

Curriculum Vitae
Deborah Whittaker Vaughan, Ph.D.
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Academic Training:

5/1971 Ph.D. Boston University, Boston, MA, Biology
5/1966 B.A. University of Vermont, Burlington, VT, Biology

Additional Training:

6/1971-5/1972 Postdoctoral Fellow in Neurocytology, Dr. Alan Peters, Boston University School of Medicine, Boston, MA.

Academic Appointments:

12/2003 - present Professor of Anatomy and Neurobiology, Boston University School of Medicine
7/1987-11/2003 Associate Professor of Anatomy and Neurobiology, Boston University School of Medicine
7/1979-6/1987 Assistant Professor of Anatomy, Boston University School of Medicine
7/1972-6/1979 Assistant Research Professor of Anatomy, Boston University School of Medicine

Honors:

5/2013 Metcalf Cup and Prize, Boston University (Boston University's highest recognition for Excellence in Teaching)
5/2011 Educator of the Year in the Pre-Clinical Medical Sciences, Boston University School of Medicine
5/2006 Thomas Robitscher Faculty Award in recognition of excellence in teaching the preclinical sciences
5/2002 Thomas Robitscher Faculty Award in recognition of excellence in teaching the preclinical sciences
5/2001 Educator of the Year in the Pre-Clinical Medical Sciences, Boston University School of Medicine
5/2000 Thomas Robitscher Faculty Award in recognition of excellence in teaching the preclinical sciences
5/1999 Stanley L. Robbins Award for Excellence in Teaching, Boston University School of Medicine
5/1998 Golden Apple Award from the American Medical Student Association in recognition of excellence in teaching
5/1996 Thomas Robitscher Faculty Award in recognition of excellence in teaching the preclinical sciences

Departmental and University Committees: (since 2000)

BUSM and BUMC (past to present):

2000-01; 2009-10, 2017: ad hoc Committee on BUSM Student Evaluation, Grading and Promotions Policies; co-chair in '01; chair in '09-10
2001-02: ad hoc Committee to Review Policies and Practices Regarding Professional Qualifications, Performance and Behavior of BUSM Students
2002-07: EMSSP Admissions Committee, Boston University School of Medicine
2002: ad hoc Committee on Newer Educational Technologies

- 2002: Advisory Committee to Evaluate the Effects of the Different Educational Pathways on Preclinical Education and Student Experiences
- 2002: ad hoc Committee on Faculty Development, Department of Anatomy and Neurobiology
- 2003: ad hoc Committee to Examine Restructuring of the Curriculum
- 2003-2015: Advisor in Wilkins Academy of BUSM Academy of Advisors
- 2003— Student Services Committee, BMC
- 2003-11: PCS: Preclerkship Curriculum Subcommittee of BUSM Course Directors: thereafter, chair
- 2003-06: Carnegie Initiative on the Doctorate: Chair, Teaching Subcommittee
- 2004-17 MD/PhD Program Steering Committee
- 2006-08: chair, Payne Memorial Library Committee (Department), planning and maintaining
- 2004-06: Faculty Development and Promotions Committee, Department of Anatomy and Neurobiology
- 2005-16 Faculty Development Advisory Board, Office of Medical Education
- 2006: ad hoc Committee on Criminal Background Checks for Medical Students
- 2006: ad hoc Committee on Basic Science Curriculum Committee (for medical and graduate programs)
- 2006-08: Planning Committee for First and Second Annual John McCahan Medical Education Day
- 2007-11: EMSSP Promotions Committee, Boston University School of Medicine
- 2007: chair, ad hoc Committee of BUSM I Course Managers to implement and oversee BUSM I curriculum
- 2008: ad hoc Committee for Establishing Peer Review System for Teachers
- 2007-17 MEC: Medical Education Committee, faculty-at-large member; then as chair of PCS; again as pre-clerkship faculty-at-large member
- 2008, 2011, 2017-18: co-chair, Task Force on BUSM Bylaws
- 2009-11: co-chair, LCME Teaching and Evaluation, ME Subcommittee
- 2009-11: LCME Medical Students Standards Committee
- 2009-11: LCME Structure and Content of the Educational Programs, ME Subcommittee
- 2010-16 Planning Committee for Educational Neuroscience Program, member
- 2011— member, Appeals Committee for BU/MD Pathway Programs Promotions
- 2011— member, BUSM Academic Calendar committee
- 2011-14: chair, PCS (Pre-clerkship Curriculum Subcommittee)
- 2012: member, ad hoc search committee for the BUSM Associate Dean for Academic Affairs
- 2012-17 member, LCME and Curriculum Oversight Committee (later LES: LCME Education Subcommittee)
- 2012: chair, ad hoc committee to revise BUSM Student Disciplinary Code of Academic and Professional Conduct
- 2012: member, ad hoc Search Committee for the BUSM Assistant Dean for Student Affairs
- 2015: member, BUSM Strategic Plan working group
- 2015: chair, Digital Media Studio Committee, responsible for designing and funding a Medical Campus Digital Media Studio for faculty (now Godley Digital Media Studio)
- 2015: member, Executive Committee, Dept. of Anatomy & Neurobiology Academic Review
- 2016: member, ad hoc Search Committee for BUSM Chief Financial officer
- 2016: member, ad hoc Search Committee for BUSM Director, Office of Medical Education
- 2017: member, ad hoc Search Committee for BUSM Associate Dean of Admissions
- 2017— member, BUMC Academic Educational Resource Committee
- 2017— chair, LCME Education Subcommittee (LES) of the Medical Education Committee
- 2018: member, ad hoc Search Committee for BUSM Associate Dean of Medical Education (previously Academic Affairs)

All-University (past to present):

- 1988-92; 2002-08: Faculty Council and University Council
- 2000: Evaluation Panel, Boston University Instructional Technology Grant Program
- 2004-05: Secretary of Faculty Council; member of Faculty Council Executive Committee
- 2005-08: Faculty Council Committee on Communications

- 2007: ad hoc Committee on Proposed Distinguished Professors Program
- 2008: envoy for University Fact Finding Mission to Abu Dhabi, UAE, representing BUSM
- 2010— University Committee on Student Life and Policies
- 2010— co-chair, Educational Technologies Committee, one of the BU Information Services & Technology Governance Committees
- 2012— co-chair, LMS Steering Committee for Blackboard Learn and LMS
- 2014, 2015: member selection committee for Boston University Metcalf award and Methodist Teacher Awards

Teaching Experience and Responsibilities: since 2000

- 2014— Director, and co-director from 8/2017, Principles Integrating Science and Medicine (PrISM), the integrated first year foundational science course
- 2014— Module Director of PrISM's Cellular Foundations of Medicine
- 2008-11: Director; Co-Course Director (2010-11), Histology A and B (GMS AN 705, 706) two-semester GMS course
- 2005-08: Co-Course Director, Spring Medical Histology (GMS AN 700)
- 2004-2017 Co-Course Director; Director (2010) Vesalius Module Teaching Practicum (GMS AN 805)
- 2002-05: Course Director, Histology for Graduate Students (GMS AN 710)
- 1998-2004: Course Director, MMEDIC Histology (GMS AN 500), later, Spring Histology (GMS AN 700)
- 1995-2008: Course Director, Summer Microscopic Anatomy (GMS AN 700S)
- 1992-2015: Director, Medical Histology, BUSM

Major Mentoring Activities: Doctoral Students

Principal Advisor

- 1991 WHITE, K.K. "The effects of Age on Denervation, Reinnervation and Recovery of Function of the rat nasolabialis Muscle." published Anat. Rec. 229:149-158; Anat Rec. 219-237.
- 1986 GUNDRUM, J.J. "An Ultrastructural Study of Cultured Neonatal Rat Aortic Smooth Muscle and its Response to Elastase"

Co-Advisor The following students worked on Interdepartmental Dissertation Research Projects

- 1982 FOUNDAS, S. (with Dr. J. Albright, B.U. Department of Biology) "The effects of partial deafferentation on the auditory cortex of young adult rat" (M.A. Thesis) published J. Neurocytol. 11 :29-51
- 1980 MAZURKOWITZ, J. (with Dr. C. Franzblau, Dept. of Biochemistry, BUSM) "A morphometric study of vascular smooth muscle cells in culture" (Ph.D. Thesis) published in vitro 16:337-34S.
- 1980 CLARK, J. (with Dr. H. Kagan, Dept. of Biochemistry, BUSM) "The ultrastructural localization of T-boc-L-ananyl-p-nitrothiophenyl esterase in human neutrophils" (Ph.D. Thesis) published J. Histochem. Cytochem. 28:90-99; J. Cell Biol. (1980) 84: 102- 120.

Major Administrative Responsibilities:

- 9/2016— Faculty Accreditation Lead, BUSM LCME Accreditation scheduled for February 24-27, 2019
- 2014–8/2017 Course Director (co-director from 8/2017) for Principles Integrating Science and Medicine, BUSM, BUSM's integrated first year foundational science course
- 7/2003— Assistant Dean for Admissions, BUSM
- 1999-2004: Web Design: Initiated, designed, and maintained Anatomy and Neurobiology Department Website through the summer of 2004 when the project was assumed by the first of several subsequent professional Web designers and administrators

Other Professional Activities:

Professional Societies: Memberships, Offices, and Committee Assignments:

- 6/2006-7/2007: ad hoc Strategic Plan Committee, International Association of Medical Science Educators (IAMSE)
- 7/ 2005– Membership Committee, IAMSE
- 7/2004-6/2007 member of Board of Directors, IAMSE
- 3/2000- member, AMEE (Association for Medical Education in Europe)
- 3/1998– member, International Association of Medical Science Educators (IAMSE)
- 3/1983– member, American Association of Anatomists

Major National Committee Assignments:

- 11/6-9/2016 Faculty Fellow on LCME Site Visit Team: November 6-9, 2016
- 11/12-15/2017 Member of LCME Survey Site Visit Team: November 12-15, 2017

Study Sections:

- 7/2001-6/2002 NSF Grant proposal review; Grant Review Panel

Support:

Past:

- 6/2016-5/2017 Digital Media Studio, grant from Boston University Digital Learning Initiative for Curriculum Development, \$63,000
- 4/1999-3/2000 Instructional Technology Grant Program of Boston University: Deborah W. Vaughan, Construction of A Microscopic Anatomy Website for laboratory Preview and Review; \$8,500
- 6/1992-5/1995 NIA: AGO9869 PI: Deborah Vaughan, Age, Axon Injury, and Monto Neuron Synaptology; \$87,858/yr
- 6/1988-5/1991 NIA: AG06154 PI: Deborah Vaughan. Effects of Advancing Age on Facial Nucleus, \$?/yr

Invited Lectures and Conference Presentations:

- 3/12/2017. Vaughan, D.W: Histology in Medicine, presentation and workshop. BU Introduction to Careers in Medicine, for local high school students
- 10/11/2016. Vaughan, D. W: Teaching with Technology. Presented at the Boston University Teaching with Technology Conference.
- 9/30/2016. Vaughan, D.W: Technology in the BUSM Classroom. Presented to BUSM Dean's Advisory Committee
- 3/25/2014. Vaughan, D.W: Teaching the Art and Science of a Discipline Using the Art and Science of Teaching. Presentation to PA program Leadership
- 2/13/2013. Vaughan, D.W: Echo 360: A Teacher's Perspective. CEIT Technology Workshop
- 5/23/2012. Vaughan, D.W, and Brady, J.: ExamSoft computer-Based Exams (Workshop for John McCahan Education Day)
- 3/26/2012. Vaughan, D.W, and Brady, J.: Digital and Digging It: The case of Virtual Microscopy (VM) and Computer-Based Exams (CBE) at BUSM. CEIT workshop
- 3/27/2009. Vaughan, DW: Teaching Histology with Interactive Technology: Virtual Microscopy and Audience Response System. Boston University Instructional Innovation Conference, March 27, 2009
- 7/26/2008. Vaughan, DW: Teaching Histology with interactive technology: Virtual Microscopy and Audience Response System. International Association of Medical Science Educators
- 4/16/2002. Vaughan, D.W.: A Microscopic Anatomy Website for Preview and Review. Technology Showcase, Boston University

Bibliography:

Original, Preer Reviewed Articles:

1. **Vaughan, D.W.** (1994) The effects of peripheral axotomy on presynaptic axon terminals with GABA-like immunoreactivity. *Anat. Rec.* 238:248-262.
2. **Vaughan, D.W.** (1992) Effects of advancing age on peripheral nerve regeneration. *J. Comp. Neurol.* 323:219-237
3. White, K.K., and **D.W. Vaughan** (1991) Age effects on cytochrome oxidase activities during denervation and recovery of three types of muscle fiber types. *Anat. Rec.* 230:460-467
4. White, K.K., and **D.W. Vaughan** (1991) The effects of age on atrophy and recovery in denervated fiber types of the rat nasolabialis muscle. *Anat. Rec.* 229: 149-158
5. **Vaughan, D.W.** (1990) The effects of age on enzyme activities in the rat facial nucleus following axotomy: acetylcholinesterase and cytochrome oxidase. *Exp. Neurol.* 109:224-236
6. **Vaughan, D.W.** (1990) Effects of Advancing age on the central response of rat facial neurons to axotomy: light microscope morphometry. *Anat. Rec.* 228:211-219
7. **Vaughan, D.W.** and Ketti K. White (1987) The effects of age on the response of a facial motor system to injury. *Anat. Rec.* 223:118
8. **Vaughan, D.W.** and A. Peters (1985) Proliferation of thalamic afferents in cerebral cortex altered by callosal deafferentation. *J. Neurocytol.* 14: 705-716.
9. **Vaughan, D.W.** and C. Cahill (1984) Long term effects of callosal lesions in the auditory cortex of rats of different ages. *Neurobiol. Aging*, 5: 175-182.
10. Peters, A., M.L. Feldman and **D.W. Vaughan** (1983) The effect of aging on the neuronal population within area 17 of adult rat cerebral cortex. *Neurobiol. Aging* 4: 273-282.
11. **Vaughan, D.W.** and C.D. West (1983) Deteriorative changes in the neocortex of aging rats on restricted diets. *Anat. Rec.* 205:206.
12. **Vaughan, D.W.** (1983) Thalamic and callosal connections of the Rat Auditory cortex. *Brain Res.* 260: 181 - 190.
13. Berkowitz, E., A.C. Sanborn and **D.W. Vaughan** (1983) Chromatin structure in neuronal and neuroglial cell nuclei as a function of age. *J. Neurochem.* 41:516-523.
14. **Vaughan, D.W.** (1982) Effects of long-term callosal lesions in the neocortex of aging rats. *Gerontologist*, 22: 233.
15. Waeber, B.H., I. Gavras, P. Chao and **D.W. Vaughan**, et al. (1982) Evidence for a sodium induced activation of central neurogenic mechanisms in one-kidney, one clip renal hypertensive rats. *J. Pharmacol. Exp. Ther.* 223: 510-515.
16. **Vaughan, D.W.** and S. Foundas (1982) Synaptic proliferation in the auditory cortex of the young adult rat following callosal lesions. *J. Neurocytol.* 11 :29-51.
17. **Vaughan, D.W.** and A. Peters (1981) The structure of neuritic plaques in the cerebral cortex of aged rats. *J. Neuropath. Exp. Neurol.* 40:472-487.
18. Mazurkowitz, J., **D.W. Vaughan** and C. Franzblau (1980) A morphometric study of vascular smooth muscle cells in culture. *In Vitro* 16:337-345.
19. Clark, J.M., **D.W. Vaughan** and H. Kagan (1980) Elastase-like enzymes in human neutrophils localized by ultrastructural cytochemistry. *J. Cell Biol.* 84:102-120.
20. Angulo-Colmenares, A.G., **D.W. Vaughan** and J.W. Hinds (1979) Rehabilitation following early malnutrition in the rat: Body weight, brain size and cerebral cortex development. *Brain Res.* 169:121-138.
21. **Vaughan, D.W.** and J. Vincent (1979) Ultrastructure of neurons in the auditory cortex of aging rats: A morphometric study. *J. Neurocytol.* 8:215-228.
22. **Vaughan, D.W.** (1977) Age-related deterioration of pyramidal cell basal dendrites in rat auditory cortex. *J. Comp. Neurol.* 171:501-515.
23. **Vaughan, D.W.** (1976) Membranous bodies in the cerebral cortex of aging rats. *J. Neuropath. Exp. Neurol.* 35:152-166.

24. **Vaughan, D.W.** and A. Peters (1974) Neuroglial cells in the cerebral cortex of rats from young adulthood to old age: an electron microscope study. *J. Neurocytol.* 3:405-429.
25. **Vaughan, D.W.** and A. Peters (1973) A three dimensional study of layer I of the rat parietal cortex. *J. Comp. Neurol.* 149: 355-370.

Textbook Chapters:

1. **Vaughan, D.W.** (1984) Morphology of Neuroglial Cells. In: *Cerebral Cortex*, Vol. 2, eds. E.G. Jones and A. Peters. Plenum Press, New York, pp. 285-329.
2. West, C.W., L. Volicer and **D.W.Vaughan** (1984) Aging in the Food Restricted Rat: Body Temperature, Receptor Function, and Morphologic Changes in the Brain. In: *Nutritional Intervention in the Aging Process*, eds. H.J. Armbricht, J.M. Pendergast, R.M. Coe. Springer-Verlag, New York, pp. 111 - 137.
3. Peters, A. and **D.W.Vaughan** (1981) Central Nervous System. In: *Aging and Cell Structure* Vol. I. ed, J.E. Johnson, Jr., Plenum Publishing Corporation, pp. 1-34.
4. 5. Feldman, M.L. and **D.W.Vaughan** (1979) Changes in the auditory pathway with age. In: *Special Senses in Aging*. eds., S.S. Han and D.H. Coons, Institute of Gerontology, University of Michigan, Ann Arbor.

Textbooks:

1. **Vaughan, D.W.** (2002) *A Learning System in Histology: A CD-ROM and Guide*. Oxford University Press, New York

Website:

1. **Vaughan, D.W.** (2002) Histology Interactive Atlas. *A Learning System in Histology*. <http://www.medlib.bu.edu/histology>