Curriculum Vitae of Michael J. Hylin, Ph.D.

I. PROFESSIONAL AFFILIATION AND CONTACT INFORMATION

A. Brain and Cognitive Sciences
Department of Psychology
B. Life Science II Mail Code 6502
Southern Illinois University
1125 Lincoln Drive
Room 77B
Carbondale, IL 62901
mhylin@siu.edu

II. EDUCATION

B.S. in Psychology with minor in Biology, Magna Cum Laude, GPA 3.9 December 2003 Northern Illinois University, DeKalb, Il,
Honors Thesis: Effects of cortical disconnection of the agranular medial cortex (AGm) and posterior partial cortex (PPC) on the neglect syndrome and extinction in rodents
Advisor: James Corwin, PhD.

M.A. in Psychology, GPA 4.0 August 2008
Department of Psychology, Northern Illinois University, DeKalb, Il,
Thesis: Unilateral AGm Lesions Produce Changes in the Dendritic Morphology of Layer V Cells in the Contralesional Homotopic Cortex
Advisor: James Corwin, PhD.

PhD in Psychology, GPA 4.0 December 2010
Department of Psychology, Northern Illinois University, DeKalb, Il, Dissertation: The Role of Noradrenergic Receptors in Ampehetamine-Induced Recovery from Neglect
Advisor: James Corwin, PhD.

Postdoctoral Certification Program University of Texas Health Science Center at Houston – Houston, Texas 2011-2013
A two-year program including semesters in responsible conduct of research, career development, departmental colloquia, and supervised research

III. PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Psychology, Southern Illinois University
August 2014-Present

Postdoctoral Fellow, Department of Neurobiology and Anatomy, University of Texas Medical School at Houston, Houston TX, October 2010- July 2014
Supervisor: Pramod Dash, PhD.

Graduate Research Assistant, September 2004 – October 2010
Department of Psychology, Northern Illinois University, DeKalb, Il
Supervisor: James Corwin, PhD.

Undergraduate Research Assistant, January 2002- August 2004
Department of Psychology, Northern Illinois University, DeKalb, Il
Supervisor: James Corwin, PhD.

IV. RESEARCH AND CREATIVE ACTIVITY

A. Research Interest and Specialties
   1. Neurocognitive dysfunction following mild and repeated traumatic brain injury.
   2. Traumatic brain injury during development
   3. Control of inflammation following brain injury
   4. Biochemical mechanisms of memory storage and recall
   5. Pharmacological enhancement of memory retrieval
   6. Impact of chronic stress upon brain injury and recovery
   7. Neurorehabilitation through the use of environmental and pharmacological manipulations

B. Current Research Projects
   1. Investigating FDA approved treatments for mild traumatic brain injury
   2. Determining the role of the medial prefrontal cortex in memory recall
   3. Examining deficits in extinction of conditioned fear following traumatic brain injury
   4. Manipulation of peripheral inflammation in order to induce recovery

C. Grants Applied For
   1. Eli Lilly Post-Doctoral Training Grant, Received an Honorable Mention

D. Grants Received
   None

E. Honors and Awards
   1. Mission Connect 2nd Place TBI Poster Presentation Competition Winner, 2013
   2. Mission Connect Best Overall TBI Poster Presentation Competition Winner 2012
   3. Dissertation Completion Award Honorary, Northern Illinois University, 2009
   4. Sigma Xi Graduate Presentation Competition Winner, 2008
   5. Graduated Magna Cum Laude B.S. in Psychology, Northern Illinois University, 2003
   6. University Honors Program, Northern Illinois University, 2002-2003
   7. Psychology Department Honors, Northern Illinois University, 2002-2003
   8. Dean's List, Northern Illinois University, 2001-2003
   9. Golden Key International Honors Society Member
   10. Phi Kappa Phi Member

F. Papers and Presentations at Professional Meetings

1. Cholinergic Modulation of Peripheral Inflammation Affects Outcome Following a Moderate Traumatic Brain Injury, presented at the 20th Annual Neuroscience Poster Session, Houston, TX

2. Cholinergic Modulation of Peripheral Inflammation Affects Outcome Following a Moderate Traumatic Brain Injury, presented at the Mission Connect 2013 Annual Scientific Symposium, Houston, TX

3. Characterization of the severity of neurocognitive and histopathological deficits following a mild fluid percussion injury, presented at the 3rd Annual Postdoctoral Science Symposium, Houston, TX

4. Impairments in visuospatial learning and memory following repeated concussion injury, presented at the Mission Connect 2012 Annual Scientific Symposium, Houston, TX

5. Neurocognitive and histopathological outcome following a mild fluid percussion injury, presented at 19th Annual Neuroscience Poster Session, Houston, TX

6. Complete disruption of the perineuronal net impairs long-term fear memory, presented at the 2012 Society for Neuroscience Conference, New Orleans, LA

7. Administration of d-amphetamine induces behavioral recovery from neglect after photothrombotic or aspiration lesions of the rat medial agranular cortex, presented at the 2010 Society for Neuroscience Conference, San Diego, CA

8. Use of amphetamine in treating allocentric spatial deficits following bilateral posterior parietal cortex lesions, presented at the 2009 Society for Neuroscience Conference, Chicago, IL

9. Severe unilateral neglect flowing unilateral photothrombotic lesions of the medial agranular cortex, presented at the 2009 Society for Neuroscience Conference, Chicago, IL

10. Running on rungs: Serial pattern learning on the horizontal ladder, presented at the 2008 Society for Neuroscience Conference, Washington, DC.

11. Unilateral lesions of the medial agranular cortex produce a persistent disruption in the organization of food protection behaviors, presented at the 2008 Society for Neuroscience Conference, Washington, DC.

12. Dendritic plasticity in the contralesional cortex following lesions of the AGm, presented at 2008 Sigma Xi Graduate Student Presentation, NIU Chapter, DeKalb, IL.

13. Effects of unilateral lesions of the medial agranular cortex upon the morphology of layer V neurons in the contralateral hemisphere, presented at the 2007 Society for Neuroscience Conference, San Diego, CA.

14. Effects of cortical disconnection of the agranular medial cortex (AGm) and posterior partial cortex (PPC) on the neglect syndrome and extinction in rodents, presented before the Honors Committee, May 2001.

V. PUBLICATIONS AND CREATIVE WORKS

A. Books

None

B. Articles in Professional Journals

1. Gibb, SL, Zhao, Hylin, MJ, Y, Potter, D, Zhao, J, Xue, H, Baimukanova, G, Cox Jr, CS, Pramod, PK, & Pati, S (Under Review, Journal of Clinical Investigation) TIMP3 activates the Akt-mTOR pathway and attenuates neurocognitive dysfunction following Traumatic Brain Injury.

2. Zhao, Y, Hylin, MJ, Zhao, J, Moore, A, Menge, T, Xue, H, Cox, CS, Dash PK, & Pati, S (In Preparation)Modulation of Hippocampal Neuronal Survival and Wnt3a by MSCs after TBI.

3. Jeter, CB, Hylin, MJ, Hergenroeder, GW, Hill, JL, Johnson DR, Barrera, JA, Sheilds, TC, Redell, JB, Zhao, J, Moore, AN, & Dash, (2014) Biomarkers of Organ Injury. *Recent Patents on Biomarkers,* 4, 1-12. doi: 10.2174/2210309004666140616232339

4. Jeter, CB, Hergenroeder, GW, Hylin, MJ, Redell, JB, Moore, AN, & Dash, PK (2013) Biomarkers for the diagnosis and prognosis of mild traumatic brain injury/concussion. *Journal of Neurotrauma,* 30(8), 657-670. doi: 10.1089/neu.2012.2439.

5. Hylin, MJ, Orsi, SA, Zhao, J, Bockhorst, K, Perez, A, Moore, AN, & Dash, PK (2013) Behavioral and histopathological alterations resulting from mild fluid percussion injury. *Journal of Neurotrauma,* 30(9), 702-715. doi: 10.1089/neu.2012.2630.

6. Hylin, MJ, Orsi, SA, Rozas, NS, Hill, JL, Zhao, J, Redell, JB, Moore, AN, & Dash, PK (2013) Repeated concussive injury impairs short-term visuospatial memory and

complex learning *Journal of Neurotrauma*, 30(9), 716-726. doi: 10.1089/neu.2012.2717.

7. Hylin, MJ, Orsi, SA, Moore, AN & Dash, PK (2013) Disruption of the perineuronal net in the hippocampus or medial prefrontal cortex impairs trace fear conditioning *Learning and Memory,* 20(5), 267-273. doi: 10.1101/lm.030197.112.

C. Chapters in Professional Books

1. Jeter CB, Redell JB, Moore AN, Hergenroeder GW, Zhao J, Johnson DR, **Hylin MJ**, Dash PK. Biomarkers of traumatic injury. In: Li G, Baker SP (eds.) Injury Research: Theories, Methods, and Approaches. Springer. 2012.

D. Popular and Creative Writing
N/A

E. Book Reviews
N/A

F. Other: Published Journal Article Cover
1. Diffusion tensor image of rodent brain following a mild traumatic brain injury. *Journal of Neurotrauma,* 30(8), 2013

VI. TEACHING EXPERIENCE

A. Teaching Interests and Specialties
1. Neuroscience
2. Learning and Memory
3. Neuroanatomy

B. Teaching and Training Grants
None

C. Teaching Honors and Awards
None

D. Current Graduate Faculty Status
Regular

E. Number of Master's and Ph.D. Committees on which I have served
None

F. Names of Students who have completed Master's Thesis and Doctoral Dissertations under my direction
None

G. Other Student Research Supervision
None

VII. UNIVERSITY SERVICE

A. Departmental Committees
1. Reviewer for MD Anderson Research Mentor Award, Department of Neurobiology and Anatomy, University of Texas Medical School at Houston, 2011, 2013
2. Reviewer for UTHealth Postdoctoral Association Travel Award, Department of Neurobiology and Anatomy, University of Texas Medical School at Houston, 2011
3. Neuroscience and Behavior Area Representative Graduate Colloquium Committee, Department of Psychology, Northern Illinois University, 2006-2007, 2007-2008, 2009-2010
4. Psychology Department Representative Graduate Colloquium Committee, Department of Psychology, Northern Illinois University, 2009-2010

B. College and University Committees and Councils
None

C. Other Service
1. University of Texas Medical School at Houston Graduate Student Education Committee Poster Competition Judge, October 2013
2. Rice Undergraduate Research Symposium Judge, Rice University, April 2013

VIII. PROFESSIONAL SERVICE

A. Membership in Professional Associations
1. National Neurotrauma Society
2. Mission Connect
3. Molecular and Cellular Cognition Society
4. Sigma Xi
5. Society for Neuroscience
6. Psi Chi

B. Offices Held and Honors Awarded in Professional Associations
N/A

C. Consultantships
N/A

D. Evaluation of Manuscripts for Journals and Book Publishers and of Grant Proposals for Agencies

Ad Hoc Reviewer for:

1. Advances in Neuroscience
2. Learning and Memory
3. Journal of Neurotrauma

IX. COMMUNITY SERVICE

1. Neuroscience Research Center Brain Night for Kids, University of Texas Medical School at Houston, March 2012, 2013, 2014
2. Neuroscience Research Center 18th Annual Public Forum on Concussions, University of Texas Medical School at Houston, Feburary, 2013
3. Neuroscience Research Center 19th Annual Public Forum on Multiple Sclerosis, University of Texas Medical School at Houston, Feburary, 2014
4. Science Engineering Fair of Houston Judge, February 2012, March 2013, February 2014
5. Facilitator, Psychology Lab Tours, Northern Illinois University SciCamp Explorations, Summer 2010