Curriculum Vitae

Ausaf A. Bari, M.D. Ph.D.

CURRENT POSITION

Assistant Professor
UCLA Department of Neursurgery

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562 Los Angeles, CA
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EDUCATION AND TRAINING

07/14-06/15	Fellowship in Stereotactic and Functional Neurosurgery Toronto Western Hospital, University of Toronto
07/09-06/14	Residency in Neurological Surgery UCLA Department of Neurosurgery, Chair: Neil Martin, MD
06/08-07/09	Internship in General Surgery UCLA Department of Surgery, Chair: Ronald Busuttil, MD, PhD
08/99–05/08	Boston University School of Medicine, Boston, MA M.D., May 18 2008
08/00–07/05	Boston University School of Medicine, Boston, MA Ph.D. in Neuroscience and Pharmacology, May 18 2008
08/99–05/99	Boston University School of Medicine, Boston, MA M.A., Thesis: Calcium Channel Regulation in the VTA and Cocaine Sensitization
01/91–05/95	University of California, Berkeley A.B., Molecular Cell Biology, Neurobiology

LICENSURE

05/2010-	California State Medical Board, #A112205
10/2015-	North Carolina Medical Board, #2015-02160, Certificate: 212892
11/2015-	Montana Medical Licensing Board, #MED-PHYS-LIC-43669
07/2014-06/2015	The College of Physicians and Surgeon of Ontario, License #104422
03/2010	ABNS Primary Examination, Passed, Board Eligible

PROFESSIONAL EXPERIENCE

03/2015-	Assistant Professor, UCLA Department of Neurosurgery, WLA VA Healthcare System
12/2015-12/2015	Mission Hospital, Asheville NC, Locum Tenens Neurosurgery
11/2015-11/2015	St. Vincent's Hospital, Billings MT, Locum Tenens Neurosurgery
10/2015-11/2015	High Point Regional Hospital, High Point, NC, Locum Tenens Neurosurgery

PROFESSIONAL ACTIVITIES

2010-	Editorial Board, Surgical Neurology International, Consulting Editor: Information Technology
2010-	Ad Hoc Reviewer, Journal of Neuro-Oncology
2010-	Ad Hoc Reviewer, PLOS ONE
2010-	Ad Hoc Reviewer, Journal of Addiction Research & Therapy

HONORS AND SPECIAL AWARDS

05/2015	Wightman-Berris Academy Individual Teaching Excellence Award Nomination, University of Toronto
07/2014	William P. Van Wagenen Fellowship, American Association of Neurological Surgeons
03/2011	Retzius Neuroanatomy Competition -First Place
03/2009	Retzius Neuroanatomy Competition -Third Place
05/2004	Henry I. Russek Student Achievement Award, B.U. School of Medicine
05/2002	Norris Cotton Graduate Student Award
05/2001-05/2002	American Academy of Neurology Research Scholarship
01/2001-05/2008	Ruth L. Kirschtein Individual National Research Service Award (NRSA) (NIH)
05/2001	Association of Pathology Chairs Honor Society, B.U. School of Medicine
05/2000-05/2001	Wotiz Family MD/PhD Fellowship, B.U. School of Medicine
05/2000	Elizabeth K. Moyer Memorial Prize in Anatomy, B.U. School of Medicine
05/1999-05/2000	Mehos Merit Scholarship, $5,000, B.U. School of Medicine
05/1999	E. Gordan Glass Memorial Fund, B.U. School of Medicine
05/1996	Volunteer Service Award, Children's Hospital, Oakland
05/1991	Academic Honors, University of California, Berkeley
05/1990	Honors, 49th Annual Westinghouse Science Talent Search

RESEARCH GRANTS AND FELLOWSHIPS RECEIVED

07/2014-06/2015	William P. Van Wagenen Fellowship (AANS) $120,000, Principal Investigator
01/2012-07/2012	Medtronic Stereotactic and Functional Fellowship $12,500, Principal Investigator
01/2001-05/2008	Ruth L. Kirschtein National Research Service Award F31 (NIH) Modulation of Reward by Inhibition of Dopamine and Glutamate Receptors in the Nucleus Accumbens $250,000, Principal Investigator

LECTURES AND PRESENTATIONS

LECTURES

1. **The Nucleus Accumbens Reward Network: Data from the Human Connectome Project**
   Botterell Lectureship, University of Toronto, Division of Neurosurgery, Toronto, Ontario CA, November 2014.
2. **Neurosurgical Emergencies**
   UCLA School of Medicine, Applied Anatomy. June 2011.
3. **Neurosurgical Emergencies**

UCLA School of Medicine, Applied Anatomy. June 2012.

PEER REVIEWED ORAL PRESENTATIONS

1. **Bari A. A.**, Pezeshkian P., and Pouratian N., Use of the Human Connectome to Validate fMRI Changes in the Nucleus Accumbens Associated with Reward Cues During a Gambling Task. American Association of Stereotactic and Functional Neurosurgery Biennial Meeting, Washington D.C., June 3 2014.

2. **Bari A. A.**, Pezeshkian P., and Pouratian N., Screening the Human Connectome for Potential DBS Targets for the Treatment of Drug Addiction. American Association of Stereotactic and Functional Neurosurgery Biennial Meeting, Washington D.C., June 3 2014.

3. **Bari A. A.**, McLaughlin N., Upadhyaya, P., Buxey F., and Martin N., Measuring the Cost of Microvascular Decompression: A Key Step to Optimize Value-Based Neurosurgery. California Association of Neurological Surgeons Meeting, Monterey, CA, January 2014.

4. **Bari A. A.**, Zheng Z., DeSalles A., and Pouratian N., In-Vivo Segmentation of the Human Nucleus Accumbens Using Diffusion Tensor Imaging and Probabilistic Tractography. CNS Annual Meeting, Chicago, IL, October 2012.

5. **Bari A. A.**, Zheng Z., DeSalles A., and Pouratian N., In-Vivo Segmentation of the Human Amygdala using Diffusion Tensor Imaging and Probabilistic Tractography. CNS Annual Meeting, Washington D.C., October 2011.

6. **Bari A. A.**, Zheng Z., Behnke E., Elias J., Desalles A., and Pouratian N. Thalamic Deep Brain Stimulation Targeting Using Probabilistic Tractography. 8th Annual World Congress of International Brain Mapping and Intraoperative Surgical Planning Society (IBMISPS), San Francisco, CA, June 8-10, 2011.

PUBLICATIONS

RESEARCH PAPERS

RESEARCH PAPERS (PEER REVIEWED)

A. RESEARCH PAPERS - PEER REVIEWED

1. Rangan V. S., Serre L., Witkowska H. E., **Bari A. A.**, and Smith S. Characterization of the malonyl-/acetyltransacylase domain of the multifunctional animal fatty acid synthase by expression in *Escherichia coli* and refolding *in vitro*. *Protein Engineering* 10(5), 561–6 (1997).

2. **Bari A. A.** Increases in N-type calcium channel mRNA in the ventral tegmental area contribute to behavioral sensitization to cocaine. Master's Thesis, Boston University School of Medicine, Boston, MA., 36 pp. (1999).

3. Pierce R. C. and **Bari A. A.** The role of neurotrophic factors in psychostimulant-induced behavioral and neuronal plasticity. *Reviews in the Neurosciences* 12(2), 95–110 (2001).

4. Park W., **Bari A. A.**, Jey A. R., Anderson S. M., Spealman R. D., Rowlett J. K., and Pierce R. C. Cocaine administered into the medial prefrontal cortex reinstates cocaine-eeeking behavior by increasing AMPA receptor-mediated glutamate

transmission in the nucleus accumbens. *Journal of Neuroscience* 22(7), 2916–25 (2002).

5. Anderson S. M., **Bari A. A.**, and Pierce R. C. Administration of the D1-like dopamine receptor antagonist SCH-23390 into the medial nucleus accumbens shell attenuates cocaine priming-induced reinstatement of drug-seeking behavior in rats. *Psychopharmacology* 168(1–2), 132–8 (2003).

6. **Bari A. A.** and Pierce R. C. D1-like and D2 dopamine receptor antagonists administered into the shell subregion of the rat nucleus accumbens decrease cocaine, but not food, reinforcement. *Neuroscience* 135(3), 959–68 (2005).

7. Sedrak M, Gofgulho A, **Bari A. A.**, Behnke E., Frew A., Gevorkyan I., Pouratian N., and Desalles A. Diffusion tensor imaging (DTI) and colored fractional anisotropy (FA) mapping of the subthalamic nucleus (STN) and the globus pallidus interna (GPi). *Acta Neurochirurgica*, 152(12), 2079-84 (2010).

8. Zheng Z., **Bari A. A.**, Behnke E., Elias J., BS, Desalles A., and Pouratian N. Multi-institutional evaluation of deep brain stimulation targeting using probabilistic connectivity-based thalamic segmentation. *Journal of Neurosurgery*, 115(5):995-1004 (2011).

9. Clelland CD., Zheng Z., Kim W., **Bari A. A.**, and Pouratian N. Common cerebral networks associated with distinct deep brain stimulation targets for cluster headache. *Cephalalgia*, 34(3):224–30 (2014).

10. **Bari A. A.**, Fasano A., Munhoz R. P., and Lozano A. M. Improving outcomes of deep brain stimulation of the subthalamic nucleus in Parkinson's disease. *Expert Review of Neurotherapeutics*, 10:1151-60 (2015).

11. Mirzadeh Z., **Bari A. A.**, and Lozano A. M. The rationale for deep brain stimulation in Alzheimer's disease. *Journal of Neural Transmission.* (2015) [Epub ahead of print].

C. RESEARCH PAPERS (SUBMITTED)

1. Alomar S., King N. K. K., **Bari A. A.**, Hamani C., and Lozano A. M. Speech side effects after thalamotomy and deep brain stimulation in patients with movement disorders: a meta-analysis. *Movement Disorders*, (Submitted for publication: 2015).

RESEARCH PAPERS (NON-PEER REVIEWED)

D. RESEARCH PAPERS -NON-PEER REVIEWED

1. **Bari A. A.** In vitro screening for resistance in lettuce to lettuce root aphid *Pemphigus bursarius* (L.) *49th Annual Westinghouse Science Talent Search* (1990).

2. **Bari A. A.** and Hauptman J., From the bench to the bedside: Gene therapy for Parkinson's disease, habenula neurons provide insight into depression, the nucleus accumbens, anhedonia, and depression, microglia, neurotoxocity, and neurodegenerative disease. *Surgical Neurology International*, 2:73, (2011).

CHAPTERS

1. **Bari A. A.** and Pouratian N. Brain Imaging Correlates of Peripheral Nerve Stimulation. *Surgical Neurology International, Stereotactic Supplement*, 3(Suppl 4):S260-8 (2012).

2. **Bari A. A.**, Niu T., Langevin J.P., and Fried I. Limbic Neuromodulation: Implications for PTSD, Addiction, and Memory. *Neurosurgery Clinics of North America* 25(1):137-45 (2014).

3. **Bari A. A.**, King N. K. K., Lipsman N., and Lozano A. M. Deep Brain Stimulation for Neuropsychiatric Disorders in Tuszynski M. H. (Ed.), *Translational Neuroscience: Fundamental Approaches for Neurological Disorders*. Springer (2015).

CHAPTERS (IN PRESS)

1. **Bari A. A.** and Lozano A. M. Deep Brain Stimulation for the Treatment of Myoclonus Dystonia in Dressler, D., Altenmller, E. and Krauss, J. K., (Eds.), *Treatment of Dystonia*. Cambridge University Press (Accepted for publication: May 2015).

ABSTRACTS

1. King N. K. K., Krishna V., Sammartino F., **Bari A. A.**, Fasano A., Lozano A. M., and Hamani C. An anatomical targeting method of the optimal location in deep brain stimulation for tremor. *World Society for Stereotactic and Functional Neurosurgery (WSSFN) Interim Meeting*, Mumbai, India (September 2015).

2. **Bari A. A.**, Elias J., Sedrak M., Zheng A., BS, Desalles A., and Pouratian N. Multi-institutional validation of a patient-specific probabilistic diffusion tractography-based method of thalamic targeting for the surgical treatment of tremor. AANS Annual Meeting, Denver, CO (April 2011).

3. **Bari A. A.**, Silva D. and Pierce R. C. Intra-accumbal microinjection of D1, D2, AMPA, or CAM-KII antagonists but not D3, NMDA, or MEK antagonists decreases the breakpoint on a progressive ratio schedule for intravenous cocaine self-administration. *New England Pharmacologists, 33rd Annual Meeting*, Portland, ME (January 2004).

4. Anderson S. M., **Bari A. A.** and Pierce R. C. Administration of D2-like dopamine receptor antagonists into the nucleus accumbens shell attenuates cocaine-priming induced reinstatement of drug-seeking behavior. *Society for Neuroscience, 33rd Annual Meeting*, New Orleans, LA (November 2003).

5. **Bari A. A.** and Pierce, R. C. Intra-accumbal microinjection of a D1/5 or D2 dopamine receptor antagonist or AMPA antagonist but not a D3 or NMDA receptor antagonist decreases breakpoint on a progressive ratio schedule for intravenous cocaine self-administration. *Society for Neuroscience, 33nd Annual Meeting*, New Orleans, LA (November 2003).

6. **Bari A. A.** and Pierce, R.C. The role of nucleus accumbens dopamine receptor subtypes in processing cocaine reward. *36th Winter Conference on Brain Research*, Snowbird, UT (February 2003).

7. Anderson S. M., **Bari A. A.**, Pierce R. C. Antagonism of dopamine receptors in the nucleus accumbens shell attenuates cocaine priming-induced reinstatement of drug-seeking behavior. *Society for Neuroscience, 32nd Annual Meeting*, Orlando, FL (November 2002).

8. **Bari A. A.** and Pierce R. C. Intra-accumbal microinjection of selective dopamine receptor antagonists lowers the breakpoint on a progressive ratio schedule for intravenous cocaine. *8th Annual Student Achievement Day, Boston University School of Medicine*, Boston, MA (April 2002).

9. **Bari A. A.** and Pierce R. C. Intra-accumbal microinjection of selective dopamine receptor antagonists lowers the breakpoint on a progressive ratio schedule for intravenous cocaine. *Science and Technology Day, Boston University*, Boston, MA (March 2002).

10. **Bari A. A.** and Pierce R. C. Intra-accumbal microinjection of selective dopamine receptor antagonists or a MAP kinase inhibitor lowers the breakpoint on a progressive ratio schedule for intravenous cocaine. *New England Pharmacologists, 31st Annual Meeting, Dartmouth Medical School*, Hanover, NH (January 2002).

11. Park W., **Bari A. A.**, Jey A. R. A., Spealman R. D., Rowlett J. K., and Pierce R. C. Cocaine administered into the medial prefrontal cortex reinstates cocaine-seeking behavior by increasing glutamate and dopamine transmission in the nucleus accumbens in rats. *Society for Neuroscience, 31st Annual Meeting*, San Diego, CA (November 2001).

12. **Bari A. A.** and Pierce R. C. Intra-accumbal microinjection of selective dopamine receptor antagonists or a MAP kinase inhibitor lowers the breakpoint on a progressive ratio schedule for intravenous cocaine. *Society for Neuroscience, 31st Annual Meeting*, San Diego, CA (November 2001).

13. Licata S. C., **Bari A. A.**, and Pierce R. C. The L-type calcium channel antagonist diltiazem attenuates the development of cocaine-induced behavioral sensitization and blocks the reinstatement of cocaine-seeking behavior. *Society for Neuroscience, 31st Annual Meeting*, San Diego, CA (November 2001).

14. Jey A. R. A., **Bari A. A.**, Park W., and Pierce R. C. Administration of cocaine reinstates cocaine-seeking behavior by increasing glutamate and dopamine transmission in rat nucleus accumbens. *7th Annual Student Achievement Day, Boston University School of Medicine*, Boston, MA (April 2001).

15. **Bari A. A.** and Pierce R. C. Increases in calcium channel mRNA in the ventral tegmental area contribute to behavioral sensitization to cocaine. *Society for Neuroscience, 29th Annual Meeting*, Miami Beach, FL (October 1999).

16. **Bari A. A.** and Pierce R. C. Increases in N-type calcium channel mRNA in the ventral tegmental area contribute to the expression of behavioral sensitization to cocaine. *5th Annual Student Achievement Day, Boston University School of Medicine*, Boston, MA (April 1999).

17. **Bari A. A.** and Pierce R. C. Increases in N-type calcium channel mRNA in the ventral tegmental area contribute to the expression of behavioral sensitization to cocaine. *New England Pharmacologists, 28th Annual Meeting*, Wakefield, MA (February 1999).