



Curriculum Vitae
Farzad Mortazavi, PhD
Department of Anatomy and Neurobiology
Boston University School of Medicine
700 Albany Street, W-701
Boston, MA 02118
Office: (617) 638-4134
Fax: (617) 639-4922
Farzad@bu.edu

ACADEMIC TRAINING:

- 2006 **Ph.D.** Northeastern University, Boston, MA, Experimental Psychology/Behavioral Neuroscience. **Mentor: Denise Jackson, PhD**
- 2001 **M.S.** Central Michigan University, Mt. Pleasant, MI Experimental Psychology/Behavioral Neuroscience. **Mentor: Gary Dunbar, PhD**
- 1996 **B.A.** University of South Florida, Tampa, FL, Psychology

POSTDOCTORAL TRAINING:

- 2010 – 2012 Senior Research Associate, Laboratory of Cognitive Neurobiology, **Mentor: Dr. Douglas Rosene**
- 2008 – 2010 Post Doc Molecular Mechanisms of Neurodegenerative Disease, **Mentor: Dr. Marie-Francoise Chesselet**, Department of Neurology, UCLA School of Medicine, Los Angeles, CA
- 2006 – 2008 **Michael J. Fox Post-Doctoral Fellowship**, Department of Neurology, UCLA School of Medicine, Los Angeles, CA. **Mentor: Marie-Francoise Chesselet**

ACADEMIC APPOINTMENTS:

- 2010 – Present **Instructor**, Department of Anatomy and Neurobiology, Boston University School of Medicine
- Course Director**, Instructor for Experimental Design and Analysis for Forensic Anthropology, Department of Anatomy and Neurobiology, Boston University School of Medicine
- 2006 – 2010 **Faculty**, College of Humanities, University of Phoenix, Online

HONORS:

- 2010 “The Mazz Prize”, Outstanding Postdoctoral Research Award, Department of Neurology, UCLA School of Medicine
- 2006 – 2008 Michael J Fox Foundation Post-Doctoral Fellowship, Molecular Mechanisms of Neurodegeneration in Murine Models of Parkinson’s disease
- 2007 Invited Speaker at 3rd VA/UCLA Research Symposium on Movement Disorders on April 25, 2007 at UCLA.
- 2000 and 2001 Phi Beta Delta Honors Society for International Scholars; recognized for “achievements in the areas of international education and exchange”
- 2000 The National Society of Collegiate Scholars; recognized for “outstanding scholarship, leadership, and service

TEACHING EXPERIENCE AND RESPONSIBILITIES:

- 2011 – Present Course Director and Instructor, Experimental Design and Analysis for Forensic Anthropologists, **FA804**, BUSM, Boston, MA.
Elementary Biostatistics, **GMS/AN704**
- 2005 – Present Variety of Psychology courses, Critical Thinking and Ethics,
2005 Statistics, Experimental Design, Northeastern University
2000 Biopsychology, Behavioral Neuroscience, Central Michigan University

MAJOR MENTORING ACTIVITIES:

BOSTON UNIVERSITY SCHOOL OF MEDICINE, PhD PROGRAM:

- 2015 – Present **Nadine Aziz:** Neuropathological changes in the brain in a Murine Model of Down's syndrome
- 2014 – Present **Neema Yazdani:** Murine models of methamphetamine addiction
- 2013 – Present **Eli Shobin:** Inflammation in the aging brain
- 2013 – Present **Mary Orczykowski:** Recovery of function following ischemic stroke
- 2012 – Present **Nadine Heyworth:** Neurogenesis in the adult monkey
- 2012 – Present **Larissa Estrada:** White matter degeneration in the aging monkey

BOSTON UNIVERSITY SCHOOL OF MEDICINE, GMS PROGRAM:

- 2013 – 2014 **Malavika Rangunathan** "Stereological analysis of glial cell subtypes in the primary visual cortex across the life span of rhesus monkeys
- Michael Connerney** "3D reconstruction of Motor Pathways from tract tracing in the rhesus monkey."
- Kevin Arndt** "Investigating Reorganization of the Motor Cortices Following Stem Cell Therapy in a Non-Human Primate Model of Cortical Ischemia.
- Xiyue Wange** "Inhibitory interneurons in the anterior cingulate and medial frontal cortex in parentally malnourished rats."
- Yom Alemante:** "Calorie restriction in the aging brain of the rhesus monkey"
- 2011 – 2012 **Will Jin,** GMS student, BUSM, Orexin A terminal expression in thalamic nuclei of the Rhesus Monkey

BOSTON UNIVERSITY SCHOOL OF MEDICINE, PROGRAM IN FORENSIC ANTHROPOLOGY:

- 2013-2015 **Amanda Castello**
- 2013-2015 **Karen E. Brun,** Master's Student. Boston University School of Medicine, Program in Forensic Anthropology. The utility of histomorphometrics in distinguishing between human and non-human rib bone: osteon area, perimeter, and circularity
- 2014-2015 **Karen St. George,** Master's Student. Boston University School of Medicine, Program in Forensic Anthropology. Estimating body mass from the human skeleton.
- 2011-2012 **Chase Philips,** Master's Student. Boston University School of Medicine, Program in Forensic Anthropology. The Use of Craniometrics in the Determination of Juvenile Sex by means of Discriminant Function Analysis: A Revised Method. Projected Date of Graduation: Summer 2011

- 2011 – 2012 **Amelia Boaks**, Master’s Student, Boston University School of Medicine, Program in Forensic Anthropology. Collagen Degradation in Cadaveric Bone as a Function of Time. Graduated Summer 2012
- 2010 **Ana Maria Cardoza**, Master’s Student. Boston University School of Medicine, Program in Forensic Anthropology. Estimation of Adult Stature From Fragments: A Validation Study. Graduated 2010

BOSTON UNIVERSITY SCHOOL OF MEDICINE, UROP PRORAM:

- 2015 **Simrat Dhaliwal**- Investigating the effects of calorie restriction in the aging monkey
- 2014 **Danny Mackenzie**- Investigating cortical reorganization following ischemic stroke in rhesus monkey
- 2011 **Punam Patel**- Investigating the effects of inosine treatment following ischemic stroke in a monkey model of ischemic stroke
- 2010 **Mariana Vigerál**- Immunohistochemical localization of microcolumns in thick sections from the rhesus monkey

UNIVERSITY OF CALIFORNIA AT LOS ANGELES, DAVID GEFLEN SCHOOL OF MEDICINE

- 2009 **Valerie ter Wengel MD., Ph.D** Student from Department of Anatomy and Neurosciences, Vrije Universiteit medical center, The Netherlands. Study of neuropathological deficits in olfactory system of Thy-1 alpha-synuclein overexpressing transgenic mice.. UCLA School of Medicine. Currently a Neurologist, MD resident at Vrije Universiteit medical center, The Netherlands.
- 2008-2009 **Morgane Thion** Master’s Student from Laboratoire de Frédéric SAUDOU- Institut Curie, Centre Universitaire ORSAY, France. Use of FK506 for phosphorylation of Huntingtin as a neuroprotective strategy. UCLA School of Medicine. Currently, completing PhD program at Institut Curie, Centre Universitaire ORSAY.

OTHER PROFESSIONAL ACTIVITIES:

PROFESSIONAL SOCIETIES: MEMBERSHIPS, OFFICES, AND COMMITTEE ASSIGNMENTS:

- 2000 – Present Society for Neuroscience
- 2000 – 2010 American Psychological Association
- 1998 – 2001 Michigan Chapter Society for Neuroscience
- 1999 – 2001 Central Michigan University Neuroscience Society, Charter President
- 1999 – 2001 Michigan Society of Electroneurodiagnostic Technologists

EDITORIAL BOARD SERVICES:

- 2014-Present: Editorial Board: Annals of Forensic Research and Analysis
- 2013-Present: Editorial Board of the Frontiers in Neuroanatomy as a reviewer
- 2013-Present: Editorial Board of the Journal for Undergraduate Neuroscience Education
- 2013-Present Ad-hoc reviewer for Journal of Histochemistry
- 2013-Present Ad-hoc reviewer for Journal of Nutritional Neurosciences
- 2013-Present Ad-hoc reviewer for PloS One

STUDY SERVICES:

- 2010 – Present Parkinson’s UK Foundation, Science Review Committee

ORIGINAL, PEER-REVIEWED ARTICLES:

1. Richter F, Fleming SM, Watson M, Lemesre V, Pellegrino L, Raney B, Zhu C, **Mortazavi F**, Mulligan CK, Sioshansi PC, Hean S, De La Rosa K, Khanna R, Flanagan J, Lockhart DJ, Wustman BA, Clark SW, Chesselet MF. (2014). A GCase Chaperone Improves Motor Function in a Mouse Model of Synucleinopathy. *Neurotherapeutics*, 11(4):840-56.
2. Boaks A, Siwek D, **Mortazavi F**. (2014) The temporal degradation of bone collagen: A histochemical approach. *Forensic Sci Int*, 240C:104-110.
3. Wedeen VJ, Rosene DL, Wang R, Dai G, **Mortazavi F**, Hagmann P, Kaas JH, Tseng WY. (2012). Response to Comment of “The Geometric Structure of the Brain Fiber Pathways” The Geometric Structure of the Brain Fiber Pathways. *Science*, 337(6102):1605-1606. Peer Reviewed.
4. Wedeen VJ, Rosene DL, Wang R, Dai G, **Mortazavi F**, Hagmann P, Kaas JH, Tseng WY. (2012) The Geometric Structure of the Brain Fiber Pathways. *Science*, 335(6076):1628-34.
5. Hutson CB, Lazo CR, **Mortazavi F**, Giza CC, Hovda D, Chesselet MF. (2011). Traumatic brain injury in adult rats causes progressive nigrostriatal dopaminergic cell loss and enhanced vulnerability to the pesticide paraquat. *J Neurotrauma*, 28(9):1783-1801.
6. Fleming SM, Mulligan CK, Richter F, **Mortazavi F**, Lemesre V, Frias C, Zhu C, Stewart A, Gozes I, Morimoto B, Chesselet MF. (2011). A pilot trial of the microtubule-interacting peptide (NAP) in mice alpha-synuclein shows improvement in motor function and reduction of alpha-synuclein inclusions. *Mol Cell Neurosci*, 46(3):597-606.
7. Lu X-H, Fleming S, Meurers B, **Mortazavi F**, Lo V, Hernandez D, Sulzer D, Jackson GR, Chesselet MF, Yang XW. (2009). BAC Mice Expressing a Truncated Mutant Parkin Exhibit Progressive Motor Deficits and Late-onset Dopaminergic Neuron Degeneration. *J Neuroscience*, 29(7):1962-76.
8. Chou AP, Maidment N, Klintonberg R, Casida JE, Li S, Fitzmaurice AG, Fernagut PO, **Mortazavi F**, Chesselet MF, Bronstein JM. (2008). Ziram causes dopaminergic cell damage by inhibiting E1 ligase of the proteasome. *J Biol Chem*. 283(50):34696-703.
9. Chesselet MF, Fleming S, **Mortazavi F**, Meurers B. (2008) Strengths and limitations of genetic mouse models of Parkinson's disease. *Parkinsonism and Related Disorders*, 14(SUPPL 2):S84-S87.
10. Trksak GH, Glatt SJ, **Mortazavi F**, Jackson D. A meta-analysis of animal studies on disruption of spatial navigation by prenatal cocaine exposure. *Neurotoxicol Teratol*, 2007 Sep-Oct;29(5):570-7.
11. **Mortazavi F**, Ericson M, Story D, Hulce VD, Dunbar GL. (2005) Spatial learning deficits and emotional impairments in the pentylenetetrazole-kindled rats. *Epilepsy and Behavior*, 7 (4):629-38.
12. Krenitsky TA, Dillberger J, Zotova E, Arezzo JC, Koprach JB, **Mortazavi F**, Gates TA, Dunbar GL. (2004). KP544, a nerve growth factor amplifier: Pharmacokinetics, safety, and efficacy in the rat. *Drug Development Research*, 62(1):60– 70.

BOOK CHAPTER:

Mortazavi F and Rosene, DL. (2015). Chapter 17: Neuroanatomical techniques for analysis of axonal trajectories in the cerebral cortex of the rhesus monkey. In: *Axons and Brain Architecture* (Ed. Rockland). Elsevier Publishing

MANUSCRIPTS SUBMITTED:

Mortazavi F, Oblak AL, Morisson WZ, Schmahmann JD, Stanley HE, Wedeen VJ, Rosene DL. (2015). Geometric structure of cerebral pathways at axonal level. **Submitted to: *Cerebral Cortex***

Arndt KR, Moore TL, Passina Mam Oblak AL, Finkelstein MD, Kramer BC, Rosene DL, **Mortazavi F**. (2015). Cell therapy stimulates ventral premotor cortex plasticity to enhance recovery of function from cortical ischemia. **Submitted to: *Neurotherapeutics***

Jones F, Estrada LE, **Mortazavi F**, Rosene DL, Cruz L. (2015). Characterization of MAP2 immunostained digital images of dendrites using image analysis. In **preparation for submission to: *Neuroscience Methods***

MANUSCRIPTS IN PREPARATION:

Mortazavi F, Rosene DL, Rockland KS (2015). White matter neurons in the aging monkey. In **preparation for submission to: *Frontiers in Neuroanatomy***

Mortazavi F, Moore TL, Killiany RJ, Rosene DL. (2015). Neuropathological consequences of ischemic stroke in the motor cortex of the rhesus monkey.

SOURCES OF SUPPORT:

SENIOR PERSONNEL/CO-INVESTIGATOR ON THE FOLLOWING GRANTS:

5R01 AG043478-02 (PI: Mark Barry Moss)	8/01/2013-7/31/2018
5R01 AG043640-02 (PI: Douglas Rosene)	8/01/2013-4/30/2018
R01 AG042512-01 (PI: Douglas Rosene, M. Kubicki and N. Makris at BBW)	9/01/2014-8/31/2018
1R21 MH107456-01 (PI: Rockland)	7/01/2015-6/30/2017
1R21 NS084022-01 (PI: Rushmore)	4/01/2015-3/31/2017
NSF- Physics of the Living Systems Emergent Order in the Cerebral Cortex: From Light Microscopy to Diffusion MRI	
1R21 MH106796-01 (PI: Rockland) Regional diversity of cortical white matter neurons in adult and infant rhesus monkey”	