

**Curriculum Vitae**  
**Elizabeth Ratcliffe Whitney, PhD, MSPT**  
Boston University, Chobanian & Avedisian School of Medicine  
Department of Anatomy & Neurobiology  
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**Academic Training:**

1988 BS	Simmons College, Boston, MA; Physical Therapy
1996 MS	Massachusetts General Hospital, Institute of Health Professions, Boston, MA; Physical Therapy
2005 PhD	Boston University Chobanian & Avedisian School of Medicine, Boston, MA; Anatomy & Neurobiology

**Academic Appointments:**

1993 – 2003	Instructor, Graduate Program in Physical Therapy, Simmons College, Boston, MA, USA
2005 – 2010	Instructor of Anatomy & Neurobiology, Boston University Chobanian & Avedisian School of Medicine, Boston, MA, USA
2010 – 2024	Assistant Professor of Anatomy & Neurobiology, Boston University Chobanian & Avedisian School of Medicine, Boston, MA, USA
2024 –	Clinical Associate Professor of Anatomy & Neurobiology, Boston University Chobanian & Avedisian School of Medicine, Boston, MA, USA

**Hospital Appointments:**

1989 – 2008	Physical Therapist, Department of Physical and Occupational Therapy, Massachusetts General Hospital, Boston, MA
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**Honors:**

**Institutional**

2005	Henry I. Russek Student Achievement Research Award, Boston University Chobanian & Avedisian School of Medicine
2009	Procter and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University Goldman School of Dental Medicine
2012	Procter and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University Goldman School of Dental Medicine
2013	Procter and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University Goldman School of Dental Medicine
2014	Procter and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University Goldman School of Dental Medicine
2017	Educator of the Year in the Preclinical Medical Sciences, Boston University Chobanian & Avedisian School of Medicine
2017	Procter and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University Goldman School of Dental Medicine
2018	Procter and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University Goldman School of Dental Medicine

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| 2021 | Procter and Gamble Excellence in Teaching in the Basic Sciences Award, Boston University Goldman School of Dental Medicine |
| 2023 | Spencer N. Frankl Award for Excellence in Teaching, Boston University Goldman School of Dental Medicine                    |

**Licenses and Certification:**

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| 1989 – | Massachusetts Physical Therapy License #7977 |
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**Administrative Responsibilities:**

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| 2012 – 2013 | Acting Director _ MS in Anatomy and Neurobiology _ Vesalius Program, Department of Anatomy & Neurobiology |
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**Departmental, School, and University Committees:**

**Department:**

**Graduate Program in Physical Therapy, Simmons College, Boston, MA**

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| 1996 – 2000 | Member_ Admissions Committee |
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**Anatomy & Neurobiology, Boston University Chobanian & Avedisian School of Medicine, Boston, MA**

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| 2006 – 2013 | Member _ Graduate Education Committee |
| 2023 –      | Member_ Admissions Committee          |

**School:**

**Henry M. Goldman School of Dental Medicine, Boston University, Boston, MA**

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| 2005 – 2006 | Member _ Promotions Committee  |
| 2006 – 2007 | Chair _ Subcommittee to Review/ Reconstruct the Oral Pathology Curriculum  |
| 2006 – 2008 | Member _ Committee to Review/ Reconstruct the Biomedical Sciences Curriculum   |
| 2006 –      | Member _ Committee of Directors of the Biomedical Sciences   |
| 2014 – 2015 | Member _ Task Force to Review Policies and Procedures for Administering Examinations   |
| 2019 – 2020 | Member _ Dean’s Advisory Search Committee for the Director of Oral Maxillofacial Radiology for the Department of General Dentistry |
| 2019 – 2021 | Member _ Task Force to Establish an Honor Code for Students and Residents  |
| 2021 – 2022 | Member _ Dean’s Advisory Search Committee for the Assistant Dean of Admissions   |
| 2021 –      | Member _ Promotions Committee  |
| 2023 –      | Member _ Core Accreditation Committee  |

**Chobanian & Avedisian School of Medicine, Boston University, Boston, MA**

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| 2023 – 2024 | Member _ Search Committee for Chair of the Department of Anatomy & Neurobiology |
| 2024 –      | Member _ Curriculum Peer Review Team (PISCES, Foundations-2 Module)             |

**Teaching Experience and Responsibilities:**

<b>Dates</b>	<b>Title Course</b>	<b>Role</b>	<b>Contact hours/week</b>	<b>Enrollment N</b>
1993 – 2000	Human Gross Anatomy Simmons College, Graduate Program in Physical Therapy (GP/PT)	Course lecturer Laboratory instructor	6/wk	40
1994 – 1996	Disease and Disability - Problem Based Learning Simmons College, GP/PT	Instructor Discussion leader	4/wk	40
1995 – 1998	Management of the Musculo-skeletal System - Problem Based Learning Simmons College, GP/PT	Instructor Discussion leader	4/wk	40
1996 – 2000	Kinesiology Simmons College, GP/PT	Course lecturer Laboratory instructor	5/wk	40
1997 – 2000	Examination and Intervention of the Musculoskeletal System Simmons College, GP/PT	Course co-director Lecture/lab course	7/wk	40
1999 – 2001	Neuroanatomy Simmons College, GP/PT	Course director	3/wk	40
2005 – 2021	Body Structures - Medical Gross Anatomy Boston University - Chobanian & Avedisian School of Medicine (CAMEd)	Course lecturer Laboratory instructor	20/yr	160
2005 –	Anatomical Sciences I – Histology and Neuroanatomy Boston University - Goldman School of Dental Medicine (GSDM)	Course director	5/wk	117
2006 – 2009	EXCEL Summer Program _ Anatomical Sciences GSDM	Course co-director	3/wk	30
2006 – 2014	Neurology Resident Program- Neuroscience Review Lectures Boston Medical Center (BMC)	Series coordinator Lecturer	8/yr	10
2006 – 2021	Anatomical Sciences II - Dental Gross Anatomy GSDM	Laboratory director	5/wk	117
2006 –	Anatomical Sciences II - Dental Gross Anatomy GSDM	Lecturer	2/wk	117
2008 – 2011	Physiatry Resident Program – Gross Anatomy Review Lecture BMC	Lecturer	8/yr	10
2016 – 2021	Graduate Histology (2yr cycle) CAMEd – A&N	Course co-director	4	8

Dates	Title Course	Role	Contact hours/week	Enrollment N
2016 –	Pain Control–I GSDM	Lecturer	2/yr	217
2018 – 2019	Human Anatomy and Osteology CAMed – GMS Forensic Anthropology	Lecture	2/yr	12
2018 – 2021	Human Body Systems CAMed – GMS	Course lecturer	6/yr	150
2019 –	Oral Surgery GSDM	Lecturer	1/yr	217
2020 –	Pain Control–II GSDM	Lecturer	1/yr	217
2021 –	Neuroanatomy Through Clinical Cases CAMed - Early Medical School Selection Program (EMSSP)	Course director	4.5/wk	20
2022 –	Foundations of Histology CAMed - EMSSP	Course lecturer Laboratory instructor	3/wk	20

### Diversity, Equity, Inclusion, and Belonging Activities:

Diversity, equity, inclusion, belonging, and justice (DEIBJ) are core values, and I have been actively involved in a range of initiatives that reflect this commitment. One notable contribution involves my participation in curricular updates in Boston University's Early Medical School Selection Program, where I played a key role in the development of a new course titled "Neuroanatomy Through Clinical Cases." This course is designed to embrace inclusive teaching practices, placing a strong emphasis on fostering a growth mindset among students.

Since 2020, I have also dedicated myself to A&N's DEIJ Committee. This committee serves as a platform for advancing diversity and inclusion initiatives within the department. More recently, I have assumed a leadership role as co-chair of the DEIJ Committee, working collaboratively with a colleague to steer our initiatives toward continuous learning and action.

2006 – 2009	Member _ EXCEL (EXperiential Center for Excellence in Learning) Summer Program, Boston University - Goldman School of Dental Medicine
2020 – 2023	Member _ Diversity, Equity, Inclusion & Justice Committee, Department of Anatomy & Neurobiology (A&N)
2020 - 2021	Curriculum _ Collaborated with colleagues to update BU's Early Medical School Selection Program curriculum
2020 –	Subcommittee Chair_ Black History Month, Department of A&N
2020 –	Co-organized _ Annual A&N Neuroscience and Society Symposium, Department of Anatomy & Neurobiology (A&N) <ul style="list-style-type: none"> <li>- Neuroscience of Stress and Resilience Across the Lifespan (2022)</li> <li>- Biocultural Perspectives on Anatomization (2023)</li> <li>- Brain Health Equity (2024)</li> </ul>
2020 – 2021	Subcommittee Member _ Inclusive Curriculum and Learning, Department of A&N
2021	Course Development _ Developed a 4-credit course titled, Neuroanatomy Through Clinical Cases, for BU's Early Medical School Selection Program. This course is now offered to EMSSP students each fall.

2021	Program Contributor _ Upward Bound; Actively engaged with high school students from local under-resourced neighborhoods during their spring break; students participated in various research-focused activities centered around the topic of Neurons and Glia
2022	Certificate_ Inclusive STEM Teaching Project Course, Offered through Boston University's School of Public Health
2023 –	Summer Program Contributor _ Expanding the Pipeline to Graduate Research in Alzheimer's Disease and Related Dementias (EPGRAD) Program; Organized and facilitated a laboratory session where students from under-represented groups explored the gross anatomy of the human brain
2023 –	Subcommittee Chair _ Inclusive Curriculum and Learning, Department of A&N
2023 –	Subcommittee Member _ Community Engagement, Department of A&N
2023 –	Co-chair _ Diversity, Equity, Inclusion & Justice Committee, Department of A&N
2023 –	Member _ Pre-matriculation Enrichment Program, Goldman School of Dental Medicine
2024 –	Fellowship Recipient _ Designing Antiracism Curricula Fellowship Program _ Boston University Diversity & Inclusion

**Research Mentoring Activities (MS Degree Candidates):**

Mentee	Dates	Role	Program	Product produced
Felix Hsu	2008 – 2009	Second reader, master's thesis	GMS; MS A&N	Thesis title: Effects of parathyroid hormone on spine fusion in ovariectomized rats
Megan Moretti	2011 – 2012	Second reader, master's thesis	GMS; MS A&N	Thesis title: Density of Purkinje cells in the anterior lobe of the cerebellum in autism: An immunocytochemical study using Calbindin-D28k
Jamie Waller	2015 – 2016	Co-research advisor	GSDM, Academic Dental Careers Fellowship Program	Poster presentation at the American Dental Education Association –titled: Inter-Professional Education: Do Health Professional Students Believe in the Power of Collaboration?
Dylan Turner	2015 – 2016	First reader, master's thesis	GMS; MAMS	Thesis title: The role of sub-concussive traumatic brain injury in the development of chronic traumatic encephalopathy spectrum diseases
Nina Rizk	2015 – 2017	First reader, master's thesis	GMS; MAMS	Thesis title: Aggressive and violent behavior: the result of malfunction in the neural circuit regulating emotion
Haoming Liu	2015 – 2017	First reader, master's thesis	GMS; MAMS	Thesis title: Regulation of osteoclast differentiation and activation in response to environmental stimuli
Andrew J. Kim	2015 – 2017	Second reader, master's thesis	GMS; MAMS	Thesis title: Organ transplantation and the liver tolerance effect: history, mechanisms, and potential implications for the future of transplant care
Kelly Harmon	2015 – 2017	First reader, master's thesis	GMS; MAMS	Thesis title: The effect of different cardiovascular devices on carotid and aortic baroreceptors

<b>Mentee</b>	<b>Dates</b>	<b>Role</b>	<b>Program</b>	<b>Product produced</b>
Pavania Elavalakanar	2015 – 2017	Second reader, master's thesis	GMS; MAMS	Thesis title: Bcl11b regulates arterial stiffness by regulating vascular smooth muscle contractility
Tristan Cruz	2015 – 2017	First reader, master's thesis	GMS; MAMS	Thesis title: A complex of proteins encoded by ASD-associated genes regulates gene expression and sociability
Scott Bovino	2015 – 2017	First reader, master's thesis	GMS; MAMS	Thesis title: The evolution and treatment of congenital diaphragmatic hernias in neonates
Damilola Iyiola	2015 – 2017	First reader, master's thesis	GMS; MAMS	Thesis title: An analysis of the emergency response in northeastern Nigeria and its ability to contribute to improved mental health care in the region
Emily Wong	2016 – 2018	First reader, master's thesis	GMS; MAMS	Thesis title: High risk alcohol use after sleeve gastrectomy
Tanzia Shaheen	2016 – 2018	First reader, master's thesis	GMS; MAMS	Thesis title: Screening Lead Small Molecules for Cytokine Induction in a Human Whole Blood Assay Informs Candidate Adjuvant Selection
Nicholas Carnes	2016 – 2018	First reader, master's thesis	GMS; MAMS	Thesis title: Predicting risk of malignancy in patients with indeterminate thyroid nodules
Devon Huntley	2016 – 2018	First reader, master's thesis	GMS; MAMS	Thesis title: The role of comorbid factors in the development of central sensitization with chronic pelvic pain in cases of adolescent endometriosis
Alexander Lee	2016 – 2018	Second reader, master's thesis	GMS; MAMS	Thesis title: Obstructive sleep apnea as a risk factor in the development of nonalcoholic fatty liver disease
Elena Martel	2016 – 2018	First reader, master's thesis	GMS; MAMS	Thesis title: Endometriosis: an investigation into persistent pelvic pain.
Chase Kahn	2017 – 2018	Research advisor	CAMed; Medical Student Summer Research Program	Publication title: Complex arterial patterning in an anatomical donor
Sophie Kontur	2017 – 2019	Research advisor; First reader, master's thesis	GMS; MS A&N	Thesis title: Whole body survey of arterial variants in anatomical donors
Amr Elmansoury	2018 – 2019	Research advisor; First reader, master's thesis	GMS; MS A&N	Thesis title: The branch point and course of the motor branch of the nerve to vastus medialis
Elizabeth Marco	2018 – 2019	Research advisor; First reader, master's thesis	GMS; MS A&N	Thesis title: Systemic vascular variants
Sri Akkineni	2023 – 2024	Second reader, master's thesis	GMS; MAMS	Thesis title: Connectivity matrix of the cerebellum
Aris Desai	2023 – 2024	Second reader, master's thesis	GMS; MS A&N	Thesis title: Organization of Cerebral White Matter in the Primate Frontal Cortex

**Teaching Mentoring Activities (MS Degree Candidates):**

<b>Mentee</b>	<b>Dates</b>	<b>Role</b>	<b>Program</b>	<b>Product produced</b>
Yuxin Zhou	2019	Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Sensory and Motor Pathways with Brainstem and Spinal Cord Cross-Sectional Anatomy: Integrated Group Study with Lecture In: Anatomical Sciences_I (GSDM)
Alexander Lobo	2019	Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Temporomandibular joint: structure and function In: Anatomical Sciences_II (GSDM)
Anastasia Filimonov	2021	Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Structure and Function of the Vestibular System In: Neuroanatomy through Clinical Cases (EMSSP)
Nadia Rakavina	2022	Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Gross Anatomy and Function of the Trigeminal Nerve: Instruction with the Anatomage Table In: Anatomical Sciences_II (GSDM)
Haroun Haque	2022	Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Cerebellar Anatomy and Function Using Clinical Cases In: Neuroanatomy through Clinical Cases (EMSSP)
Yijun Liu		Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Gross Anatomy and Function of the Trigeminal Nerve: Instruction with the Anatomage Table In: Anatomical Sciences-II (GSDM)
Sean Farley	2023	Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Gross Anatomy of the Pterygopalatine Fossa using a 3-D Model In: Anatomical Sciences-II (GSDM)
Aris Desai	2023	Vesalius teaching practicum mentor	GMS; MS A&N	Presentation: Clinical Application of Sensory and Motor Pathways In: Neuroanatomy through Clinical Cases (EMSSP)

**Dissertation Committee Member:**

<b>Mentee</b>	<b>Dates</b>	<b>Role</b>	<b>Program</b>	<b>Product produced</b>
Philip Homes Montenegro	2016	Chair: dissertation committee	GMS; PhD A&N	Thesis title: Clinical Diagnosis and Risk Factors for Chronic Traumatic Encephalopathy
Alexandra Wink	2018	Chair: dissertation committee	GMS; PhD A&N	Correlates and Consequences of Varus Knee Thrust in Osteoarthritis Development

**Academic Advising:**

- 2007 –2013 M.S. in Anatomy & Neurobiology, Primary academic advisor for year-1 students, Department of Anatomy & Neurobiology
- 2015 –2019 M.S. in Medical Sciences Program, Primary Academic Advisor for group of M.S. of Medical Science Program students, Boston University - Graduate Medical Sciences

**Other Professional Activities:**

**Professional Societies:**

- 2008 – Member \_ American Association of Clinical Anatomists
- 2011 – Member \_ American Dental Education Association

**Ad Hoc Reviewing:**

- 2008 Journal of Chemical Neuroanatomy
- 2008 Anatomical Sciences Education
- 2008 Ontario Mental Health Foundation (grant review)
- 2013 Journal of Anatomy
- 2014 Neuroscience
- 2015 Anatomical Sciences Education
- 2017 Anatomical Sciences Education
- 2019 Anatomical Sciences Education
- 2020 Anatomical Sciences Education
- 2023 Anatomical Sciences Education

**Invited Lectures, Conference Presentation, and Abstracts in Print:**

**Institutional**

- 2001 **Whitney E.R.**, Kemper T.L., Bauman M.L., Blatt G.J. A decreased number of Purkinje cells in autism: An early or late developmental event? Henry I. Russek Student Achievement Day,
- 2003 **Whitney E.R.**, Kemper T.L., Bauman M.L., Blatt G.J. Infantile autism: an early or late developmental event? Henry I. Russek Student Achievement Day
- 2004 **Whitney E.R.**, Kemper T.L., Bauman M.L., Blatt G.J. Calcium-binding protein calbinin-D28k is a reliable marker for cerebellar Purkinje cells. Henry I. Russek Student Achievement Day
- 2007 Pessina M.A., **Whitney E.R.** 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
- 2007 **Whitney E.R.**, Pessina M.A. 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.
- 2011 Pessina M.A., **Whitney E.R.** 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

**Regional**

- 2005 Cerebellar neuropathology in autism. Invited lecture, Tufts University, Department of Occupational Therapy, Medford, MA



## National

- 1997 **Ratcliffe-Whitney E.** and Volpone E. Accuracy in grading material stiffness and linear displacement: A model of the lumbar spine. American Physical Therapy Association Combined Sections Meeting, Boston, Massachusetts.
- 2004 **Whitney E.R.**, Kemper T.L., Bauman M.L., Blatt G.J. Calcium-binding proteins in cerebellar Purkinje cells in the control and autism cerebellum. Society for Neuroscience, San Diego, California.
- 2008 **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.
- 2008 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.
- 2015 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.
- 2018 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.
- 2019 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
- 2019 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

## International

- 2004 **Whitney E.R.**, Kemper T.L., Bauman M.L., Blatt G.J. Calbinin-D28k is a reliable marker for Purkinje cells in control and autism cerebellum. International Meeting for Autism Research, Sacramento, California.
- 2005 **Whitney E.R.**, Kemper T.L., Bauman M.L., Blatt G.J. Cerebellar basket and stellate cells in autism. International Meeting for Autism Research, Boston, Massachusetts.
- 2007 Blatt G.J., Yip J., Soghomonian J.J., **Whitney E.R.**, Thvarkunnel S., Bauman M.L., Kemper T.L. (An emerging GABA/ glutamate hypothesis of cerebellar dysfunction in autism. International Meeting for Autism Research. Seattle, Washington.

## Bibliography

### Original, Peer Reviewed Articles

ORCID: [0000-0001-8339-679X](https://orcid.org/0000-0001-8339-679X)

1. **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. PMID: 17961663
2. **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. PMID: 18587625
3. **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. PMID: 19301429

4. Nada E., Elmansoury A., Elkassabany N., **Whitney, E.R.** Location of the entry point of the muscular branch of the nerve to vastus medialis. *British Journal of Anaesthesia* 2021; 127 (2): e58 – e60. PMID: 34092383

#### **Peer reviewed Web Publications**

1. **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.
2. 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.

#### **Peer Reviewed Case Report**

1. Rathod S., Kolus R., Kim B., Gurnani S., Kim A., Kim E., Tan F., Van Roy I., Whitney E.R., MacNeil M., Wisco J.J. A case of abnormally dilated and tortuous arc of Buhler and pancreaticoduodenal arteries in the absence of celiac trunk stenosis. *Surgical and Radiologic Anatomy* 2022; 44: 1343 – 1347. PMID: 36114879