

Kayla V. Pavlick, PhD

University of South Alabama

5851 USA Drive North, Mobile, AL 36608

kvpavlick@southalabama.edu | kvpavlick@outlook.com

Mobile: (662) 668-0125 | Twitter: @KVP_Anatomy

LinkedIn: <https://www.linkedin.com/in/kayla-v-pavlick-bb4aa6183/>

Education

PhD, Clinical Anatomy University of Mississippi Medical Center (UMMC), MS
2020 – 2024
Dissertation: Perceptions of Learning Objectives from Pre-Clerkship Medical Educators and Students
Advisor: Andrew Notebaert, PhD

Graduate Certificate University of Florida (UF), FL
2019 – 2020
Biomedical Neuroscience

MS, Biology Idaho State University (ISU), ID
2017 – 2019
Thesis: Olfactory Conditioning Alters American Cockroach Response to Narcotic Substances
Advisor: David Delehanty, PhD

BS, Biology Millsaps College, MS
2013 - 2017

Teaching Experience

Assistant Professor **June 2024 - current**
Primary appointment: Whiddon College of Medicine Division of Medical Education
Secondary appointment: Department of Physiology and Cell Biology
University of South Alabama, Mobile, AL

- Neuroscience and Behavior Module (co-director)
- Respiratory Module (instructor)
- Patients and Human Structure (instructor)

Graduate Teaching Assistant
Department of Advanced Biomedical Education (formerly Neurobiology and Anatomical Sciences)
UMMC, Jackson, MS

Pedagogy in the Health Sciences **January 2024 – May 2024**

- Assisted with facilitation of seminar-style discussion-based course regarding topics pertinent to medical education and higher education:
- Led interactive lecture on Backwards Course Design (90 min)

Neuroanatomy for Occupational Therapy **August 2023 – December 2023**

- Facilitated interactive lectures for up to 35 first-year Occupational Therapy students on:
 - Meninges and Ventricles
 - Spinal Cord and Brainstem
 - Diencephalon and Telencephalon

- Basal Nuclei
- Neurophysiology

Anatomical Basis for Human Movement

May 2023 – August 2023

- Led interactive lectures for up to 90 first-year Physical and Occupational therapy students on:
 - Introduction to Nervous System (50 min)
 - Brachial Plexus (45 min)
 - Posterior Leg and Knee Joint (110 min)
 - Cubital Fossa and Elbow Joint (50 min)
 - Forearm (110 min)
 - Muscles of Mastication, Facial Expression, and Temporomandibular Joint (90 min)
- Facilitated student-led cadaveric dissections in conjunction with lecture content
- Delivered active learning review sessions in a team dynamic with multiple facilitators (4, 50 min sessions)
- Created, administered, and evaluated written exam questions
- Provided support to the course director as needed

Medical Neuroscience and Behavior I

February 2023 – May 2023

- Led interactive lecture on Neurodevelopment (50 min) to 170 first-year medical students
- Delivered active learning review sessions in a team dynamic with multiple facilitators to cover neuroanatomy, clinically relevant neural pathways, and pathology in preparation for NBME and STEP 1 exams
- Facilitated case-based learning sessions alongside clinicians (16, 45 min sessions)
- Created, administered, and evaluated written exam questions
- Provided support to the course director as needed

Medical Histology and Cell Biology

August 2022 – February 2023

- Educated up to 170 first-year medical and graduate students in fundamental cell biology and functional histology in preparation for STEP exams
- Led interactive lecture on the Integumentary System (50 min) to 170 first-year medical students
- Facilitated in-person laboratory sessions using light microscopy and images of electron microscopy
- Created, administered, and evaluated written and practical exam questions
- Reviewed fundamental cell biology and functional histology with students upon request in preparation for NBME and STEP 1 exams
- Provided support to the course director as needed

Dental Neuroanatomy

July 2022 – August 2022

- Educated up to 40 second-year dental students in neuroanatomy and clinically relevant neural pathways and pathology
- Led interactive lectures for up to 40 second-year dental students on:
 - Telencephalon, Diencephalon, and Internal Capsule (110 min)
 - Anterolateral System (90 min)
 - Auditory System (50 min)
- Created, administered, and evaluated written and practical exam questions
- Provided support to the course director as needed

Medical Neuroscience and Behavior I

February 2022 – May 2022

- Led interactive lecture on Neurodevelopment (50 min) to 170 first-year medical students

- Delivered active learning review sessions in a team dynamic with multiple facilitators to cover neuroanatomy, clinically relevant neural pathways, and pathology in preparation for NBME and STEP 1 exams
- Facilitated case-based learning sessions alongside clinicians (16, 45 min sessions)
- Created, administered, and evaluated written exam questions
- Provided support to the course director as needed

Medical Gross and Developmental Anatomy

August 2021 – December 2021

- Educated up to 170 first-year medical and graduate students in human anatomy and embryology using cadaveric laboratory sessions
- Led interactive lectures for up to 170 first-year medical students on:
 - Muscles of Facial Expression and CN VII (50 min)
 - Muscles of Mastication, Infratemporal Fossa, and Mandibular Branch of Trigeminal Nerve (50 min)
- Created and facilitated interactive STEP-style review sessions with other TA for the course (3, 50 min sessions)
- Created, administered, and evaluated written and practical exam questions
- Provided support to the course director as needed

Adjunct Instructor

Western Texas College, Snyder, TX

Anatomy and Physiology I

August 2019 – December 2019

- Educated up to 40 pre-health profession undergraduate students in foundational human anatomy and physiological processes corresponding to the systems presented
- Created, delivered, and maintained virtual, asynchronous A&P I course through Moodle
- Provided educational support to students as needed

Anatomy and Physiology II

January 2020 – May 2020

- Educated up to 40 pre-health profession undergraduate students in foundational human anatomy and physiological processes corresponding to the systems presented
- Created, delivered, and maintained virtual, asynchronous A&P I course through Moodle
- Provided educational support to students as needed

High School Instructor

East Valley Institute of Technology (EVIT), Mesa, AZ

Human Anatomy and Physiology for Health Careers

September 2019 – May 2020

- Educated up to 50 high school students pursuing careers in healthcare in human anatomy and physiology with clinical applications
- Created, delivered, and evaluated course content, teaching and learning activities, and assessments
- Worked closely with institution guidance counselor to modify curriculum as needed for students with accommodations or extenuating circumstances
- Delivered didactic lectures corresponding with state-mandated systems-based curriculum
- Provided additional educational support to students upon request
- Switched to virtual platform due to COVID-19 pandemic and maintained frequent communication with students, parents, guardians, and EVIT faculty to ensure goals were met

Lead Graduate Teaching Assistant

Department of Biology
ISU, Pocatello, ID

Anatomy and Physiology Laboratory

August 2017 – May 2019

- Educated up to 200 pre-healthcare track undergraduate students in foundational anatomy and physiology utilizing cadaveric laboratory sessions and various physiological tools
- Delivered didactic laboratory introduction lectures on regions of Upper Extremity, Lower Extremity, and Back
- Delivered didactic laboratory introduction lectures on the Heart, Lungs, Brain and Cranial Nerves, Reproductive System, and Organs of Special Sense
- Provided training and education to team of graduate teaching assistants in preparation for laboratory sessions
- Prosected and maintained cadavers as needed
- Administered and evaluated practical exams
- Provided tutoring upon student request

Outreach Coordinator

Department of Physics
ISU, Pocatello, ID

August 2017 – May 2019

- Educated K-12 students in the tri-state area through interactive learning and experimental demonstrations on various biological and physics concepts including:
 - Arthropods of Public Health Importance
 - Forces and Motion
 - States of Matter
 - Electricity and Magnetism

Science Tutor

Wyzant, Inc.

May 2017 – June 2024

- Providing additional individualized educational support to students upon request in subjects of:
 - Medical Gross Anatomy
 - Medical Histology
 - Medical Neuroscience
 - Physical Therapy Neuroanatomy
 - Veterinary Histology
 - Undergraduate Biology
 - Undergraduate Ecology
 - High School AP Biology
- Introducing and implementing study approaches to foster growth mindset and metacognitive habits

Lead Undergraduate Teaching Assistant

Department of Biology
Millsaps College, Jackson, MS

Terrestrial Arthropods

August 2016 – December 2016

- Educated up to 20 undergraduate students in taxonomic and phylogenetic classification, ecology, and maintenance of terrestrial arthropods
- Delivered didactic lecture on Insects of Public Health Concern (60 min)
- Providing individualized tutoring upon student request

Invited Lectures and Workshops

SciComm Bootcamp Workshop, USA

October 22, 2024

- Lead facilitator for workshop centered around improving scientific communication to non-scientific or differently scientific audiences through the use of improvisation theater techniques

SciComm Bootcamp Workshop, UMMC

April 4, 2024

- Lead facilitator for workshop centered around improving scientific communication to non-scientific or differently scientific audiences through the use of improvisation theater techniques

Promoting Recruitment Opportunities in Medicine with Individual Study Experiences (PROMISE) Program, UMMC

June 14, 2023

- Constructed and delivered a condensed neuroanatomy course as an interactive introduction to medical school for undergraduate junior and senior under-represented minority students participating in the Promise Program (60 min)

UMMC-MSU Engineering Excellent in Device Design Program (UMEEDD), UMMC

July 12, 2023

- Provided an introduction of cadaveric-based gross anatomy with an emphasis on lung anatomy and the physics underlying pneumothorax to undergraduate engineering students from Mississippi State University (90 min)

-

Medical Gross and Developmental Anatomy, UMMC

November 10, 2022

- Muscles of Mastication, Infratemporal Fossa, and Mandibular Branch of Trigeminal Nerve, delivered to first-year medical students (50 min)

Publications (Abstracts)

Pavlick, K., Boothe, C., and Notebaert, A. (2023), Pre-Clerkship Medical Educators' Definition and Uses of Learning Objectives. *Anatomical Sciences Educator*, 16(6). <https://doi.org/10.1002.ase.2344>

Pavlick, K. and Schaefer, A. (2022), Factors Contributing to Cognitive Enhancement and Psychostimulant Medication Use Among First Year Medical Students. *The FASEB Journal*, 36(1). <https://doi.org/10.1096/fasebj.2022.36.S1.R2546>

Publications (Manuscripts)

Pavlick, K., Boothe, C., and Notebaert, A. (in press). Pre-Clerkship Medical Students' Perceptions of Learning Objectives: Definitions, Uses, and Communication. *HAPS Educator*.

Pavlick, K., Boothe, C., and Notebaert, A. (2024), A Qualitative Study on Instructor Experiences with Learning Objectives in the Basic Sciences. *HAPS Educator*, 28(1). <https://doi.org/10.21692/haps.2024.04>

Grants and Awards

- Travel Award, Anatomy Connected, Washington, D.C. 2023
- Graduate Research Day Poster Award, UMMC 2022
- Travel Award, Experimental Biology, Philadelphia 2022

- Dean’s Scholarship, UMMC 2020 – present
- Graduate TA of the Year (Runner Up), ISU 2019
- College of Science and Engineering Internal Grant (\$1,500), ISU 2017
- Howard Hughes Medical Institute Research Grant (\$3,000) 2015

Memberships, Licenses, and Certifications

- International Association of Medical Science Educators 2024 – present
- American Association of Clinical Anatomists 2024 – present
- Human Anatomy and Physiology Society 2022 – 2023
 - HAPS Annual Meeting, Attendee (2022)
- Psychological First-Aid Certification, Johns Hopkins University 2021
- Group on Women in Medicine and Science, UMMC 2021 – 2024
- Standard CTE Health Careers K-12, AZ Dept. of Education 2019 – 2020
- American Association for Anatomy 2019 – present
 - Anatomy Connected, Poster Presenter (2023)
 - Experimental Biology, Poster Presenter (2022)
 - Experimental Biology, Attendee (2019)
- Schedule II Narcotics Researcher and Handler, Drug Enforcement Agency 2018 – 2019
- Biology Graduate Student Association, ISU 2017 – 2019
- Protecting Human Research Participants, NIH 2017 – 2020
- United States Pony Club, H-B Certification 2014
- MENSA 2002 – present

Professional Service (National)

- Peer Reviewer, Teaching Tips, Human Anatomy & Physiology Society 2022 - 2023

Professional Service (Local)

- Dissertation Committee Member, Nasfik Khan, PhD in Systems Engineering, USA 2024
- Student Recruitment Ambassador, UMMC 2023 – 2024
- Student Safety Advisory Board, Student Representative, UMMC 2023 – 2024
- Qualifying Exam Preparation Lead Facilitator, UMMC 2023 – 2024
- Embryology Club Lead Facilitator, UMMC 2023 – 2024
- Journal Club Lead Facilitator, UMMC 2023 – 2024
- Exploring Healthcare Pathways, IMPACT the RACE, Alcorn State University 2023
- Columnist, *The Murmur*, UMMC 2022 – 2023
- Graduate Student Body Vice President, UMMC 2022 – 2023
- Social Media Account Manager (Twitter and Instagram), UMMC 2022 – present
- Exploring Healthcare Pathways, IMPACT the RACE, Jackson State University 2022
- Exploring Healthcare Pathways, IMPACT the RACE, Mississippi State Univ., Facilitator 2022
- Exploring Healthcare Pathways, IMPACT the RACE, Univ. of Mississippi, Facilitator 2022
- Group on Women in Medicine and Science (GWIMS), Trainee Representative 2021 – 2022
- Graduate Student Body Secretary/Treasurer, UMMC 2021 – 2022
- EVIT Behavioral Health Advisory Board, Member 2019 – 2020
- Travel Grant Committee, ISU, Member 2019

- Hiring and Search Committee, ISU, Student Representative 2018

Community Engagement

- Mississippi Organ Recovery Agency, Jackson, MS (advocate) 2023
- Mosaic Summer Enrichment Cadaveric-Based Anatomy Demonstration, UMMC, MS 2023
- Lamar High School Cadaveric-Based Anatomy Demonstration, UMMC, MS 2023
- Jackson Prep School Cadaveric-Based Anatomy Demonstration, UMMC, MS 2023
- Insight Summer Enrichment Cadaveric-Based Anatomy Demonstration, UMMC, MS 2022
- Starkville High School Cadaveric-Based Anatomy Demonstration, UMMC, MS 2021
- Cadaveric Dissection Demonstration, ISU, ID 2019
- Cadaveric-Based Anatomy Demonstration, ISU, ID 2019
- Arachnid Lecture, New Albany High School, MS (presenter) 2016
- Arachnid Lecture, Tupelo Elementary School, MS (presenter) 2016
- Arachnid Lecture, Christ Covenant School, MS (presenter) 2016
- Southwest Region Pony Club Camp, St. John, AZ (instructor) 2016
- Prairie Jumpers Pony Club Camp, Fort Madison, IA (instructor) 2016
- Arachnid Lecture, Highland Bluff Elementary School, MS (presenter) 2015
- Arachnid Lecture, New Albany High School, MS (presenter) 2015
- Polocrosse Clinic, RainTree Farm, MS (instructor) 2009
- Polocrosse Clinic, Red Brick Farm, MS (instructor) 2008

Professional Development

- Crucial Conversations, USA July 2024
- SciComm Bootcamp, Indiana University October 2023
- Wellness Initiative Program, UMMC September 2022 – February 2023
 - Wellness Initiative Program Level 1 Badge
 - Wellness Initiative Program Level 2 Badge
 - Substance Misuse and Prevention
 - Lifestyle Medicine: Nutrition + Physical Wellness
 - Mental Health, Burnout, Imposter Syndrome
 - Self-Care, Self-Worth, and Community Building with Supportive Relationships
 - Professional & Personal Identity
- Group for Women in Medicine and Science (GWIMS), UMMC August 2022 - present
 - Calming the Storm: How to De-Escalate Emotionally Charged Encounters
 - How to Navigate Challenging Situations
 - Women in Medicine and Infertility
- Career Opportunity Professional Development Series (COPD), UMMC August 2021 – present
 - 63 Best Careers for PhD's
 - Cultural Competency in the Research Environment
 - Buried Under Emails
 - A Journey from Bedside to Bench and Back – A Clinician Scientist Path through Practice, Research, and Academia
 - Environmental Science Careers in the Federal Government
 - “Hair-On-Fire” Presentation Skills
 - Diversity and Sensitivity in the Workplace
 - The Write Stuff: Tools & Strategies for Writing with Confidence
 - Bench to Beltway: Transitioning to a Career in Science Policy

- My Journey to Now
- What in the world is an MSL?
- One Approach to Drug Discovery is to Start Backwards to Go Forwards
- Cultural Competence in Research
- FDA Overview and Career Opportunities

Internships

- Supervised Cadaveric Dissection; ISU, Katrina Rhett, DPT 2019
- Performed dissections on several cadaveric donors to include the following: deep and superficial back, brain and spinal cord, head and neck, thigh, leg, arm, forearm, abdominal viscera, heart and lungs
- Salticidae spp. Aversion to Stripes, University of Florida 2017
- Manipulated the appearance of prey for *Anasaitis canosa* to test for an aversion or preference for striped prey versus solid colored prey
 - Formulated hypotheses as to whether and/or why striped patterning on individual prey plays a role in courtship behaviors
- Hippotherapy Experience, Equest Therapeutic Riding Center 2015
- Utilized horses as tools for physical therapy treatment plans to encourage motor activities in patients with autism, cerebral palsy, dementia, Down's syndrome, and arthritis
- Transcranial Direct Current Stimulation; George Mason University, Joseph Pancrazio, PhD 2015
- Researched and compiled data regarding FDA regulations on TDCS devices and their availability to the public
 - Built a TDCS device from readily available over-the-counter materials
- Robotic Sensory Obstacles; George Mason University, Joseph Pancrazio, PhD 2014
- Experimented with different programming patterns to write a program that allowed a small robot to utilize and integrate multiple types of sensors ranging from infrared detectors to tactile sensors

Non-Peer Reviewed Publications

- Pavlick, K. (2023). Perspectives. *The Murmur*, 52(2).
- Pavlick, K. (2023). Without You. *The Murmur*, 52(2).
- Pavlick, K. (2022). Perspectives. *The Murmur*, 52(1).
- Pavlick, K. (2022). Puzzles & Ponderings. *The Murmur*, 52(1).

References

Audra Schaefer, PhD – Associate Professor, University of Mississippi Medical Center, Jackson, MS
 Phone: 601.984.1000
 E-mail: aschaefer2@umc.edu

Michael Brown, PT, DPT, SCS – Assistant Professor, University of Mississippi Medical Center, Jackson, MS
 Phone: 601.984.6311
 E-mail: mbrown23@umc.edu

Andrew Notebaert, PhD – Associate Professor, Northern Illinois University, DeKalb, IL
 Phone: 815-753-9283

E-mail: anotebaert@umc.edu

Joseph Pancrazio, PhD – Vice President for Research and Professor, University of Texas, Dallas, TX
Phone: 972.883.2138
E-mail: joseph.pancrazio@utdallas.edu

Eddie Perkins, PhD – Professor, University of Mississippi Medical Center, Jackson, MS
Phone: 601.984.5722
E-mail: eperkins@umc.edu

Katrina Rhett, PT, DPT- Custom Rehab Physical Therapy Services, Chubbuck, ID
Phone: 651.307.0459
E-mail: rhett.kr@gmail.com

John Corsaro, MS- Principal, EVIT Power Road (East) Campus, Mesa, AZ
Phone: 480.308.4605
E-mail: jcorsaro@evit.com