Presentations by SFARI Investigators, collaborators and SFARI staff at Neuroscience 2018

ORAL PRESENTATIONS				
Date	**Time**	**Presenter**	**Presentation title**	**SFARI Investigators**
November 3	3.20 – 3.55 p.m.	Christopher Walsh	The genetics of human connectivity	
November 4	2:00 – 2:15 p.m.	Hye Young Lee	Nanoparticle delivery of CRISPR into the brain rescues a mouse model of fragile X syndrome from exaggerated repetitive behaviors	
	2:30 - 3:40 p.m.	Ann Graybiel	The striatum and decision-making based on value	
	5:15 - 6:30 p.m.	Catherine Dulac	Neurobiology of social behavior circuits	
November 5	8:00 - 8:15 a.m.	Jason Wolff	Longitudinal diffusion tensor imaging study of infants at low and high risk for autism	Joseph Piven Robert Schultz
	8:15 - 8:30 a.m.	Adam Eggebrecht	Restricted and repetitive behavior and brain functional connectivity in infants at risk for developing autism spectrum disorder	Joseph Piven Robert Schultz Lonnie Zwaigenbaum
	8:30 - 8:45 a.m.	Abigail Dickinson	Atypical circuit level brain activity in infants at high risk for autism spectrum disorder	Shafali Jeste
	8:45 - 9:00 a.m.	Laurel Gabard-Durnam	An EEG biomarker quantifying sensitive period onset in autism spectrum disorder	Charles Nelson Helen Tager-Flusberg
	9:00 - 9:15 a.m.	Carol Wilkinson	EEG markers of language development in infants and toddlers at risk for autism spectrum disorder	Charles Nelson Helen Tager-Flusberg
	10:15 - 10:30 a.m.	Yangfeifei Gao	Anatomical correlates of language connectivity-based subgrouping in autism spectrum disorder	Ruth Carper

	10:30 - 10:45 a.m.	Afrooz Jahedi	Functional connectivities are more informative than anatomical variables in diagnostic classification of autism	Ruth Carper
	11:00 - 11:15 a.m.	Sophie Schwartz	Response to own name in noise differs in autistic adolescents with severe language impairments	Helen Tager-Flusberg
	11:15 - 11:30 a.m.	Janice Hau	The cingulum and cingulate U-fibers in children and adolescents with autism spectrum disorders	Ruth Carper
	1:00 - 2:00 p.m.	Jessica Cardin Vikaas Sohal	Gamma – Fumes or Fundamental	
	2:30 - 2:45 p.m.	Rui Peixoto	Abnormal corticostriatal development underlies the onset of behavioral deficits in Shank3B$^{-/-}$ mice	Bernardo Sabatini
November 6	10:00 - 10:15 a.m.	Bernard Bloem	Two-photon imaging of striosomes and matrix in mice demonstrates overlapping and distinct functions in reinforcement learning	Ann Graybiel Mriganka Sur
	10:15 - 10:35 a.m.	Ofer Yizhar	Reward-associated modulation of excitatory-inhibitory dynamics in the prefrontal cortex	
	1:00 - 1:15 p.m.	Wendy Wenderski	Mendelian autism caused by mutations in BAF53b that disrupt activity-dependent chromatin repression	Gerald Crabtree Joseph Gleeson Liqun Luo Robert Malenka
	1:30 - 1:45 p.m.	M. Albert Basson	The autism-associated chromatin remodeller CHD8 regulates neurodevelopmental gene expression, brain growth and functional connectivity	Alessandro Gozzi Jason Lerch
	1:45 - 2:00 p.m.	Anna Gennadiy Vorobyeva	Ultra Rare inherited and *de novo* mutations in eIF2a kinases disrupt protein synthesis and contribute to autism-associated clinical phenotypes	Ivan Iossifov Eric Klann
	2:00 - 2:15 p.m.	Morgan Kleiber	Deletion of CACNG2 (Stargazin) in a personalized mouse model of autism spectrum disorder (ASD)	Jonathan Sebat
	2:15 - 2:30 p.m.	Megha Amar	Functional genomics approaches identify pathways dysregulated by the 16p11.2 autism-linked CNV	Lilia Iakoucheva Alysson Muotri

	2:30 - 2:45 p.m.	Thomas Nickl-Jockschat	Linking spatial gene expression patterns to sex-specific brain structural changes on a mouse model of 16p11.2 hemideletion	Ted Abel
	2:30 - 2:45 p.m.	Vedakumar Tatavarty	Regulation of homeostatic plasticity by Shank3	Gina Turrigiano
	4:00 - 4:15 p.m.	Hilary Richardson	How language facilitates theory of mind development: Behavioral and fMRI evidence in children with delayed access to language	Rebecca Saxe
November 7	8:00 - 8:15 a.m.	Nadeem Murtaza	Identifying the role of *TAOK2* in brain development and the 16p11.2 CNV microdeletion	Stephen Scherer James Ellis
	8:15 - 8:30 a.m.	Lilia Iakoucheva	Cerebral organoid and animal models targeting the pathway dysregulated by 16p11.2 autism CNV	Alysson Muotri

POSTER PRESENTATIONS

Date	Time	Presenter	Poster title	SFARI Investigators/staff
November 3	1:00 - 2:00 p.m.	Cesar Canales	Alterations in mouse cortical development following mid-gestational Poly(I:C)-mediated maternal immune activation	Alex Nord Kimberley McAllister
	2:00 - 3:00 p.m.	Carina Lea Block	Prenatal air pollution and maternal stress alter brain development in the anterior cingulate cortex	Cagla Eroglu
	3:00 - 4:00 p.m.	Valerio Zerbi	The autism mouse brain connectome project	Alessandro Gozzi Michela Fagiolini Jason Lerch
	3:00 - 4:00 p.m.	Amandine Fernandez	The GABA developmental shift is abolished by maternal immune activation already at birth	Yehezkel Ben-Ari
	3:00 - 4:00 p.m.	Lei Xing	Functions of Neurofibromin in cortical circuit development	Mark Zylka
	4:00 - 5:00 p.m.	Loredana Georgiana Stoica Ghita	Dissecting the contributions of Foxp1 and Foxp2 to motor behavior	Rui Costa
November 4	8:00 - 9:00 a.m.	Russell Port	Children with autism spectrum disorder demonstrate regionally altered resting-state alpha-to-gamma phase-amplitude coupling as well as resting-state band-passed power	Timothy Roberts

	8:00 - 9:00 a.m.	Alice Luo Clayton	Towards preclinical validation of arbaclofen (R-baclofen) treatment for 16p11.2 deletion syndrome	Ted Abel Jacqueline Crawley Sandeep Robert Datta Brigitta Gundersen Yann Herault Timothy O'Brien
	8:00 - 9:00 a.m.	Kathryn Anne McNaughton	Neural response to dynamic and static faces in adults with autism spectrum disorder and typical development	James McPartland
	9:00 - 10:00 a.m.	Lisa Yankowitz	Dissociating regional gray matter density and volume in children and adolescents with autism spectrum disorder	Robert Schultz
	8:00 – 9:00 a.m.	Perry William Eric Spratt	The autism-associated gene *Scn2a* plays an essential role in dendritic excitability, synaptic stability, and learning	Kevin Bender Stephan Sanders
	9:00 - 10:00 a.m.	Dmitry Velmeshev	Single-cell analysis implicates upper-layer neurons and protoplasmic astrocytes in autism	Arnold Kriegstein
	9:00 – 10:00 a.m.	Wei Wu	Human IPSCs-derived cerebral organoids reveal increased intrinsic neuronal excitability in an autistic subject harboring cacng2 mutation	Alysson Muotri Jonathan Sebat
	10:00 – 11:00 a.m.	Roya Bina	SUPT16H *de novo* mutations in patients with neurodevelopmental disorders	Elliot Sherr
	10:00 - 11:00 a.m.	Don-Wook Kim	Characterization of cell-types in the ventromedial hypothalamus which mediate innate social behaviors	David Anderson
	10:00 - 11:00 a.m.	Xuan Amelia Tran	Hyperconnectivity during language processing in infants at risk for ASD	Shafali Jeste
	10:00 - 11:00 a.m.	Pu-Yun Shih	Investigation of the role of CTTNBP2 in autism spectrum disorder	Yi-Ping Hsueh
	11:00 a.m.- 12:00 p.m.	Katrina Choe	Oxytocin normalizes altered social circuit connectivity in the *Cntnap2* knockout mouse	Daniel Geschwind

	11:00 a.m. - 12:00 p.m.	Thomas Maynard	Increased cellular stress disrupts migration of cortical interneurons in the LgDel model of 22q11.2 DS	Anthony LaMantia
	11:00 a.m. - 12:00 p.m.	Jorge Urresti	Cerebral organoids from autism patients provide insights into dysregulated molecular pathways	Llilia Iakoucheva Alysson Muotri
	11:00 a.m. - 12:00 p.m.	Tatiana Winkelman	Children with autism and sleep problems show abnormal regulation of resting EEG	James McPartland
	1:00 - 2:00 p.m.	Cleber Trujillo	Spontaneous functional network activity in organoids resembles programmed early human brain development	Alysson Muotri
	4:00 - 5:00 p.m.	Rachel Bandler	Developmental diversification of forebrain inhibitory neurons	Gordon Fishell
November 5	11:00 a.m. - 12:00 p.m.	Giorgia Quadrato	Investigation of the role of CHD8 in human brain development at single-cell resolution	Paola Arlotta Feng Zhang
	1:00 - 2:00 p.m.	Sarah Ferri	Age- and sex-specificity of deficits in the Pcdh10 mouse model relevant to autism	Ted Abel
	2:00 - 3:00 p.m.	Ashley Anderson	FOXP1 regulates cell-type specific molecular pathways and function within striatal projection neurons	Jay Gibson Genevieve Konopka
	4:00 - 5:00 p.m.	Ozge Oztan	Cerebrospinal fluid vasopressin, diagnostic classification, and symptom severity in children with autism	Antonio Hardan Karen Parker Elliott Sherr
	4:00 - 5:00 p.m.	Joseph Francis Lynch	Deficits in learning are common across multiple mouse models of autism	Ted Abel
November 6	9:00 - 10:00 a.m.	Ruchi Malik	Conditional loss of the tuberous sclerosis gene, Tsc1, results in altered cortical GABAergic interneuron development and physiology	John Rubenstein Vikaas Sohal
	10:00 - 11:00 a.m.	Chen Tian	ASD/ID related *de novo* mutations in the TRIO-Rac1 pathway alter synaptic function	Bruce Herring
	1:00 - 2:00 p.m.	Oleh Krupa	Whole brain cellular resolution imaging reveals layer-specific neuronal deficits upon cortical topoisomerase I deletion	Mark Zylka

	1:00 - 2:00 p.m.	Manar Zaghlula	Identification of post-translational regulators of MeCP2 protein levels as treatment targets	Huda Zoghbi
	1:00 - 2:00 p.m.	Jiaiqui Julia O'Reilly	Placental allopregnanolone loss alters fetal GABAergic signaling	Anna Penn
	2:00 - 3:00 p.m.	Anahita Amiri	Integrative multi-omics analyses of iPSC-derived brain organoids identify early determinants of human cortical development	Alexej Abyzov Nenad Sestan Flora Vaccarino
	3:00 - 4:00 p.m.	Dino Dvorak	Dentate spike modulation of hippocampal activity	André Fenton
	4:00 – 5:00 p.m.	Jacquelyn Salzbank	Placental allopreganolone loss alters postnatal cerebellar development and long-term function	Anna Penn
November 7	8:00 a.m. - 12:00 p.m.	Daniel Gutierrez-Barragan	Altered brain-wide neural dynamics in mouse models of autism	M. Albert Basson Alessandro Gozzi
	9:00 - 10:00 a.m.	Liron Rabany	Temporal dynamics in schizophrenia and autism spectrum disorder: Convergence, divergence and classification	Kevin Pelphrey
	10:00 – 11:00 a.m.	Byoung-Il Bae	Aspm knockout ferret reveals an evolutionary mechanism governing cerebral cortical size	Christopher Walsh
	11:00 a.m. - 12:00 p.m.	Xin Jin	*In vivo* Perturb-Seq: Finding common ground for heterogeneous variants in autism spectrum disorder	Paola Arlotta Feng Zhang
	1:00 - 2:00 p.m.	Alain Burette	Subcellular organization of the autism-associated protein UBE3A in human cerebral cortex	Benjamin Philpot
	2:00- 3:00 p.m.	Toshihiro Nomura	Metaplasticity mediated by Kv4.2 is altered in the hippocampus of *Fmr1* KO mice	Anis Contractor

	2:00 - 3:00 p.m.	Adam Jackson	Fronto-amygdala connectivity in a rat model of fragile X syndrome	Peter Kind
	3:00 - 4:00 p.m.	Gunvant Chaudhari	Pupil fluctuations track deficits in perceptual learning in fragile X syndrome mice	Carlos Portera-Cailliau
	4:00 - 5:00 p.m.	Stacy Roudabush	Genetic rescue of fragile X by conditional knockdown of Rictor	Suzanne Zukin

EVENTS/SOCIALS				
Date	**Time**	**Organizer/Chair**	**Event/social title**	**SFARI Investigators/staff**
November 5	6:30 - 8:30 p.m.	John Spiro	SFARI Social	Marta Benedetti Brigitta Gundersen Alice Luo Clayton
	6:45 - 8:45 p.m.	Oscar Marin	Cajal Club Social	Arnold Kriegstein Nenad Sestan Christopher Walsh

**If you have a presentation that is not included in this list, please email sfariannouncements@simonsfoundation.org

.