

Curriculum Vitae
Elizabeth Ratcliffe Whitney, PhD, MSPT

Boston University School of Medicine
Department of Anatomy and Neurobiology
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May 2019

Academic Training:

- 5/2005 Ph.D. Boston University School of Medicine, Boston, MA; Anatomy and Neurobiology
- 5/1996 M.S. Massachusetts General Hospital, Institute of Health Professions, Boston, MA;
Physical Therapy
- 12/1988 B.S. Simmons College, Boston, MA; Physical Therapy

Academic Appointments:

- 7/2010 – present Assistant Professor of Anatomy and Neurobiology, Boston University School of
Medicine, Boston, MA
- 9/2005 – 7/2010 Instructor of Anatomy and Neurobiology, Boston University School of Medicine,
Boston, MA
- 9/1993 – 3/2003 Instructor, Graduate Program in Physical Therapy, Simmons College, Boston, MA

Hospital Appointments or Other Employment:

- 2/1989 – 1/2008 Physical Therapist, Department of Physical and Occupational Therapy,
Massachusetts General Hospital, Boston, MA

Honors:

- 5/2018 Proctor and Gamble Excellence in Teaching in the Basic Sciences Award, Boston
University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 5/2017 Educator of the Year in the Preclinical Medical Sciences, Boston University School
of Medicine, Boston, MA
- 5/2017 Proctor and Gamble Excellence in Teaching in the Basic Sciences Award, Boston
University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 5/2014 Proctor and Gamble Excellence in Teaching in the Basic Sciences Award, Boston
University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 5/2013 Proctor and Gamble Excellence in Teaching in the Basic Sciences Award, Boston
University - Henry M. Goldman School of Dental Medicine, Boston, MA

- 5/2012 Proctor and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 5/2009 Proctor and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 5/2005 Henry I. Russek Student Achievement Research Award, Boston University - School of Medicine, Boston, MA

Licenses and Certification:

- 2/1989 – present Massachusetts Physical Therapy License #7977

Departmental and University Committees:

- 9/2006 – present Committee of Directors of the Biomedical Sciences, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 5/2019 – present Task Force to Establish an Honor Code for Students and Residents, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/2014 – 9/2015 Task Force to Review Policies and Procedures for Administering Examinations, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/2006 – 7/2013 Graduate Education Committee, Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 9/2006 – 9/2008 Committee to Review/ Reconstruct the Biomedical Sciences Curriculum, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/2006 – 9/2007 (Chair) Subcommittee to Review/ Reconstruct the Oral Pathology Curriculum, Boston University- Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/2005 – 7/2006 Promotions Committee, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/1996 – 7/2000 Admissions Committee, Simmons College, Graduate Program in Physical Therapy, Boston, MA

Teaching Experience and Responsibilities:

- 9/2005 – present Course Director, Anatomical Sciences – I (Histology and Neuroanatomy), Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/2016 – present Course Co-Director, Graduate Histology (two year cycle), Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 9/2005 – present Course Lecturer and Laboratory Director, Anatomical Sciences – II (Embryology and Human Gross Anatomy), Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/2005 – present Course Lecturer and Laboratory Instructor, Medical Gross Anatomy, Boston University School of Medicine, Boston, MA

- 9/2006 – 7/2014 Residency Lecture Series _ Coordinator and Lecturer, Neurology Resident Program, Boston Medical Center, Boston, MA
- 9/2008 – 7/2011 Residency Lecture Series _ Lecturer, Psychiatry Resident Program, Boston Medical Center, Boston, MA
- 6/2006 – 7/2009 Course Co-Director, EXCEL Summer Program, Boston University - Henry M. Goldman School of Dental Medicine, Boston, MA
- 1/1999 - 7/2001 Course Director, Neuroanatomy, Simmons College, Graduate Program in Physical Therapy, Boston, MA
- 1/1997 - 7/2000 Course Co-Director, Examination and Intervention of the Musculoskeletal System, Simmons College, Graduate Program in Physical Therapy, Boston, MA
- 1/1996 - 7/2000 Course Lecturer and Laboratory Instructor, Kinesiology, Simmons College, Graduate Program in Physical Therapy, Boston, MA
- 1/1993 - 7/2000 Course Lecturer and Laboratory Instructor, Human Gross Anatomy, Simmons College, Graduate Program in Physical Therapy, Boston, MA
- 9/1995 – 7/1998 Instructor /Discussion Leader in Problem Based Learning Course, Management of the Musculoskeletal System, Simmons College, Graduate Program in Physical Therapy, Boston, MA
- 9/1994 – 7/1996 Instructor /Discussion Leader in Problem Based Learning Course, Disease and Disability, Simmons College, Graduate Program in Physical Therapy, Boston, MA

Major Mentoring Activities:

- 1/2017 – 5/2019 Sophie Kontur; Master’s thesis research advisor and first reader. Whole body survey of arterial variants in anatomical donors. Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 1/2018 – 5/2019 Amr Elmansoury; Master’s thesis research advisor and first reader. The branch point and course of the motor branch of the nerve to vastus medialis. Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 1/2018 – 5/2019 Elizabeth Marco; Master’s thesis research advisor and first reader. Systemic vascular variants. Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 1/2019 – 5/2019 Alexander Lobo; Advisor _ Vesalius teaching project. Temporomandibular joint: structure and function. Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 9/2015 – 5/2019 M.S. in Medical Sciences Program, Primary Academic Advisor, M.S. of Medical Science Program, Boston University School of Medicine, Boston, MA
- 5/2017 – 6/2018 MSSRP (Medical Student Summer Research Program) advisor: Grant awarded to MD-I student Chase Kahn, Boston University School of Medicine, Boston, MA
- 8/2016 – 5/2018 Nicholas Carnes; First reader_ Master’s thesis. Predicting risk of malignancy in patients with indeterminate thyroid nodules. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA

- 8/2016 – 5/2018 Devon Huntley; First reader_ Master's thesis. The role of comorbid factors in the development of central sensitization with chronic pelvic pain in cases of adolescent endometriosis. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2016 – 5/2018 Alexander Lee; Second reader_ Master's thesis. Obstructive sleep apnea as a risk factor in the development of nonalcoholic fatty liver disease. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2016 – 5/2018 Elena Martel; First reader_ Master's thesis. Endometriosis: an investigation into persistent pelvic pain. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2016 – 5/2018 Tanzia Shaheen; First reader_ Master's thesis. Screening Lead Small Molecules for Cytokine Induction in a Human Whole Blood Assay Informs Candidate Adjuvant Selection. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2016 – 5/2018 Emily Wong; First reader_ Master's thesis. High risk alcohol use after sleeve gastrectomy. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015 – 8/2017 Damilola Iyiola; First reader_ Master's thesis. An analysis of the emergency response in northeastern Nigeria and its ability to contribute to improved mental health care in the region. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015 – 5/2017 Scott Bovino; First reader_ Master's thesis. The evolution and treatment of congenital diaphragmatic hernias in neonates. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015 – 5/2017 Tristan Cruz; First reader_ Master's thesis. A complex of proteins encoded by ASD-associated genes regulates gene expression and sociability. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015 – 5/2017 Pavana Elavalakanar; First reader_ Master's thesis. Bcl11b regulates arterial stiffness by regulating vascular smooth muscle contractility. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015 – 5/2017 Kelly Harmon; First reader_ Master's thesis. The effect of different cardiovascular devices on carotid and aortic baroreceptors. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015 – 5/2017 Andrew J. Kim; Second reader_ Master's thesis. Organ transplantation and the liver tolerance effect: history, mechanisms, and potential implications for the future of transplant care. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015– 5/2017 Haoming Liu; First reader_ Master's thesis. Regulation of osteoclast differentiation and activation in response to environmental stimuli. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 8/2015 – 5/2017 Nina Rizk; First reader_ Master's thesis. Aggressive and violent behavior: the result of malfunction in the neural circuit regulating emotion. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA

- 8/2015 – 8/2016 Dylan Turner; First reader_ Master's thesis. The role of sub-concussive traumatic brain injury in the development of chronic traumatic encephalopathy spectrum diseases. Master of Science in Medical Sciences Program, Boston University School of Medicine, Boston, MA
- 2/2015 – 5/2016 Academic Dental Careers Fellowship Program, American Dental Education Association, DMD-I student Jamie Waller, Boston University, Henry M. Goldman School of Dental Medicine, Boston, MA
- 9/2007 – 7/2013 Master of Science in Anatomy and Neurobiology, Primary academic advisor for year-1 students, Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 6/2011 – 5/2012 Megan Moretti; Second reader_ Master's thesis. Density of Purkinje cells in the anterior lobe of the cerebellum in autism: An immunocytochemical study using Calbindin-D28k. Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA
- 6/2008 – 5/2009 Felix Hsu; Second reader_ Master's thesis. Effects of parathyroid hormone on spine fusion in ovariectomized rats. Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA

Major Administrative Responsibilities:

- 8/2012 – 7/2013 Acting Director of the MS in Anatomy and Neurobiology (Vesalius Program), Department of Anatomy and Neurobiology, Boston University School of Medicine, Boston, MA

Other Professional Activities:

Professional Societies:

- American Association of Clinical Anatomists: 2008- present
- American Dental Education Association: 2011 – present

Bibliography:

Original, Peer Reviewed Articles:

Kahn C.I., MacNeil M., Fanola C.L., **Whitney E.R.** Complex arterial patterning in an anatomical donor. *Translational Research in Anatomy* 2018; 12:11-19.

Whitney E.R., Kemper T.L., Rosene D.L., Bauman M.L., Blatt G.J. Density of cerebellar basket and stellate cells in autism: Evidence for a late developmental loss of Purkinje cells. *Journal of Neuroscience Research* 2009; 87:2245-54.

Whitney E.R., Kemper T.L., Bauman M.L., Rosene D.L. Blatt G.J. Cerebellar Purkinje cells are reduced in a subpopulation of autistic brains. *Cerebellum* 2008; 7: 406-416.

Whitney E.R., Kemper T.L., Rosene D.L., Bauman M.L., Blatt G.J. Calbindin-D28k is a more reliable marker of human Purkinje cells than standard Nissl stains: A stereological experiment. *Journal of Neuroscience Methods* 2008; 168:42-47.

Whitney E.R., Pessina M.A. Does the availability of audio podcasts enhance the classroom experience for first year dental students? Data on use and perceived benefits. *Learning Technology* 2008; 10: 16-21.

Abstracts in Print and Conference Presentation:

Elmansoury A., Nada E., Pessina M.A., **Whitney E.R.** (2019) The location of the branching point of the motor branch of the nerve to vastus medialis from the femoral nerve. Annual Society of Regional Anesthesiology and Acute Pain Medicine. Las Vegas, Nevada

Elmansoury A., Nada E., Pessina M.A., **Whitney E.R.** (2019) The branch point and course of the motor branch of the nerve to vastus medialis. *Experimental Biology*. Orlando, Florida

Kahn C., Pinheiro A., **Whitney E.R.** (2018) The Identification of Vascular Variants to Improve Risk Assessment and Reduce Surgical Complications. Human Anatomy and Physiology Society, Columbus, Ohio.

Waller J., Henshaw M., Jurassic M., **Whitney E.R.** (2016). Inter-Professional Education: Do Health Professional Students Believe in the Power of Collaboration? American Dental Education Association, Denver, Colorado.

Leone C.W., Pessina M.A., Sarita-Reyes C.D., Walsh C.T., **Whitney E.R.** (2015) Igniting Minds Through Student Self-Directed Group Learning. American Dental Education Association, Boston, Massachusetts.

Pessina M.A., **Whitney E.R.** (2011) Introduction of Small Group Clinical Skills Workshops in the First-Year Medical Gross Anatomy Course at Boston University School of Medicine. John McCahan Education Day. Boston University School of Medicine, Boston, Massachusetts.

Whitney E.R., Pessina M.A. (2008) Does the availability of audio podcasts enhance the classroom experience for first year dental students? Data on use and perceived benefits. American Association of Anatomists. San Diego, California.

Pessina M.A., **Whitney E.R.** (2008) Does the availability of lecture video recordings enhance the classroom experience for first year medical students? Data on use and perceived benefits. American Association of Anatomists. San Diego, California.

Whitney E.R., Pessina M.A. (2007) Use of lecture recordings by first year dental students: data on use and perceived benefits. John McCahan Education Day. Boston University School of Medicine, Boston, Massachusetts.

Pessina M.A., **Whitney E.R.** (2007) Does the availability of lecture recordings change the approach to note taking and in-class learning by first year dental students? John McCahan Education Day. Boston University School of Medicine, Boston, Massachusetts.

Blatt G.J., Yip J., Soghomonian J.J., **Whitney E.R.**, Thvarkunnel S., Bauman M.L., Kemper T.L. (2007) An emerging GABA/ glutamate hypothesis of cerebellar dysfunction in autism. International Meeting for Autism Research. Seattle, Washington.

Whitney E.R., Kemper T.L., Bauman M.L., Blatt G.J. (2005) Cerebellar basket and stellate cells in autism. International Meeting for Autism Research, Boston, Massachusetts.

Whitney E.R., Kemper T.L., Bauman M.L., Blatt G.J. (2004) Calcium-binding proteins in cerebellar Purkinje cells in the control and autism cerebellum. Society for Neuroscience, San Diego, California.

Whitney E.R., Kemper T.L., Bauman M.L., Blatt G.J. (2004) Calbinin-D28k is a reliable marker for Purkinje cells in control and autism cerebellum. International Meeting for Autism Research, Sacramento, California.

Whitney E.R., Kemper T.L., Bauman M.L., Blatt G.J. (2004) Calcium-binding protein calbinin-D28k is a reliable marker for cerebellar Purkinje cells. Henry I. Russek Student Achievement Day, Boston University School of Medicine, Boston, Massachusetts.

Whitney E.R., Kemper T.L., Bauman M.L., Blatt G.J. (2003) Infantile autism: an early or late developmental event? Henry I. Russek Student Achievement Day, Boston University School of Medicine, Boston, Massachusetts.

Whitney E.R., Kemper T.L., Bauman M.L., Blatt G.J. (2001) A decreased number of Purkinje cells in autism: An early or late developmental event? Henry I. Russek Student Achievement Day, Boston University School of Medicine, Boston, Massachusetts.

Ratliffe-Whitney E. and Volpone E (1997) Accuracy in grading material stiffness and linear displacement: A model of the lumbar spine. American Physical Therapy Association Combined Sections Meeting, Boston, Massachusetts.

Previously Funded Grant:

Olivocerebellar Circuitry in Autism (#R01 HD039459), National Institute of Child Health and Human Development

Grant Reviewer for:

Ontario Mental Health Foundation. Reviewer for grant titled, Preferential Purkinje cell survival in a mouse model of autism (2008).

Manuscript Reviewer for:

- 2017 Anatomical Sciences Education
- 2015 Anatomical Sciences Education
- 2014 Neuroscience
- 2013 Journal of Anatomy
- 2008 Anatomical Sciences Education
- 2008 Journal of Chemical Neuroanatomy