

Curriculum Vitae
Donald F. Siwek, PhD
3/18/16

ACADEMIC TRAINING:

- 1977 B.A. Hampshire College, Amherst, MA; Zoology
- 1989 Ph.D. Dept. of Anatomy and Neurobiology, Boston University Sch. Medicine, Boston, Anatomy and Neurophysiology

POSTDOCTORAL TRAINING:

- 1989 – 1992 NRSA Postdoctoral Fellowship, Dept. of Anatomy and Neurobiology, Boston University Sch. Medicine, Boston, Visual System Neurophysiology
- 1994 Single Cell Injection, Woodshole Oceanographic Institute
- 2003 Neurostereology, Woodshole Oceanographic Institute
- 2011 FBI Human Remains Recovery, Knoxville, TN
- 2012 Advanced Laboratory Techniques in Forensic Anthro., Knoxville, TN

ACADEMIC APPOINTMENTS:

- 1992 - Present Research Assistant Professor, Anatomy and Neurobiology
- 2002 – Present Graduate Medical School
- 2010 – Present Associate Director, Program in Forensic Anthropology

HOSPITAL APPOINTMENTS:

- 1992 – 2001 Research Health Scientist. ENRM, VAMC, Bedford, MA 01760

HONORS:

N/A

LICENSES AND CERTIFICATION:

- 1993 Certified Novell Engineer, Boston University Corporate Computing Center

DEPARTMENTAL AND UNIVERSITY COMMITTEES:

- 2009 - 2011 Department of Anatomy Graduate Education Committee
- 2015 Faculty Search Committee, Anatomy and Neurobiology
- 2015 Departmental Review Affiliated Masters Programs.

TEACHING EXPERIENCE AND RESPONSIBILITIES:

- 1988 – Present Faculty Medical Gross Anatomy Lecturer and Laboratory
- 1999 - 2008 Lecturer, Dental Anatomical Sciences
- 2008 – Present Lecturer, Anatomy and Imaging, Forensic Anthropology
- 2008 - 2010 Lecture, Dental Surgery, Post-natal Development of the Head and Face
- 2008 – Present Co-developer and author “Anatomy of the Human Skull”, www.skullanatomy.info
- 2009 - 2012 Methods in Neuroscience, Department of Anatomy and Neurobiology
- 2015 - Present Introduction to Anatomy for Bioimaging Students
- 2015 - Present Body Systems, GMS, MAMS program

MAJOR ADMINISTRATIVE RESPONSIBILITIES:

- 1996 - 2001 Database Manager, Boston University Alzheimer’s Disease Center
- 2001 - 2005 Associate Dir, Lab for Cognition and Sleep
- 2009 - Present Associate Dir. Masters Program in Forensic Anthropology

OTHER PROFESSIONAL ACTIVITIES:

PROFESSIONAL SOCIETIES: MEMBERSHIPS, OFFICES, AND COMMITTEE ASSIGNMENTS

- 2009 - 2012 National Sleep Association

CV: Donald F. Siwek, PhD

2013 - 2014 American Paleopathology Society
PENDING American Academy of Forensic Sciences

EDITORIAL BOARDS:

2011 - Journal of Forensic Toxicology and Pathology
2014 - Austin Journal of Anatomy
2003- Editorial Advisor, Gray's Anatomy for Students, Drake et al., Churchill Livingstone

MAJOR COMMITTEE ASSIGNMENTS:

Federal Government

N/A

Private/Foundations

1993 – 1995 Board of Directors, Datawave Inc., Longmont, CO
2014 – present Anatomical editor. SciTech, Inc

Study Sections

N/A

State:

N/A

Current Other Support:

Past Other Support:

1999 - 2004 Boston University Alzheimer's Disease Center, Original database manager

Invited Lectures and Presentations

1999 The Health Outreach Program for the Elderly Database. Soc. Neurosciences, Alz.Dis. Assoc.
2013 – present Introduction to 3D Printing. GMS, Medical Technology Prog

Bibliography:

ORIGINAL, PEER REVIEWED ARTICLES:

1. Payne BR, Siwek DF. Receptive fields of neurons at the confluence of cerebral cortical areas 17, 18, 20a. and 20b in the cat. *Vis Neurosci.* 1990 May;4(5):475-9.
2. Payne BR, Siwek DF. The visual map in the corpus callosum of the cat. *Cereb Cortex.* 1991 Mar-Apr; 1(2):173-88.
3. Payne BR, Siwek DF, Lomber SG. Complex transcallosal interactions in visual cortex. *Vis Neurosci.* 1991 Mar; 6(3):283-9.
4. Payne BR, Siwek DF. Visual-field map in the callosal recipient zone at the border between areas 17 and 18 in the cat. *Vis Neurosci.* 1991 Sep;7 (3):221-36.
5. Siwek DF, Pandya DN. Prefrontal projections to the mediodorsal nucleus of the thalamus in the rhesus monkey. *J Comp Neurol.* 1991 Oct 22; 312 (4): 509-24.
6. Schulz JB, Henshaw DR, Siwek D, Jenkins BG, Ferrante RJ, Cipolloni PB, Kowall NW, Rosen BR, Seal MF. Involvement of free radicals in excitotoxicity in vivo. *J. Neurochem.* 1995 May; 64 (5):2239-47.
7. Schulz JB, Matthews RT, Jenkins BG, Ferrante RJ, Siwek D, Henshaw DR, Cipolloni PB, Mecocci P, Kowall NW, Rosen BR. Blockade of neuronal nitric oxide synthase protects against excitotoxicity in vivo. *J Neurosci.* 1995 Dec; 15(12):8419-29.
8. Reaume AG, Elliott JL, Hoffman EK, Kowall NW, Ferrante RJ, Siwek DF, Wilcox HM, Flood DG, Seal MF, Brown RH Jr, Scott RW, Snider WD. Motor neurons in Cu/Zn superoxide

- dismutase-deficient mice develop normally but exhibit enhanced cell death after axonal injury. *Nat Genet.* 1996 May;13(1):43-7.
9. Datta S, Siwek DF, Excitation of the brain stem pedunculopontine tegmentum cholinergic cells induces wakefulness and REM sleep. *J Neurophysiol.* 1997 Jun;77(6):2975-88.
 10. Datta S, Patterson EH, Siwek DF. Endogenous and exogenous nitric oxide in the pedunculopontine tegmentum induces sleep. *Synapse.* 1997 Sep;27(1):69-78.
 11. Datta S, Siwek DF, Patterson EH, Cipolloni PB. Localization of pontine PGO wave generation sites and their anatomical projections in the rat. *Synapse.* 1998 Dec;30(4):409-23.
 12. Siwek D. The Health Outreach Program for the Elderly (HOPE) Database. *Alzheimer Dis Assoc Disord.* 1999 Apr-Jun;13 Suppl 1:S101-5.
 13. Shefner JM, Reaume AG, Flood DG, Scott RW, Kowall NW, Ferrante RJ, Siwek DF, Upton-Rice M, Brown RH Jr. Mice lacking cytosolic copper/zinc superoxide dismutase display a distinctive motor axonopathy. *Neurology.* 1999 Oct 12;53(6):1239-46.
 14. Datta S, Patterson EH, Siwek DF. Brainstem afferents of the cholinceptive pontine wave generation sites in the rat. *Sleep Res Online.* 1999;2(3):79-82.
 15. Datta S, Siwek DF. Single cell activity patterns of pedunculopontine tegmentum neurons across the sleep-wake cycle in the freely moving rats. *J Neurosci Res.* 2002 Nov 15;70(4):611-21.
 16. Albright CD, Siwek DF, Craciunescu CN, Mar MH, Kowall NW, Williams CL, Zeisel SH. Choline availability during embryonic development alters the localization of calretinin in developing and aging mouse hippocampus. *Nutr Neurosci.* 2003 Apr;6(2):129-34.
 17. McKeen-O'Malley C, Siwek D, Lamoureux JA, Williams CL, Kowall NW. Prenatal choline deficiency decreases the cross-sectional area of cholinergic neurons in the medial septal nucleus. *Brain Res.* 2003 Jul 11; 977(2):278-83.
 18. Mavanji V, Siwek DF, Patterson EH, Spoley EE, Datta S, Effects of passive-avoidance training on sleep-wake state-specific activity in the basolateral and central nuclei of the amygdala. *Behav. Neurosci.* 2003 Aug;117(4):751-9.
 19. Clement AM, Nguyen MD, Roberts EA, Garcia ML, Boillee S, Rule M, McMahon AP, Doucette W, Siwek D, Ferrante RJ, Brown RH Jr, Julien JP, Goldstein LS, Cleveland DW. Wild-type non-neuronal cells extend survival of SOD1 mutant motor neurons in ALS mice. *Science.* 2003 Oct 3;302(5642):113-7. Erratum in: *Science.* 2003 Oct 24;302(5645):568.
 20. Ulloor J, Mavanji V, Saha S, Siwek OF, Datta S. Spontaneous REM sleep is modulated by the activation of the pedunculopontine tegmental GABA B receptors in the freely moving rat. *J Neurophysiol.* 2004 Apr;91(4):1822-31. Epub 2003 Dec 31.
 21. Klivenyi P, Siwek D, Gardian G, Yang L, Starkov A, Cleren C, Ferrante RJ, Kowall NW, Abeliovich A, Seal MF. Mice lacking alpha-synuclein are resistant to mitochondrial toxins. *Neurobiol. Dis.* 2006 Mar; 21(3):541-8. Epub 2005
 22. Datta S, Siwek DF, Huang MP. Improvement of two-way active avoidance memory requires protein kinase a activation and brain-derived neurotrophic factor expression in the dorsal hippocampus. *J Mol. Neurosci.* 2009 Jul;38(3):257-64. Epub 2009 May 6.
 23. Datta S, Siwek DF, Stack EC. Identification of cholinergic and non-cholinergic neurons in the pons expressing phosphorylated cyclic adenosine monophosphate response element-binding protein as a function of rapid eye movement sleep. *Neuroscience.* 2009 Sep 29;163(1):397-414. Epub 2009 Jun 18.
 24. Stack EC, Desarnaud F, Siwek OF, Datta S. A novel role for calcium/calmodulin kinase II within the brainstem pedunculopontine tegmentum for the regulation of wakefulness and rapid eye movement sleep. *Neuroscience.* 2009 Sep 29; 163(1):397-414. Epub 2009 Jun 18.
 25. Siwek DF and Reinecke, GW. Relaxation of clenched digits in cadaveric hands to facilitate the recovery of postmortem friction ridge impressions. 2014 *J. For. Ident.* 64:13 – 17.
 26. Siwek DF, Knapp CM, Kaur G. and Datta S. Dorsal subcoeruleus nucleus (SubCD) information context-associated fear memory consolidation. *Exp Brain Res.* 2014 May;232(5):1535-45.
 27. Boaks A. Siwek DF. and Mortazavi F. The temporal degradation of bone collagen: A Histochemical

CASE REPORTS, REVIEWS, CHAPTERS AND EDITORIALS

Proceedings of Meetings & Invited Papers:

Editorials and Critical Reviews

- 1 “Time to Sell the Farm”. Forensic Magazine Editorial, April / May, 1999

Textbook Chapters:

N/A

Case Reports:

N/A

TEXTBOOKS & Monographs:

N/A

CONGRESSIONAL TESTIMONY:

N/A