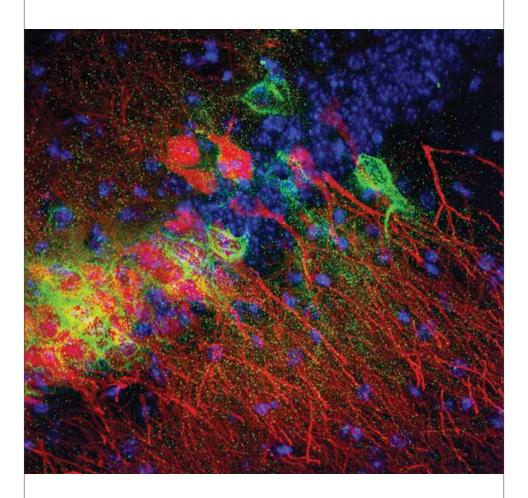


Diversity Fellows Poster Session Program

Saturday, November 11 | 6:30 p.m.-8:30 p.m. | Washington Convention Center: Hall E





Welcome to the annual SfN Diversity Poster Session

Welcome to the SfN Diversity Fellows Poster Session. This session is hosted annually to celebrate the career development of underrepresented groups in neuroscience, whose participation in the field is critical to solving problems in biomedical research.

The trainees presenting their research in this session represent a bright future for neuroscience, and in today's environment for scientific funding, professional organizations play a critical role in ensuring the continued career development of these trainees by providing opportunities for networking, mentoring, professional development, and research.

Trainees showcasing their science today have received support from the following programs:

- Neuroscience Scholars Program (NSP): Supported by the National Institute of Neurological Disorders and Stroke (NINDS)
- Enhancing Neuroscience Diversity through Undergraduate Research Education Experiences (ENDURE): Supported by the NIH Blueprint for Neuroscience Research
- Specialized Neuroscience Research Program (SNRP): Supported by the National Institute of Neurological Disorders and Stroke (NINDS)
- Princeton Neuroscience Institute (PNI): Supported by the National Institute of Neurological Disorders and Stroke (NINDS)

SfN gratefully acknowledges the financial support provided by National Institutes of Health (NIH).

The posters are organized by the following themes:

A: Development

B: Neural Excitability, Synapses, and Glia

C: Neurodegenerative
Disorders and Injury

D: Sensory Systems

E: Motor Systems

F: Integrative Physiology and Behavior

G: Motivation and Emotion

H: Cognition

1: Techniques

A: Development

BRIGETT CARVAJAL (1)

Genetic fate mapping of commissural neurons in the spinal cord

Hunter College

ENDURE

DEVIN EFFINGER (2)

Investigating the effect of neonatal IGF1 treatment on brain development in a rat model of preeclampsia

University of Colorado Denver

ENDURE

PAOLA FIGUEROA-DELGADO (3)

The role of canonical Wnt signaling pathway in regulating neuron morphology

University of Puerto Rico-Rio Piedras

ENDURE

D'NEA GALBRAITH (4)

The effects of early life stress on medial preoptic area development

Hunter College

FNDURF

RUBEN GARCIA (5)

Pathogenesis of intellectual disability: Regulation of PHF6 in excitatory synapse development Metropolitan University, Cupey ENDURE

MARIA GONZALEZ (6)

TAp63 overexpression mitigates sexually dimorphic proliferation in mesenchymal glioblastoma astrocytes

University of Puerto Rico-Cayey

ENDURE

FABRIA JNO. BAPTISTE (7)

Expression localization & functional role of NavB University of Maryland, Baltimore County ENDURE

MELANIE LOLIER (8)

Exposure to a synthetic progestin reduces dopaminergic innervation of hippocampus in a sex-specific manner in neonates

University at Albany

ZAKIA LOWERY (9)

Effects of the expression of Foxp2 in corticothalamic neurons on cortical development Tennessee State University ENDURE

BRITTANY MAYWEATHER (10)

Investigating the role of Growth Differentiation Factor 11 (GDF11) in adult neurogenesis Harvard University NSP

GOLDIE ANN MCQUAID (11)

Resting-state functional connectivity between language and emotion regions in autism spectrum disorder

Georgetown University
NSP

JOANNA MEDINA (12)

Colocalization of progesterone receptor-ir and BDNF-ir within the somatosensory cortex of postnatal rats University at Albany

MIKAELA NEAL (13)

Differential regulation of glutathione in oligodendrocyte development University of Colorado Denver

COURTNEY NEWMAN (14)

Less tissue organization in white matter suggests more typical socialization

Tennessee State University

ENDURE

AMARACHI OLERU (15)

Determining the relevance of the MHCI cytoplasmic domain residue S327 for binding to spinophilin Cameron University

PNI

JORDAN PEYER (16)

MicroRNA-based reprogramming of human adult fibroblasts into dopaminergic neurons

Vassar College

ENDURE

SHAKIRA RODRIGUEZ-GONZALEZ (17)

Role of the gut microbiome on the ontogenesis of the enteric nervous system

University of Puerto Rico at Cayey **ENDURE**

KAELA SINGLETON (18)

Pairing your Sox: Cross species function of Sox11 in neural development

Georgetown University

NSP

CATHERINE UBRI (19)

Inclusive peer environments remediate social behavioral disturbances following earlylife stress rearing

Hunter College

ENDURE

B: Neural Excitability, Synapses, and Glia

STEPHEN ALKINS (20)

The Long 3'UTR mRNA of CaMKII Drives Miniplasticity in Drosophila melanogaster **Brandeis University** NSP

MICHELLE ANTOINE (21)

Altered excitatory-inhibitory ratio preserves circuit excitability in FMR1, CNTNAP2, 16p11.2 deletion, and Tsc2 mouse models of autism University of California, Berkeley NSP

DAVID BATTLE (22)

Dendritic spine analysis of striatal spiny projection neurons in the mouse model of Fragile X Syndrome Tennessee State University **ENDURE**

CLAIRE CHEN (23)

Self-Scission of the CPEB3 ribozyme is activitydependent and may regulate expression of the CPEB3 mRNA University of California, Irvine NSP

YOLIMAR COLÓN-LÓPEZ (24)

Effects of acute MeHg-induced calcium changes in the Renshaw region of the C57BL6J mouse Pontificial Catholica University, PR **ENDURE**

ANA DEFENDINI (25)

Activation of oxytocin target neurons after social interaction of female rats University of Puerto Rico-Rio Piedras **ENDURE**

JARY DELGADO (26)

Pin1 regulates PSD-95 ubiquitination and its stability at excitatory synapses The University of Chicago NSP

TAVITA GARRETT (27)

Subtype identification of unipolar brush cells in the PO79 enhancer trap mouse line
Oregon Health and Science University
NSP

OLIVIA GAUTIER (28)

mGluR5 is functional at the cell surface and at intracellular membranes in cortical astrocytes MIT

ENDURE

ANDREA GOMEZ (29)

Functional mapping of a synaptic adhesive code in neurons
Biozentrum, University of Basel
NSP

ROMINA GONZALEZ PONS (30)

Role of inhibitory and excitatory receptors in mediating calcium changes during an acute MeHg exposure on the C57BL6J mouse
University of Puerto Rico at Cayey
ENDURE

MARISSA HANSEN (31)

Investigating biased Arrestin-3 recruitment to Nociceptin/Orphanin FQ Opioid Receptor (NOPR) University of Texas at Austin

University of Texas at Austir

AURELIA MAPPS (32)

Functional & genetic comparison of sensory & sympathetic satellite glial cells

Johns Hopkins University

NSP

MONIQUE MENDES (33)

Microglial contributions to network remodeling in adult ocular dominance plasticity

University of Rochester

NSP

PAIGE MIRANDA (34)

Metabolic processes underlying Hebbian hippocampal long term potentiation

Yale University

NSP

KERRI PRYCE (35)

The scaffold protein Magi-1 regulates voltagedependent sodium channels in dorsal root ganglion neurons State University of New York at Buffalo NSP

TI'AIR RIGGINS (36)

Determining the elastic moduli of normal and cancerous brain to develop a 3D culture mimic Purdue University

NSP

NICOLE RIVERA (37)

Cytotoxicity through L-type and the N-type voltagegated calcium channels after an acute exposure of methylmercury on primary cerebellar astrocytes Pontifical Catholic University of Puerto Rico ENDURE

DAVID TYUS (38)

The effect of KATP channel mutations on inhibitor sensitivity: Implications for personalized treatment of Cantu syndrome

Washington University in St. Louis **ENDURE**

KATHERINE VARELA (39)

Homeostatic regulation of Tomosyn-1 expression in presynaptic terminals

Hunter College

ENDURE

CORY WHITE (40)

Ethanolamine phosphate phospholyase in astrocyte lipid metabolism

Johns Hopkins School of Medicine

NSP

BRITTANY WILLIAMS (41)

A novel form of Cav1.4 Ca2+ channel regulation revealed by alternative splicing and a mutation causing congenital stationary night blindness University of Iowa

NSP

<u>C: Neurodegenerative Disorders</u> and Injury

CHINYERE AGBAEGBU IWEKA (42)

Plasticity-related gene protein type 3 modulates neurite outgrowth inhibition through the RhoA-ROCK pathway

Georgetown University

NSP

MITCHELL BARTLETT (43)

AAV2/1 VEGFB overexpression improves motor function in PINK1 gene KO rats and prevents dopamine loss University of Arizona College of Medicine

CHRIS BOLDEN (44)

Testing anti-methamphetamine gene therapy on reducing neuroinflammation

University of Arkansas for Medical Sciences

NSP

JOSEPH BRADLEY (45)

Identification of Blood eQTLs for AD risk loci Harris-Stowe State University ENDURE

JAKEIRA DAVIS (46)

Amyloid β-peptide as a modulator of the insulin receptor at the blood brain barrier
University of Arkansas for Medical Sciences
NSP

RODRIGO DE LA TORRE (47)

Characterizing p62 pathology in SCA3 diseasespecific human embryonic stem cells New York University ENDURE

JASMIN A. EATMAN (48)

Assessment of combinational metal induced neurotoxicity in vitro

Morehouse School of Medicine

SNRP

STEPHEN HERNANDEZ (49)

How mTOR regulates tight junction proteins in Alzheimer's disease University of Texas Health Center at San Antonio

ERICA LITTLEJOHN (50)

Insulin-like growth factor-1 overexpression enhances neurogenesis and activates the mTOR pathway after moderate TBI University of Kentucky NSP

ESTEBAN LUNA (51)

Differential vulnerability to pathological α-synuclein seeding in hippocampal neuron subpopulations

Perelman School of Medicine at the University of Pennsylvania

NSE

CHELSEA MACKEY (52)

A characterization of amyloid pathology and circadian system function in APP-NLGF mice University of Missouri–Columbia ENDURE

LUIS MARTINEZ-VELAZQUEZ (53)

Antagonistic regulation of trafficking to C. elegans sensory cilia by a Retinal Degeneration 3 homolog and retromer

New York University School of Medicine NSP

SACHA MCELLIGOTT (54)

Characterizing mechanisms of debris Clearance and changes in global protein synthesis after axonal injury

New York University

ITZIK NAHMOUD (55)

Identification of surrogate markers for malignant cell types in anaplastic astrocytomas *Hunter College*

ENDURE

DERRICK OGOLA (56)

Synaptic dependent amyloid-β generation in vivo in Alzheimer's disease mouse model Washington University in St. Louis ENDURE

TAYLOR REID (57)

Assessing the relationships between blood makers and executive memory brain regions in HIV+ patients

Washington University ENDURE

KIMBERLY RIVERA-CARABALLO (58)

The expression of excitatory amino acid
Transporter 1 and 2 mRNA during methylmercury
exposure in spinal cord astrocytes
University of Puerto Rico-Humacao
ENDURE

KATHRYN SANCHEZ (59)

Characterizing misfolded A53T synuclein and its role in microglial activation

Georgetown University

NSP

MICHAEL SANGOBOWALE (60)

Longitudinal assessment of cerebrovascular dysfunction after traumatic brain injury using functional near-infrared spectroscopy

University of Pennsylvania

NSP

LEEZA SANTIAGO MILLAN (61)

Expression of neurotrophic factor genes in motor neurons of mouse models of spinal bulbar muscular atrophy

University of Puerto Rico-Humacao ENDURE

JORDY SEPULVEDA (62)

BDNF and select ion transporters altered after manganese exposure: a mouse model of Huntington's disease
Hunter College

MIKAELA SIFUENTES (63)

Sex differences in stroke neuroprotection via stimulation of FAO University of Texas Health Science

Center at San Antonio

NICHOLAS SILVA (64)

Mmp-9 regulates photoreceptor regeneration in the retina of the zebrafish
University of Michigan

NSP

MUYU SITU (65)

Searching for locomotion defects in a C. elegans model of Amyotrophic lateral sclerosis

Hunter College

ENDURE

JORDAN SPENCER (66)

Are vocal tics in Tourette's speech-like?
Tennessee State University
ENDURE

ASHLEY TAYLOR (67)

Satellite glial cells may influence dorsal root ganglia response to injury
University of Missouri–St. Louis
ENDURE

SAMANI UPADHYAY (68)

Plasma abeta isoform profile and its implications on early Alzheimer's diagnosis

Brown University

ENDURE

GRACE WILLIAMS (69)

Recently discovered alpha-7/beta-2 nicotinic acetylcholine receptor may have role in amyloid-beta pathology in Alzheimer's disease Louisiana Tech University

MALANEY YOUNG (70)

Minimal nucleation state of α-synuclein is stabilized by dynamic threonine–water networks University of Minnesota

D: Sensory Systems

LELAND FLEMING (71)

Increased use of peripheral vision is associated with increased functional connectivity between peripheral V1 and functionally specialized visual areas

University of Alabama at Birmingham

NSP

KELCIE GERRY (72)

Effect of fractionated irradiation on Wnt/β-catenin signaling in mouse circumvallate papilla
New Mexico State University
ENDURE

JOSE GRAJALES (73)

Analysis of the role of glutamatergic and GABAergic periaqueductal gray (PAG) neuronal subpopulations in a mouse model of persistent inflammatory pain

Washington University School of Medicine
NSP

BIANCA MASON (74)

Vascular contributions of peripheral CGRP in migraine-like photophobia University of Iowa NSP

FRANCISCO RODRIGUEZ (75)

Spiking activity in auditory cortex to identitypreserving changes in sounds University of Pennsylvania School of Medicine NSP

CELINA SALCIDO (76)

The impact of inflammatory pain on decision-making
The University of Texas at Arlington

SIMON SANCHEZ (77)

Evaluation of repellent activities of two essential oils norcamphor and thujone in two Drosophila species St. Mary's University

ENDURE

E: Motor Systems

DARIL BROWN (78)

Classification of naturalistic birdsong vocalizations
University of California, San Diego
NSP

RYAN NORTH (79)

The influence of feedback type on the temporal stability of motor adaptation and generalization George Mason University

NSP

DANIEL POWELL (80)

Modulation of the pyrokinin-elicited gastric mill rhythm by an endogenous peptide hormone and a mechanosensory neuron

Brandeis University
NSP

F: Integrative Physiology and Behavior

SHANTEE AYALA ROSARIO (81)

Investigation of inflammatory responses in the ventral tegmental area in mouse models of depression

Inter American University of Puerto Rico
ENDURE

ABDIAS DIAZ (82)

Effects of early-life morphine exposure on response to cocaine in adulthood

University of Puerto Rico

ENDIRE

VICTORIA ENCARNACION (83)

Hyperpolarization-activated cation current (Ih) channel subunit HCN2: role on the development and expression of cocaine behavioral sensitization University of Puerto Rico Rio Piedras ENDURE

JAZZ FIELDS (84)

Probing the role of the medial prefrontal cortex in female sex behavior

Tennessee State University
ENDURE

MARCELO FRANCIA (85)

The effect of chronic sleep deprivation in the expression of Bruchpilot

University of Puerto Rico Rio Piedras Campus

ENDURE

KASEY GIRVEN (86)

Insula drive to the extended amygdala modulates reward-related behavior
University of Maryland, Baltimore
Graduate School
NSP

JORGE IRAVEDRA (87)

Interrogating inputs to rostral prelimbic prefrontal cortex that drive inhibitory responses necessary for active avoidance

Universidad de Puerto Rico ENDURE

IDRIS KOSOKO (88)

Effects of physical activity and sedentary behavior on brain responses to high-calorie food cues in obese and lean young adults

Tennessee State University

ENDURE

ELYSE LANG (89)

Identification of iso-preferred reinforcers for use in an instrumental reward devaluation task

Tennessee State University

ENDURE

KRISSY LYON (90)

Modulation of behavior by dopamine receptorexpressing serotonergic neurons Harvard Medical School

KARINA MATOS (91)

Early-life stress alters the development and neural regulation of nutrient transport in porcine small intestine

University of Puerto Rico-Ponce **ENDURE**

LAVERNE MELÓN (92)

Role of tonic inhibition in the basolateral amygdala in the maintenance and consequences of binge drinking

Tufts University School of Medicine NSP

CAILEE NELSON (93)

3D printing of EEG cap for socially assistive robot development

New Mexico State University **ENDURE**

ODOCHI NWOKO (94)

Methamphetamine exposure and withdrawal impact gut microbiota in rats University of Houston NSP

DAVID OJEDA (95)

Using immunohistochemistry and western blotting protocols for ASIC1A protein identification University of Puerto Rico, Rio Piedras Campus **ENDURE**

LONI PARRISH (96)

Behavioral difference in sham mice and mice that have received traumatic brain injury Tennessee State University

ENDURE

RAUL RAMOS (97)

From molecules to behavior: examining the role of homeostatic plasticity in learning & memory Brandeis University NSP

YAMILKA RIOS (98)

The electrochemical detection of peroxynitrite using chemically modified diamond electrodes University of Puerto Rico **ENDURE**

RAYMOND SANCHEZ (99)

Jet lag induces a transient misalignment in the circadian timing of sleep stages in the mouse University of Washington

MARCOS SANCHEZ-NAVARRO (100)

Avoidance over-conditioning impairs extinction of fear, induces persistent avoidance, and increases use of safety cues: implications for OCD Universidad Metropolitana

ENDURE

DANIEL TOBIANSKY (101)

Maternal sucrose consumption has long-term effects on male offspring behavior in rats: a possible role for neurosteroids

The University of British Columbia

The University of British Columbia
NSP

RICARDO TORRES-RAMÍREZ (102)

Isolation during adolescence increases CPP to cocaine in male rats

Inter American University ENDURE

PUJA TRIVEDI (103)

Using variational autoencoders to generate postural manifolds for animal behavior University of Maryland, Baltimore County PNI

ANDRE WALCOTT (104)

Female partner's drinking status influences the maintenance of monogamous pair bonds in male prairie voles

Oregon Health and Science University
NSP

ANTONIO WHITE (105)

Activation of MTORC 2 signaling protects against kidney damage in high fat fed DAHL salt sensitive hypertensive rats

North Carolina Central University
ENDURE

G: Motivation and Emotion

B. SOFIA BEAS (106)

Inhibitory control of a thalamic stress circuit
National Institute of Mental Health
NSP

ABRAHAM ESCOBEDO (107)

Ketamine inhibits methamphetamine-induced ultrasonic vocalizations and locomotor activity in rats

Purdue University

NSP

DANIELA FRANCO (108)

SB224289, a 5-HT1B receptor antagonist, decreases the aversion of nicotine in male, but not female adolescent rats

California State University, Long Beach
NSP

KATHERINE FURMAN (109)

Sex-differences in the effect of estradiol on cocaine-induced dopamine release: Role of selective estrogen receptors

New York University

ENDURE

SOFIA LOPEZ (110)

Assessment of the corticosterone profile and anxiety-related behaviors in sign-trackers and goal-trackers

University of Michigan

JULIA MEADE (111)

NSP

Molecular and behavioral mechanisms mediating paclitaxel-induced changes in affect-like behavior in mice

Virginia Commonwealth University

NATALIE NEVÁREZ (112)

Dopamine autoreceptor adaptations underlie increases in stimulated dopamine release in pair bonded prairie voles

The University of Michigan

MAKENZIE NORRIS (113)

Potential role for central amygdala dynorphin neurons in affective behaviors

Purdue University

ENDIRE

SYDNEY O'NEAL (114)

Anatomical study of the afferents to the dorsal and ventral nucleus accumbens shell Tulane University

ENDURE

LAURA QUINONES-CAMACHO (115)

Neurophysiological correlates of discrete emotion processing
University of California, Riverside
NSP

CINDY REYES (116)

Exploring the mechanism by which optogenetic stimulation of ventral tegmental area dopamine neurons prevents extinction of cued approach behavior

Albert Einstein College of Medicine
NSP

EFRAIN J. RODRIGUEZ SIERRA (117)

Nandrolone increases conditioned place preference to cocain in female and male rats University of Puerto Rico, Rio Piedras ENDURE

MARIAN T. SEPULVEDA-ORENGO (118)

Cocaine self-administration and extinction induces adaptations in NMDA receptor-mediated currents in the nucleus accumbens core
University of North Carolina, Chapel Hill
NSP

CIEARRA SMITH (119)

The physiological relevance of a3-containing nAChRs in nicotione-mediated behaviors
University of Massachusetts Medical School
NSP

RAPHEAL WILLIAMS (120)

Chronic stress effects on economic decision-making
University of Washington, Seattle
NSP

KATIE YOEST (121)

Regulation of food reward by female gonadal hormones University of Michigan NSP

H: Cognition

SIKOYA ASHBURN (122)

The cerebellum's involvement in reading
Georgetown University
NSP

LAUREN BERGER (123)

Neural networks for tactile language processing Gallaudet University

NSF

EDITH BRIGNONI-PEREZ (124)

Behavior-functional connectivity relationship in bilinguals and monolinguals: revisiting the brain system for reading

Georgetown University

NSP

YA'EL COURTNEY (125)

The influence of genetics on individual differences in neural activation patterns

Kent State University

ENDURE

GISELLA DIAZ (126)

Tracking the contents of working memory using oscillatory and event-related slow wave activity *University* of *Chicago*

NSP

KEITH DOELLING (127)

Synchronizing to the note: modeling oscillatory dynamics in auditory cortex to track the note rate of music

New York University

NSP

AMBER JOHNSON (128)

Over-expressed Neuregulin1-IV and its affect on transgenic mice learning an associative task University of Colorado Denver ENDURE

JASMINE KWASA (129)

Individual differences in selective and divided attention to complimentary auditory and visual tasks

Boston University

NSP

GLORIA LEE (130)

Selective loss of dopamine D2 receptors in GABAergic interneurons modifies cerebral cortical architecture and motor behaviors Florida State University College of Medicine

CHRISTOPHER MEDINA-KIRCHNER (131)

Repeated 3,4-methylenedioxymethamphetamine (MDMA) administration in humans: physiological and neurocognitive effects

Columbia University

NSP

ASHLEA MORGAN (132)

Early-life serotonin transporter blockade blunts adult serotonergic enhancement of hippocampal memory Columbia University

JULIA PAI (133)

Primate ventral pallidum neurons are sensitive to the timing of uncertainty-resolving information New York University

ENDURE

ENMANUELLE PARDILLA-DELGADO (134)

Dream reporting supports gist-based (false) memory processing MGH/Harvard Medical School

GIANNA PEREZ (135)

Measuring the role of competition between memories after reactivation during sleep Villanova University PNI

MARCO PIPOLY (136)

Variations in grey and white matter volume in relation to impulsivity in healthy adults University of Missouri-St. Louis **ENDURE**

CARISSA ROMERO (137)

The real deal: willingness-to-pay and satiety expectations are greater for real foods versus their images University of Nevada, Reno NSP

LILLIANA SANCHEZ (138)

The effects of moderate prenatal alcohol exposure on object place paired associate performance in the rat

The University of New Mexico NSP

ALEC SEIDENBERG (139)

Intrinsic BNST function in post-traumatic stress disorder Hunter College **ENDURE**

SHAWNIQUA WILLIAMS (140)

Spatiotemporal neuronal activation patterns during verbal fluency tasks

University of Pennsylvania NSP

MARK ZIELINSKI (141)

Sequential activity during hippocampal theta supports distinct prefrontal representations **Brandeis University** NSP

I: Techniques

ABRAHAM BEYENE (142)

Near-infrared nanosensors for brain imaging of modulatory neurotransmitters University of California, Berkeley NSP

LUZ MILBETH CUMBA GARCIA (143)

Optimized isolation of plasma extracellular vesicles for use as potential biomarkers in patients with glioblastoma

Mayo Clinic Graduate School of Biomedical Sciences NSP

SHALONDA INGRAM (144)

Comparative proteomics analysis of dopamine transporter interactome upon methamphetamine and cocaine treatment

Meharry Medical College NSP

DANIELLE PORTER (145)

Simultaneous visualization of all three KNDy peptide mRNAs in the same neurons of the ovine arcuate nucleus

University of Mississippi Medical Center

CARLOS RODRIGUEZ (146)

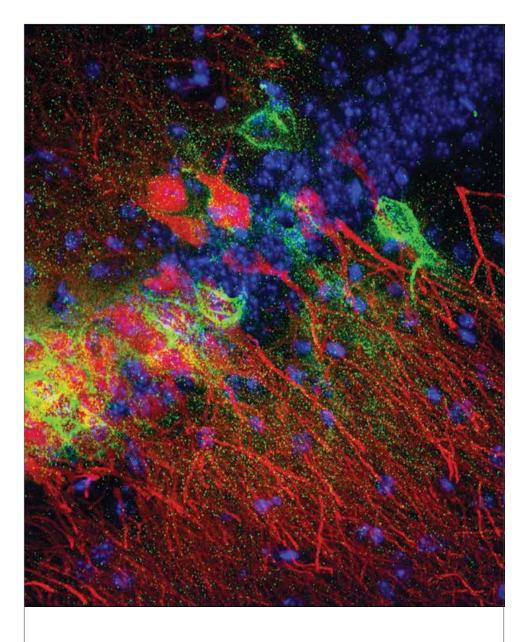
Effects of chronic olanzapine exposure on functional network connectivity in the anesthetized rat

University of New Mexico NSP

TANYA VICTOR (147)

Cannabidiol as a potential effector of epileptogenesis through microglial modulation Stony Brook University NSP

NOTES





1121 14th Street NW, Suite 1010 Washington, DC 20005 SfN.org