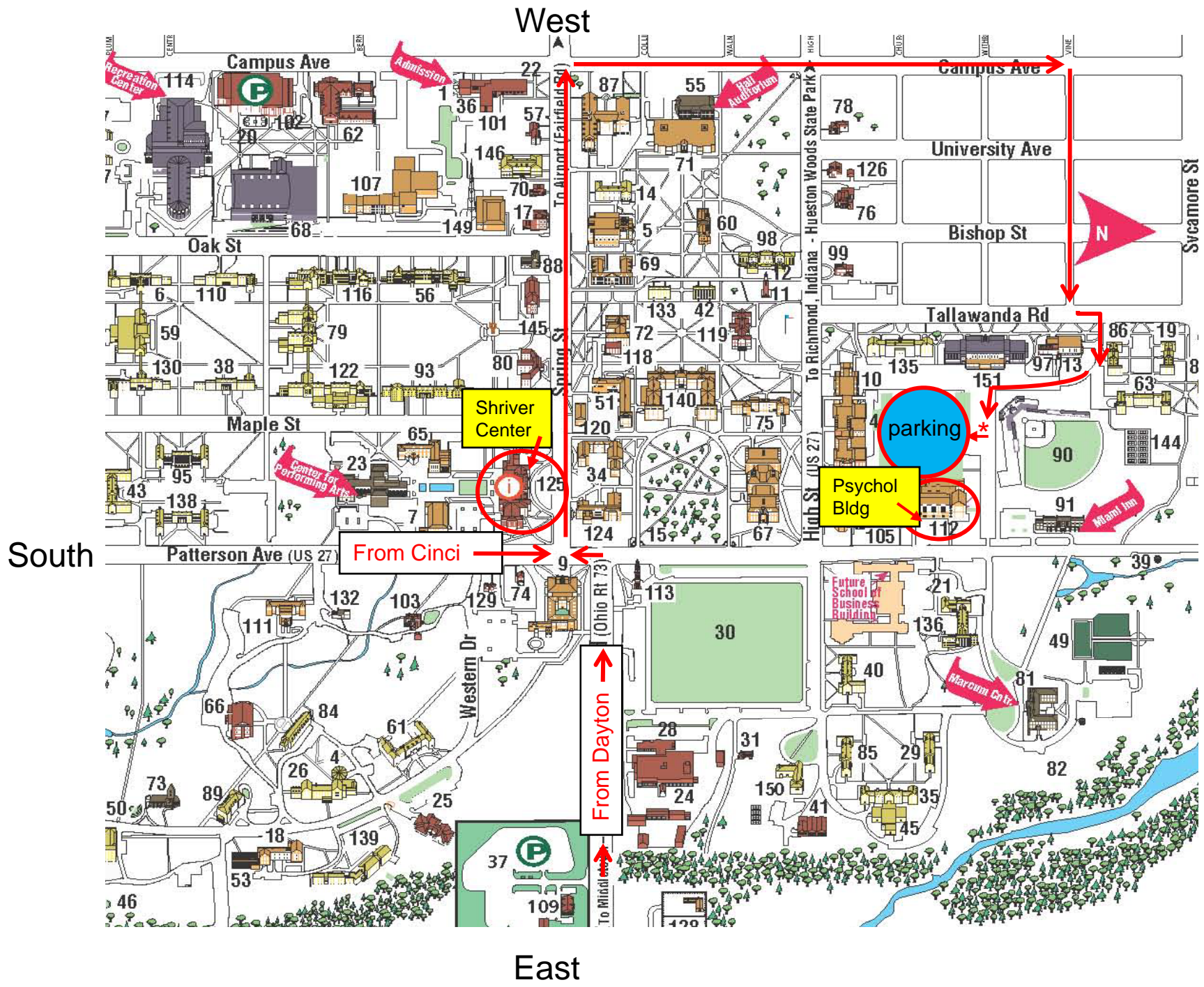


OMV-SfN

*Ohio Miami Valley
Society for Neuroscience*

Neuroscience Day

June 5, 2009
Miami University
Oxford, OH



West

South

East

Ohio Miami Valley Chapter, Society for Neuroscience
Neuroscience Day – June 5, 2009
Miami University

<p>9:45 a.m.-10:45 a.m. Psychology Bldg Lobby</p>	<p>Registration & Poster Set-up</p>
<p>11:00 a.m.-12:15 p.m. 125 Psychology Bldg</p>	<p>Keynote Lecture</p> <p>Carol A. Barnes, Ph.D. Regents' Professor of Psychology and Neurology, University of Arizona <i>Cognitive Changes in Aging: Neural Correlates in Rats and Monkeys</i></p>
<p>12:30 p.m-1:45 p.m. Heritage Room Shriver Center</p>	<p>Luncheon</p>
<p>2:00-3:00 p.m. 125 Psychology Bldg</p>	<p>Student & Postdoc Presentations</p> <p>Patrick Sonner, Ph.D., Wright State University <i>Differences in firing properties between V1-derived Renshaw and non-Renshaw cells</i></p> <p>Sarah Oross, University of Dayton <i>Dorsal eye selector, pannier (pnr), interacts with the retinal determination gene network during Drosophila eye development</i></p> <p>Loren Hoffmann, Miami University <i>Hippocampal modulation of cerebellar learning</i></p> <p>Eric Krause, Ph.D., University of Cincinnati <i>Inhibition of central angiotensin receptor signaling: drinking less and reducing stress</i></p>
<p>3:00-5:00 p.m. Psychology Bldg Lobby</p>	<p>Poster Session and Reception</p>
<p>5:00 p.m. Psychology Bldg Lobby</p>	<p>Announcement of Poster Competition Awards</p>

Listing of Posters

Poster 1

Presenter: Brian Tucker, NCBP, Wright State University
Coauthors: James E. Olson, PhD
Title: The role of glutamate in hippocampal tissue swelling during oxidative stress
Key Words: Glutamate, Oxidative Stress, ROS

Poster 2

Presenter: Brian Murphy, Anesthesia, Cincinnati Children's Medical Center
Coauthors: Cynthia Walter, Steve C. Danzer
Title: Dendritic translocation as a novel mechanism of hippocampal granule cell dysmorphogenesis in epilepsy
Key Words: dentate gyrus, granule cell dispersion, recurrent basal dendrite, epilepsy

Poster 3

Presenter: Kathleen Broomall, Zoology, Miami University
Coauthors: Krista Hardin, Matt Seifert, Souyma Banerjee, Meredith Dorr, Camilo Molina, Joyce Fernandes
Title: Ultrastructural analysis of nerve structure in H99 mutants
Key Words: Drosophila, nerves, TEM

Poster 4

Presenter: Patrick Sonner, Neuroscience, Cell Biology & Physiol, Wright State University
Coauthors: Maria C. Berrocal, Martyn Goulding, Francisco J. Alvarez
Title: Differences in firing properties between V1-derived Renshaw and non-Renshaw cells
Key Words: Firing properties, V1, Renshaw cells, spinal cord

Poster 5

Presenter: Nicholas Jury, Neuroscience Graduate Program, University of Cincinnati
Coauthors: Betsy A. McCormick, Nelson D. Horseman, Karen A. Gregerson
Title: Alterations in peripheral and central serotonin physiology during lactation
Key Words: Serotonin, Depression, Lactation, Antidepressant

Poster 6

Presenter: Lalitha Madhavan, Neurology, University of Cincinnati
Coauthors: Brian F Daley, Katrina L Paumier, Timothy J Collier
Title: Synergistic relationships between endogenous and exogenous neural precursor cells in a parkinsonian rat model
Key Words:

Poster 7

Presenter: Anne Christiansen, Psychiatry, University of Cincinnati
Coauthors: Yvonne M. Ulrich-Lai; Annette D. de Kloet; Amanda A. Jones; James P. Herman.
Title: Synaptic plasticity and persistent dampening of the HPA axis after chronic limited sucrose intake
Key Words:

Poster 8

Presenter: Valerie Siembab, NCBP, Wright State University
Coauthors: Dannette Richards, Maria C. Berrocal, Martyn Goulding, Francisco J. Alvarez
Title: Distinct synaptic development in Ia inhibitory interneurons compared to Renshaw cells
Key Words: Renshaw cells, IaINs, V1-derived interneurons, development of interneuronal circuitry, Ia sensory afferents, motor axon recurrent collaterals

Poster 9

Presenter: Ana Benito González, NCBP, WSU
Coauthors: Maria C. Berrocal, Martyn Goulding, Francisco J. Alvarez
Title: Renshaw cells are V1-derived neurons with a very early birthdate
Key Words: Spinal cord, interneurons, Renshaw cells

Poster 10

Presenter: Soumya Banerjee, Zoology, Miami University
Coauthors: Matt Siefert, Meredith Dorr, Joyce J. Fernandes
Title: Role of cell death gene reaper in restructuring the adult abdominal motor system
Key Words: Metamorphosis, cell death gene, terminal nerve trunk, neuron and glial cell

Poster 11

Presenter: Loren Hoffmann, Psychology, Miami University
Coauthors: Stephen D. Berry
Title: Hippocampal modulation of cerebellar learning
Key Words: associative learning, neural oscillations, synchrony, hippocampus, cerebellum, classical conditioning

Poster 12

Presenter: Parama Paul, Zoology, Miami University
Coauthors: R. Durbin, K.A. Killian
Title: Cellular identity of neural precursor cells in the adult cricket brain
Key Words: Adult neurogenesis, GFAP, BrdU, cell culture

Poster 13

Presenter: James Eliassen, Psychiatry, University of Cincinnati
Coauthors: Jane B. Allendorfer, Martine Lamy
Title: Recreational MDMA use reduces fMRI brain activation in serotonin target regions during associative learning
Key Words: MDMA, fMRI, serotonin, 5HT

Poster 14

Presenter: Ryan Walker, Zoology, Miami University
Coauthors: L.G. Isaacson
Title: Changes in ATF-3 immunoreactivity in the superior cervical ganglion following axotomy or crush injury
Key Words: sympathetic neurons, glia, neurotrophin, nerve growth factor, neurotrophin-3, post-ganglionic

Poster 15

Presenter: Stefanie Bronson, Dept of Psychiatry, Prog. in Neuroscience, Univ. of Cincinnati
Coauthors: Rebecca Ahlbrand, Paul S. Horn, Joseph R. Kern, Nicole L. Roenker, Neil M. Richtand
Title: Environmental influence on maternal response in a prenatal immune activation Model with Relevance to Schizophrenia
Key Words: schizophrenia, Poly IC, amphetamine

Poster 16

Presenter: Teresa Morris & Aminata Coulibaly, Zoology, Miami University
Coauthors: Ryan Walker, Lori Isaacson
Title: Characterization of immune cell infiltration into the adult rat superior cervical ganglion following injury
Key Words: OX42, axotomy, deafferentation

Poster 17

Presenter: Ann Hemmerle, Neurology/Neuroscience Graduate Prog, University of Cincinnati
Coauthors: JW Dickerson, BA Packard, KR Jones, CM Dolgas, JP Herman, KB Seroogy
Title: Temporal effects of chronic variable stress on dopaminergic cell degeneration and motor deficits in a partial lesion model of Parkinson's disease
Key Words: depression, neurodegeneration, stress, behavior, substantia nigra

Poster 18

Presenter: Shweta Nayar, Zoology, Miami University
Coauthors: Emily Murphree, Rainer Reinscheid, James Janik, Phyllis Callahan
Title: Effects of OFQ/N on prolactin receptor expression in postpartum female mice
Key Words: Lactation, opiates, stress, corticosterone, choroid plexus, restraint

Poster 19

Presenter: Rohan Modi, Biology, University of Dayton
Coauthors: Jaison Nainaparampil
Title: Drosophila eye model to understand the genetic basis of Alzheimer's disease
Key Words: Alzheimer's Disease, Drosophila, eye model

Poster 20

Presenter: Manu Kalyani, Zoology, Miami University
Coauthors: Phyllis Callahan, James Janik, Emily Murphree
Title: Prolactin receptor expression following stress in post-partum female rats
Key Words: Lactation, corticosterone, restraint, choroid plexus, HPA-axis

Poster 21

Presenter: Kenneth Strauss, Neurosurgery, University of Cincinnati
Coauthors: Ryan R. Morrison, Gail J. Pyne-Geithman, Kenneth I. Strauss
Title: Increased cox2 with age and injury in cortex and hippocampus after traumatic brain injury.
Key Words: Cyclooxygenase-2, aging, neuroinflammation

Poster 22

Presenter: Meera Seshadri, Zoology, Miami University
Coauthors: Kathleen McEwen, Emily Murphree, Phyllis Callahan, James Janik
Title: Effect of OFQ/N on prolactin receptor expression in the rat choroid plexus following stress.
Key Words: HPA Axis, restraint, corticosterone, opiate

Poster 23

Presenter: Jonathan Dickerson, Neuroscience Program, University of Cincinnati
Coauthors: G.L. Suidan, I. Pirko, K.B. Seroogy, A.J. Johnson.
Title: Modulated expression of VEGF and its receptors in a novel murine model of vascular permeability
Key Words: Blood brain barrier, in situ hybridization, VEGF, flk-1,flt-1

Poster 24

Presenter: Ajay Kumar Sharma, Pharmacology & Toxicology, Wright State University
Coauthors: Teresa L. Garrett, Shuzhen Chen, Avik Das, Wenfeng Zhang, Yanfang Chen, James B. Lucot
Title: Effect of overexpression of human renin and angiotensinogen genes on mouse behavior
Key Words: Renin-angiotensin system, open field test, elevated plus maze, prepulse inhibition

Poster 25

Presenter: Kumar Vishal, Zoology, Miami University
Coauthors: Krishan Badrinath, Rachel Adams, Joyce Fernandes
Title: Investigating a role for signaling pathways in adult myogenesis in *Drosophila*
Key Words: Myogenesis, *Drosophila*, FGF

Poster 26

Presenter: Dhawal Oswal, Pharmacology & Toxicology, Wright State University
Coauthors: Brent Izu, Mariana Morris, James Lucot
Title: Effect of low-dose sarin exposure on the neurochemistry of different brain structures in mice.
Key Words: Sarin, catecholamines, frontal cortex, amygdala, caudate nucleus

Poster 27

Presenter: Meghana Tare, Biology, University of Dayton
Coauthors: Madhuri Kango Singh, Amit Singh
Title: Antagonistic interaction of L and hth to define ventral eye boundary is independent of the *exd* function
Key Words: organogenesis, eye development, axial patterning, cell survival

Poster 28

Presenter: Jennifer McGuire, Psychiatry, University of Cincinnati
Coauthors: J.P. Herman, F.R. Sallee, R. Sah
Title: Neuropeptide Y (NPY) and posttraumatic stress disorder (PTSD): studies in a rodent model of chronic variable stress
Key Words: Neuropeptide Y, chronic stress, PTSD, rat, behavior

Poster 29

Presenter: Anne Spieles-Engemann, Neurology, University of Cincinnati
Coauthors: Michael M. Behbehani, Timothy J. Collier, Kathy Steece-Collier, Susan L. Wohlgenant, Valerie B. Thompson, Jack W. Lipton, Caryl E. Sortwell
Title: Deep brain stimulation of the subthalamic nucleus in a rodent model: effects on trophic factors
Key words: Parkinson's Disease, BDNF, Deep Brain Stimulation

Poster 30

Presenter: Oorvashi Roy Puli Gajendranath, Biology, Univ. of Dayton
Coauthors: Shiranee Gunasekera, Madhuri Kango Singh, Amit Singh
Title: A *Drosophila* model to study the role of the Notch ligand Serrate (Jagged-1) in growth and cancer.
Key Words: *Drosophila*, hippo signaling, dorso-ventral patterning, loss of function

Poster 31

Presenter: Margaret Wood, Psychiatry, University of Cincinnati
Coauthors: S. Gao, S.C. Woods, R.J. Seeley
Title: Hypothalamic malonyl-CoA and mTOR interact to alter ingestive behavior
Key Words: Obesity, fatty Acid, mTOR

Poster 32

Presenter: Laxmi Iyer, Computer Science, University of Cincinnati
Coauthors: Divyachapan Padur
Title: Connectionist models of creativity Key Words: working memory, semantic cognition, creativity
Key Words: working memory, semantic cognition, creativity

Poster 33

Presenter: Sriparna Ghosal, Psychiatry, University of Cincinnati
Coauthors: Jennifer McGuire, Floyd R. Sallee, James P. Herman, Renu Sah
Title: The acid sensing T-cell death associated gene (TDAG8) receptor in rodent brain: relevance in fear and panic associated behaviors
Key Words: pH, anxiety, fear

Poster 34

Presenter: Kaushal Joshi, Pharmacology & Toxicology, Wright State University
Coauthors: Christine M. Rapp, Kathryn E. Irwin, John J. Schlager, James B. Lucot
Title: 8-OH-DPAT PROTECTS FROM DEFICITS PRODUCED BY SARIN INDUCED CONVULSIONS
Key Words: Sarin, CBDP, 8-OH-DPAT

Poster 35

Presenter: Sara Gombash, Neuroscience, University of Cincinnati
Title: Developmental Expression of Striatal Pleiotrophin: Relevance to Gene Transfer Therapy in a Parkinsonian Rodent Model
Coauthors: A. Cole-Strauss, J.W. Lipton, T.J. Collier, K. Steece-Collier, B.T. Terpstra, A.L. Spieles-Engemann, B.F. Daley, S.L. Wohlgenant, V.B. Thompson, R.J. Mandel, F.P. Manfredsson, and C.E. Sortwell
Key Words: Parkinson's disease, neurotrophic factor, 6-Hydroxydopamine, neuroprotection, neurorestoration, striatum, substantia nigra, recombinant adeno-associated virus 2 serotype 1

Poster 36

Presenter: Alex Blair, Zoology, Miami University
Coauthors: Bridget Hartman, Matt Siefert and Alex Blair, Souyma Banerjee, Joyce J. Fernandes
Title: Nervous system remodeling: the fate of BarH1 expressing motor neurons.
Key Words: motor neurons, remodeling, BarH1, Drosophila

Poster 37

Presenter: Jonathan Flak, Psychiatry, University of Cincinnati
Coauthors: M. Ostrander, R. Jankord, M. Solomon, J. P. Herman
Title: Limbic glucocorticoid receptor expression during recovery from chronic stress
Key Words:

Poster 38

Presenter: Matt Siefert, Zoology, Miami University
Coauthors: Souyma Banerjee, Joyce J. Fernandes
Title: A single cell labeling technique to visualize motor neurons in the Drosophila.
Key Words: MARCM, Drosophila, motor neurons

Poster 39

Presenter: Julia Zavada, Zoology, Miami University
Coauthors: Jie Zhu, Katia Del Rio-Tsonis
Title: Canonical Wnt signaling regulates chicken retina regeneration
Key Words: retina, regeneration, stem cells, ciliary marginal zone

Poster 40

Presenter: Jeannine Crum, Pharmacol & Toxicol, Wright State University SOM
Coauthors: M. Di Fulvio, F.J. Alvarez-Leefmans
Title: Gene expression profile of chloride transporters and channels in DRG cells
Key Words: chloride, synaptic signaling, volume regulation

Poster 41

Presenter: Megan Onady, Zoology, Miami University
Coauthors: Tracy Haynes, Katia Del Rio-Tsonis
Title: The role of complement in retina regeneration
Key Words: retina, regeneration, complement

The Miami Valley Chapter of the Society for Neuroscience wishes to thank the following for their generous support of our 2009 Neuroscience Day:



2009 Chapter
Grant Award



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UNIVERSITY**
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The College of Arts and Science
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