research on the cellular and molecular mechanisms that lead to the development of connections in the developing brain and spinal cord into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

#### Theme B: Neural Excitability, Synapses, and Glia

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries about mechanisms affecting and controlling synaptic transmission, synaptic plasticity, and neuronal excitability as a foundation to understanding the dysfunction of these same mechanisms in neurological and neuropsychiatric diseases.

**Statement of Need:** Physicians require state of the art information on the mechanisms affecting and controlling synaptic transmission, synaptic plasticity, and neuronal excitability as a foundation to understanding the dysfunction of these same mechanisms in neurological and neuropsychiatric diseases. This information can provide a needed context for the most efficacious employment of the many therapeutic pharmacological agents either in use or in development that affect or act directly upon these mechanisms. **Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will integrate the most up-to-date information and research on the mechanisms involved in synaptic transmission, synaptic plasticity, and neuronal excitability into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

#### Theme C: Neurodegenerative Disorders and Injury

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries in basic science research related to the pathophysiology, diagnosis, and treatment of neurological diseases and trauma.

**Statement of Need:** Physicians need updated information on recent research discoveries related to the pathophysiology, diagnosis, and treatment of neurological diseases and trauma. This information will help them interpret changing trends in the diagnosis and treatment of those disorders as well as integrate the advances in their understanding of both neurological disease and trauma. **Learning Objective:** Given a patient with a neurological condition, physicians will integrate the most up-to-date information and research advances on the mechanisms, diagnosis, and treatment of neurological disorders using the relevant state-of-the-art molecular, biochemical, and other approaches into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

#### Theme D: Sensory Systems

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries in basic research related to the mechanism, diagnosis, and treatment of sensory disorders including pain, and on the mechanisms underlying the processing of sensory information as a foundation for understanding sensory dysfunction.

**Statement of Need:** Physicians require state of the art information on recent, basic research discoveries related to the mechanism, diagnosis, and treatment of sensory disorders, related to vision, hearing, touch, and pain and on the mechanisms underlying the processing of sensory information as a foundation for understanding sensory and sensorimotor dysfunction. This information will help them interpret changing trends in the diagnosis and treatment of a variety of sensory disorders.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will integrate the most up-to-date information and research on the mechanisms of transduction and processing of sensory information, the way in which sensory inputs feed into mechanisms subserving cognitive awareness and behavioral output, and the mechanism, treatment, and diagnosis of sensory disorders into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

#### **Theme E: Motor Systems**

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries in basic research related to the mechanism, diagnosis, and treatment of movement, neuromuscular, and muscle diseases, and on the mechanisms underlying sensorimotor dysfunction.

**Statement of Need:** Physicians require state of the art information on recent, basic research discoveries related to the mechanism, diagnosis, and treatment of movement, neuromuscular, and muscle diseases, and on the mechanisms underlying sensorimotor dysfunction. This information will help them interpret changing trends in the diagnosis and treatment of a variety of movement disorders.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will integrate the most up-to-date information and research on the mechanism, treatment, and diagnosis of movement disorders into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

#### Theme F: Integrative Physiology and Behavior

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries in basic research related to the mechanisms, etiology, diagnosis, and treatment of brain and neural systems that regulate basic bodily processes, including sleep and arousal, circadian rhythms of behavior and physiology, respiration, regulation of food intake and body weight, brain metabolism, stress responses, neuroendocrine secretions, and hormone effects.

**Statement of Need:** Physicians require updated information on basic research discoveries related to the mechanisms, etiology, diagnosis and treatment of brain and neural systems that regulate basic bodily processes, including sleep and arousal, circadian rhythms of behavior and physiology, respiration, regulation of food intake and body weight, brain metabolism, stress responses, neuroendocrine secretions and hormone effects. This information is necessary for understanding changing trends in the diagnosis and treatment of the neurological disorders affecting sleep and vigilance state, energy balance, stress, metabolic and autonomic systems. Physicians can take advantage of this opportunity to gain expansive fundamental information and new perspectives in sleep medicine. They will be given the opportunity to study pathophysiology, etiology of sleep disorders, approaches to and techniques of diagnosis, description, and uses of therapeutic modalities relating to sleep medicine, and more.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will be able to integrate expansive fundamental information, new perspectives, and competence regarding current research into the understanding, diagnosis, and treatment of the autonomic nervous system and other homeostatic systems in order to determine the best course of action in treating the patient.

#### Theme G: Motivation and Emotion

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries in basic research related to psychiatric disorders of motivation and emotion which include but are not limited to addiction, depression, post-traumatic stress disorder, and anxiety.

**Statement of Need:** Physicians require updated information on basic research discoveries related to the brain mechanisms of motivation and emotion. This information is necessary for understanding changing trends in the diagnosis and treatment of the psychiatric disorders such as drug addiction, depression, post-traumatic stress disorder, and anxiety. Physicians can take advantage of this opportunity to gain expansive fundamental information and new perspectives on the neural mechanisms of basic brain functions in motivation and emotion that underlie psychiatric behavioral disorders.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will be able to integrate fundamental information, new perspectives, and competence regarding current research into the understanding, diagnosis, and treatment of psychiatric disorders that arise from dysregulation of the brain systems that mediate motivation and emotion in order to determine the best course of action in treating the patient.

## **Theme H: Cognition**

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries on basic research related to the brain mechanisms, diagnosis, and treatment of brain disorders, which include all neurological and psychiatric diseases. **Statement of Need:** Physicians require recent information on basic research discoveries related to the brain mechanisms, diagnosis, and treatment of brain disorders, which include all neurological and psychiatric diseases. **Statement of** state in disorders, which include all neurological and psychiatric diseases. Most brain disorders are associated with alterations in brain mechanisms of cognition and behavior, and therefore, information on this topic will help them interpret changing trends in the diagnosis and treatment of all forms of neurologic and psychiatric disease.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will integrate the most up-to-date information and research on the neural basis of normal and abnormal cognition and behavior into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

## **Theme I: Techniques**

**Knowledge Gaps:** The physician does not possess the most recent knowledge of the latest discoveries on the development, application, and interpretation of novel techniques in neuroscience in order to optimize diagnosis and treatment of brain diseases. **Statement of Needs:** Physicians require current information on the development, application, and interpretation of novel techniques in neuroscience in order to optimize diagnosis and treatment of brain diseases.

**Learning Objective:** Given a patient with a neurological or psychiatric condition, physicians will integrate the most up-to-date information, technology, and research techniques in neuroscience into their diagnostic and therapeutic modalities of practice in order to determine the best course of action in treating the patient.

### **Desirable Physician Attributes**

All CME activities are developed in the context of desirable physician attributes, as dictated by the Accreditation Council for Graduate Medical Education. These attributes include: 1) patient care; 2) medical knowledge; 3) practice-based learning and improvement; 4) interpersonal and communication skills; 5) professionalism; and 6) systems-based practice.

#### Acknowledgement of Commercial Support

The annual meeting scientific program is developed by the Program Committee of the Society for Neuroscience, independent of influence from educational grant supporters over the topics or speakers in the CME program. The support of lectures does not constitute an endorsement of any product or program by the Society for Neuroscience. Their financial support contributes significantly to the program, and the Society for Neuroscience thanks them for their support:

Janssen Research & Development, LLC	Presidential Special Lecture
Tianqiao & Chrissy Chen Institute	Presidential Special Lecture
The Grass Foundation	Albert and Ellen Grass Lecture

\*Updated as of 10/18/18

# All other CME events, including lectures, symposia, minisymposia, and roundtables, receive no outside financial contributions.

The Society requires faculty to disclose any relevant financial relationships they have with the commercial supporters of this activity, any commercial product/service that may be discussed in the presentation, as well as any discussions of unlabeled/unapproved uses of drugs or devices.

In general, disclosure is required in any case in which an individual stands to benefit financially from research performed. Similarly, disclosure is required in any instance in which a company stands to benefit financially from any research performed. Consequently, the central criterion of this policy places the onus for disclosure on each faculty member to indicate any benefit to an individual or company that may derive from any and all relationships that may potentially lead to financial reward.

Disclosure of grant or commercial support received by speakers of Society-sponsored events is indicated on each abstract, and potential conflicts of interest are also noted. Disclosures are also provided in the daily *Program* books. All faculty not included in the disclosure section indicated that they have no relevant conflicts of interest. Disclosures from members of the **Program Committee** (the group who is responsible for planning, development, and content review of all CME activities) are listed below:

**F. Bradke**: Receive consulting fees for advisory board from Novartis Venture Fund; **Z. Dong**: Ownership Interest: Escient Pharmaceutical; **E.A. Lumpkin**: Contracted Research/Research Grant: Nestle Research Center; **P.E. Phillips**: Employment/Salary: Amgen, Inc. and Ownership Interest: Amen; **M. Wernig**: Ownership Interest: Fulcrum Therapeutics, Neucyte Inc, Fulcrum Therapeutics.

**The following Committee members had no financial relationships to disclose:** P. Arlotta; S. Bamji; D. Bautista; O. Bloom; A. Bonni; M. Carandini; C.S. Colwell; R. Costa; R. Desimone; W. Freiwald: R.C. Froemke; A. Gitler; Y. Goda; S.N. Haber; H. Hu; R.L. Huganir; T. Isa; P. Janak; A.L. Joyner; P.O. Kanold; P.S. Katz; T. Komiyama; D. Lipsombe; M.S. Livingstone; A. McKee; M. Mueller; T.H. Murphy; J.R. Naegele; R.A. Nicoll; R. Paz; L.P. Reagan; K.W. Roche; S. Roy; S. Sara; D. Schiller; A. Schwartz; P. Sengupta; N.M. Shah; M. Shapiro; K. Shen; L. Snyder; I. Tracey; N. Tritsch; E. Trushina; A. Tzingounis; N. Uchida; S.M. Voglmaier; A.E. West; S.A. White; H. Zeng; Y. Zou.

# Log Sheet for CME Credits Name: \_\_\_\_\_

## Six-Digit Registration Badge Number: \_\_\_\_\_\_

Use the annual meeting mobile app and Neuroscience Meeting Planner (NMP) to keep track of your CME credits while at Neuroscience 2018. While logged into your SfN account, add sessions to your Credit Cart via the mobile app and NMP. Evaluate sessions and print your CME certificate using the NMP. The option to claim credits will be available beginning the first day of the annual meeting, **Saturday**, **November 3**, **2018**. Please enter your hours and complete the survey by **January 11**, **2019**. You must complete the online form to submit your credits request. For questions, email program@sfn.org.

		Session			Max	Hours		
Session Type	Session Title	No.	Room	Time	Credit	Attended		
	Saturday PM							
				1:30 PM-				
Symposium	Neuronal Guidance in Health and Disease	2	6A	4:00 PM	2.5			
				1:30 PM-				
Minisymposium	New Observations in Neuroscience Using Superresolution Microscopy	3	6B	4:00 PM	2.5			
	Neuronal Mechanisms for Prepulse Inhibition: Comparative Approaches From			1:30 PM-				
Minisymposium	Sensory to Cognition	4	6C	4:00 PM	2.5			
	How to Get Out of Harm's Way: New Insight Across Multiple Species Into the			1:30 PM-				
Minisymposium	Neural Mechanisms of Visually Guided Collision Avoidance	5	6E	4:00 PM	2.5			
	Latent Factors and Dynamics in Motor Cortex and Their Application to Brain-			1:30 PM-				
Minisymposium	Machine Interfaces	6	28A	4:00 PM	2.5			
				1:30 PM-				
Minisymposium	Neurocognitive Development of Motivated Behavior	7	29D	4:00 PM	2.5			
				2:00 PM				
			Ballroom	- 3:10				
Lecture	SPECIAL LECTURE: Neural Dynamics of the Primate Attention Network	8	20	PM	1.25			
				5:15 PM				
			Ballroom	- 6:30				
Lecture	PRESIDENTIAL SPECIAL LECTURE: The dArc Matter of Synaptic Communication	9	20	PM	1.25			
	Sunday AM			Γ	1			
				8:30 AM				
	SPECIAL LECTURE: Bidirectional Interactions Between the Brain and	0.2	Ballroom	- 9:40	4.25			
Lecture	Implantable Computers	92	20		1.25			
				8:30 AIVI				
Symposium	Multiscale Computer Modeling of Neural Circuits in Health and Disease	93	64	- 11.00 ΔM	25			
Зупрозил		33	UA	8·30 ΔM	2.5			
	Specific Basal Forebrain-Cortical Cholinergic Circuits Coordinate Cognitive			- 11:00				
Symposium	Operations	94	6B	AM	2.5			

				8:30 AM		
				- 11:00		
Minisymposium	Computational Affective Neuroscience: Algorithms for Survival	95	6C	AM	2.5	
				8:30 AM		
				- 11:00		
Minisymposium	The Dynamic Interaction of Vision and Eye Movements	96	6E	AM	2.5	
				8:30 AM		
	Advances in Enteric Neurobiology: The "Brain" in the Gut in Health and			- 11:00		
Minisymposium	Disease	97	28A	AM	2.5	
				8:30 AM		
	Molecular Mechanisms Underpinning Dopamine Neuron Development,			- 11:00		
Minisymposium	Diversity, and Vulnerability	98	29D	AM	2.5	
Basic-Translational-				8:30 AM		
Clinical	What We Know, What We Don't Know: How Can We Better Understand			- 11:00		
Roundtables	Alzheimer's Disease to Develop Effective Treatments?	99	10	AM	2.5	
				10:00		
				AM-		
	SPECIAL LECTURE: Neural Data Science: Accelerating the Experiment-Analysis-		Ballroom	11:10		
Lecture	Theory Cycle in Large-Scale Neuroscience	100	20	AM	1.25	
				11:30		
				AM -		
			Ballroom	12:40		
Lecture	SPECIAL LECTURE: Sensorimotor Circuits for Social Communication	101	20	PM	1.25	
	Sunday PM					
				1:00 PM		
	CLINICAL NEUROSCIENCE LECTURE: From Axon Regeneration to Functional		Ballroom	- 2:10		
Lecture	Recovery After CNS Injury	175	20	PM	1.25	
				1:30 PM-		
Symposium	Local Field Potentials and Deep Brain Stimulation	176	6A	4:00 PM	2.5	
	Blood-Brain Barrier in Health and Disease: Role in Neurodegeneration, CNS			1:30 PM-		
Symposium	Autoimmunity, and Gene Transfer	177	6B	4:00 PM	2.5	
				1:30 PM-		
Minisymposium	High-Level Cognition in Low-Level Brain Regions	178	6C	4:00 PM	2.5	
				1:30 PM-		
Minisymposium	More Than Just a "Motor": Recent Surprises From the Frontal Cortex	180	28A	4:00 PM	2.5	
	Cell Adhesion Molecules at the Intersection of Cell Type Identity and Neural			1:30 PM-		
Minisymposium	Circuit Connectivity	181	29D	4:00 PM	2.5	
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				5:15 PM				
			Ballroom	- 6:30				
Lecture	PRESIDENTIAL SPECIAL LECTURE: Neurobiology of Social Behavior Circuits	183	20	PM	1.25			
	Monday AM							
				8:30 AM				
	SPECIAL LECTURE: Organelle Structure and Dynamics: What High-Resolution		Ballroom	- 9:40				
Lecture	Imaging Is Uncovering	256	20	AM	1.25			
				8:30 AM				
				- 11:00				
Symposium	Repairing the Injured Nervous System: Inhibiting the Inhibitors	257	6A	AM	2.5			
				8:30 AM				
				- 11:00				
Symposium	Targeted Therapies for Parkinson's Disease: From Genetics to the Clinic	258	6B	AM	2.5			
				8:30 AM				
				- 11:00				
Minisymposium	Defining Dysbiosis in Disorders of Movement and Motivation	259	6C	AM	2.5			
				8:30 AM				
	Insular Cortex Neurocircuits: Relationships Among Function, Connectivity, and			- 11:00				
Minisymposium	Drug and Alcohol Abuse	260	6E	AM	2.5			
				8:30 AM				
		264		- 11:00	2.5			
Minisymposium	Algorithms for Olfactory Search Across Species	261	28A	AM	2.5			
				8:30 AM				
	Exposing Neural Dynamics Using Real-Time Control: From Neurons to Human	262	200	- 11:00	ЭГ			
Ninisymposium Racio Translational		202	290		2.5			
				8.30 AIVI				
Roundtables	Molecular Therapies for Neurological Diseases	262	10	- 11.00	25			
Roundtables		205	10	AIVI 11·20	2.5			
				AM -				
			Ballroom	12·40				
Lecture	SPECIAL LECTURE: New Computational Perspectives on Serotonin Function	265	20	12.40 PM	1 25			
	Monday PM	205	20		1.25			
	Extracellular Vesicles: Insights Into Cell-to-Cell Communication in the Nervous			1.30 PM-				
Symposium	System	344	6A	4:00 PM	2.5			
, ,	Global Efforts to Build More Predictive Animal Models of Neurodegenerative	_ `		1:30 PM-	_			
Symposium	Disease	345	6B	4:00 PM	2.5			

	Sex Differences in Risk and Resilience: Stress Effects on the Neural Substrates			1:30 PM-		
Minisymposium	of Emotion and Motivation	346	60	4:00 PM	2.5	
				1:30 PM-		
Minisymposium	Social Motivation Across the Lifespan	347	6E	4:00 PM	2.5	
				1:30 PM-		
Minisymposium	Innovative Approaches for Monitoring Neuromodulation With Light	348	28A	4:00 PM	2.5	
				1:30 PM-		
Minisymposium	Multidimensional Neuronal Cell Type Classification in the Cerebral Cortex	349	29D	4:00 PM	2.5	
Basic-Translational-						
Clinical				1:30 PM-		
Roundtables	Rapid Antidepressant Action: Synaptic Mechanisms and Clinical Aspects	350	30E	4:00 PM	2.5	
				3:15 PM		
	ALBERT AND ELLEN GRASS LECTURE: Neural Sequences in Memory and		Ballroom	- 4:25		
Lecture	Cognition	351	20	PM	1.25	
				5:15 PM		
	PRESIDENTIAL SPECIAL LECTURE: From Nanoscale Dynamic Organization to		Ballroom	- 6:30		
Lecture	Plasticity of Excitatory Synapses and Learning	352	20	PM	1.25	
	Tuesday AM					
				8:30 AM		
			Ballroom	- 9:40		
Lecture	SPECIAL LECTURE: Understanding Regeneration of Complex Body Parts	433	20	AM	1.25	
				8:30 AM		
				- 11:00		
Symposium	RNA Control of Axonal Functions	434	6A	AM	2.5	
				8:30 AM		
				- 11:00		
Symposium	The Feeling Within: Molecules to Behavior Underlying Interoception	435	6B	AM	2.5	
				8:30 AM		
				- 11:00		
Minisymposium	The Neurobiology of Forgetting	436	6C	AM	2.5	
				8:30 AM		
	Mechanisms of Tau Oligomer-Induced Synaptic Impairment and Potential			- 11:00		
Minisymposium	Treatment Strategies	437	6E	AM	2.5	
				8:30 AM		
	Neuromodulation of Brain States in Health and Disease: Bridging Experiments			- 11:00		
Minisymposium	and Computational Models	438	28A	AM	2.5	

				8:30 AM		
	Whole-Brain Analysis of Cells and Circuits by Tissue Clearing and Light-Sheet			- 11:00		
Minisymposium	Microscopy	439	29D	AM	2.5	
Basic-Translational-				8:30 AM		
Clinical	Neuroprosthetic Devices: A Patient's Perspective on Brain Computer			- 11:00		
Roundtables	Interfaces	440	10	AM	2.5	
				10:00		
				AM-		
	SPECIAL LECTURE: The Genetics, Neurobiology, and Evolution of Natural		Ballroom	11:10		
Lecture	Behavior	441	20	AM	1.25	
				11:30		
				AM -		
	SPECIAL LECTURE: Neuronal Diversity Within the Ventral Tegmental Area and		Ballroom	12:40		
Lecture	Co-Release of Neurotransmitters	442	20	PM	1.25	
	Tuesday PM					
				1:00 PM		
			Ballroom	- 2:10		
Lecture	SPECIAL LECTURE: Genetic Specification of Neuronal Identity	528	20	PM	1.25	
	Organelle Dynamics and Proteostasis in Neuronal Homeostasis and			1:30 PM-		
Symposium	Degeneration	529	6A	4:00 PM	2.5	
	The Dynamic Brain: Signatures of Fast Functional Reconfiguration, Their			1:30 PM-		
Symposium	Interpretability, and Clinical Value	530	6B	4:00 PM	2.5	
· ·				1:30 PM-		
Symposium	Language Networks Derived From Direct Intracranial Recordings in Humans	531	6C	4:00 PM	2.5	
				1.30 PM-		
Minisymposium	Neuropentide Signaling: From Physiology to Behavior	532	6F	4.00 PM	25	
, in the second s		552	02	1:20 PM-	2.0	
Minisymposium	Molecular and Nano-Organization of Synanses	533	280	1.50 PM	25	
winnsymposium		555	204	1.20 DM	2.5	
Minicumposium	Say Differences and Hermone Action in the Limbic System	E 2.4	200	1.50 PIVI-	2 5	
winnsymposium	Sex Differences and Hormone Action in the Limbic System	554	290		2.5	
	DECIDENTIAL SECIAL LECTURE: From Solvia Divingrum to LSD: Toward a		Pallroom	5.13 FIVI		
Lecture	Molecular Understanding of Psychoactive Drug Actions	536	20	- 0.30 DM	1 25	
	Wodposday AM	550	20	r IVI	1.25	
	weunesuay Alvi	[ [		8.30 VV4		
	SPECIAL LECTURE: Biochemical Computation in Postsynantic Compartments:		Ballroom	0.50 AIVI		
Lecture	Implications for Synantic Placticity Learning and Memory	611		- 9.40 AM	1 25	
Lecture	ן ווועוונמנוטוז וטו זעוומעוני רומגונונץ, גפמרווווצ, מוע ועופווטרץ	014	20	AIVI	1.25	

				8:30 AM		
	Multiple Axes of Dopamine Systems for Behavioral Controls: From Fly Via			- 11:00		
Symposium	Rodent to Monkey	615	6A	AM	2.5	
				8:30 AM		
	Mental Structures and Sequences: Evolutionary Solutions From Birds to			- 11:00		
Symposium	Primates	616	6B	AM	2.5	
				8:30 AM		
	Human Stem Cell Models to Validate Rare and Common Variants Contributing			- 11:00		
Minisymposium	to Neurodevelopmental Disorders	617	6C	AM	2.5	
				8:30 AM		
				- 11:00		
Minisymposium	Novel Molecular Targets for the Treatment of Pain	618	6E	AM	2.5	
				8:30 AM		
	The Endolysosomal System and Proteostasis: From Development to			- 11:00		
Minisymposium	Degeneration	619	28A	AM	2.5	
				8:30 AM		
				- 11:00		
Minisymposium	Neural Proteomics in Synapse Development and Function	620	29D	AM	2.5	
				8:30 AM		
				- 11:00		
Minisymposium	Cortical Control of Locomotion and Posture	621	31C	AM	2.5	
				10:00		
				AM-		
	SPECIAL LECTURE: A Genetic Roadmap to Understanding Auditory Perception		Ballroom	11:10		
Lecture	Mechanisms	622	20	AM	1.25	
				11:30		
				AM -		
			Ballroom	12:40		
Lecture	SPECIAL LECTURE: Reward Processing by the Dorsal Raphe	623	20	PM	1.25	
	Wednesday PM					
				1:00 PM		
			Ballroom	- 2:10		
Lecture	SPECIAL LECTURE: Light Detection in the Eye: The Big Picture	704	20	PM	1.25	
	Unveiling the Extracellular Space of the Brain: From Super-Resolved			1:30 PM-		
Symposium	Microstructure to In Vivo Function	705	6A	4:00 PM	2.5	
	The Emerging Role of the Amygdala in Modulating the Somatosensory and			1:30 PM-		
Symposium	Emotional Components of Pain and Itch	706	6B	4:00 PM	2.5	

				1:30 PM-		
Minisymposium	From Recent to Remote Memory and Back	707	6C	4:00 PM	2.5	
				1:30 PM-		
Minisymposium	The Basal Ganglia: Beyond Action Selection	708	6E	4:00 PM	2.5	
				1:30 PM-		
Minisymposium	Sonic Hedgehog and Cell-Specific Programming: Circuits, Disease, and Repair	709	28A	4:00 PM	2.5	
	Multitransmitter Neurons: The Function and Regulation of Neurotransmitter			1:30 PM-		
Minisymposium	Cotransmission	710	29D	4:00 PM	2.5	