News from the Midwestern University Body Donation Program

**SPRING 2021** 

## From the Director's Desk

"Unprecedented" has been the key word of the past year. The COVID-19 pandemic has required educational institutions around the world to adjust how we teach our students, and Midwestern University is no different. However, while things certainly look different on campus these days, our commitment to providing the best possible educational experience to our medical and healthcare students has not changed. We also remain convinced of the crucial role that anatomy and body donation play in medical education. Thus, while we have made changes in the laboratory to keep our students and faculty safe, their hands-on anatomy education continues, and body donation is as important as ever. These days, our students work in smaller, socially distanced groups, and we provide them with additional personal protective equipment, but they still have the opportunity to learn directly from our generous body donors, in conjunction with high-tech virtual resources. As such, body donation continues to provide them with the best possible

educational experience on their path to becoming competent, compassionate healthcare providers.

While MWU Body Donation Program had fewer opportunities to physically venture into the community this year, we still continue to educate the community about the importance of anatomical study for health professionals and students. We contributed to health expert columns in Arizona Health & Living magazine, were featured on ABC15's Sonoran Living television show, and participated in a virtual senior expo. We appreciate the interest in our program and the kind response from the community.

We are continually grateful for your support and for your generous contribution to Tomorrow's Healthcare Team, especially in these unprecedented times.

#### Heather F. Smith, Ph.D.

Director, Anatomical Laboratories and Midwestern University Body Donation Program



Left to Right: Jim Edmundson, Dr. Heather Smith, and April Cornejo

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## High-tech Educational Resources Complement Cadaver Studies

Recently, a variety of new technological tools have been developed to facilitate teaching anatomy to medical and healthcare students. These resources include customizable 3D printed models that students can manipulate in their hands, digital media to integrate medical imaging with cadaveric study in the laboratory, and online learning tools for histological and medical imaging material. These tools can greatly facilitate student learning; however, they are not a replacement for cadaveric study.

Anatomy education is multi-modal and interactive. Just as CT scans, MRIs, and electronic medical records are used to treat actual patients, technology should serve as a supplement, not a replacement, for cadavers. Similarly, while many high quality reference books exist and can guide students through their learning of anatomy, the translation of a two-dimensional book, website, or app into a real patient requires some imagination. There are many good reasons that medical students should learn anatomy from cadavers, but among the most important are:



- 1) Cadavers provide hands-on experience with complex 3D anatomical structures;
- 2) Cadavers teach students about variation and diversity;
- 3) Learning from cadavers develops compassion and empathy.

Medical students should dissect real cadavers, not electronic ones, simply because patients are real people, not virtual ones.

# Alumni Return as Educators to Help Train Tomorrow's Healthcare Team

After spending an average of two decades in classrooms and lecture halls, healthcare professionals could be excused for wanting to avoid them after graduation. Their diplomas have been fixed in their minds throughout the educational process – representing a finish line to a challenging race where they have confronted self-doubt, difficult concepts, long hours of study, and information overload in search of a professional career.

Yet, the ranks of Midwestern University faculty include many alumni returning to the very classrooms and lecture halls in which they once furrowed their brows, sweated through exams, and lost hours of sleep on their way to their careers – this time, as program directors, faculty



instructors, clinical coordinators, preceptors, and more.

These alumni cited the unique Midwestern University culture, characterized by respect, support, mentorship, and dedication on display at every level. They also discovered, once they entered their professional fields, the challenge and personal fulfillment that mentoring others gave them. The drive to improve others' lives – instilled in them from the very start of their Midwestern education – stayed with them and spurred them to give back of themselves to future generations of healthcare experts.

# Perspectives on Anatomy: Midwestern University Faculty and Student Profiles



Faculty Profile: T. Bucky Jones, Ph.D., Professor, Anatomy

Dr. Jones has been with Midwestern University since 2008, teaching extensively in the osteopathic medical gross anatomy and neuroscience

courses, as well as anatomy courses for the dental and optometry programs.

**Dr. Jones' Perspective:** I believe that to effectively teach anatomy you need to go directly to the source: the body itself. In my view, the use of cadavers is a cornerstone of medical education, critical not just for future physicians, but for training students who will go on to become providers in many different facets of healthcare. Over the past year in particular, the importance of this aspect of medical education has come under scrutiny, and many institutions have opted to replace cadaveric dissection with online materials.

However, it is my belief that the hands-on skills that are learned and practiced as our students explore the anatomy in three dimensions cannot be replaced by any amount of virtual training. The perspective the students gain as they discover through their dissections that different tissues have different textures and features, and the wonder they experience as they follow nerves and blood vessels through their various compartments and see all the complexity the human body offers is truly remarkable.

As medical educators, we would not be able to provide this unparalleled level of training without the use of donor cadavers, made possible through you; whether you have either already made the decision to donate, or are presently considering body donation, this gift to our students of their "first patient" is truly valued.



**Student Profile:** Mitchell Mirande, second-year medical student, Arizona College of Osteopathic Medicine

Prior to attending Midwestern University for medical school, Mitchell attended the University of Washington in Seattle and earned a B.S. in Physiology in 2017.

Mitchell's Perspective: Coming into medical school, I remember being extremely excited for the opportunity to work with cadavers as a part of my education, but at that time I didn't fully understand the extent of what I would gain during this experience. While working with the cadavers as a part of my first-year anatomy course and during my summer research, I gained not just a perspective into human anatomy, but rather a view into the human condition. I learned that anatomy can vary vastly between two individuals and may reflect the lives they led and the hardships their bodies endured.

We have been told many times that the body donors are our first patients, and that has always resonated with me. It rang true immediately after uncovering the donors for the first time and every time after. While working with their bodies, I was able to trace the nerves and vessels and see structures in their natural locations, but more importantly, I was able to see where the anatomy varied, or in some cases fell short. I was constantly curious about the processes I observed in many donors and it left me with a better idea of some of the things my future patients may experience in their lives. It's something I didn't expect when I walked into the anatomy lab, but am so grateful to have experienced. I left the anatomy lab with a great understanding of the human body, but an even better understanding of what it is to be human.

I am so grateful for the donors who choose to contribute their bodies to my education and that of other future clinicians. Their generosity will never be forgotten. It has been an integral part of my education and development as a future physician, and for that, I am thankful.

# Midwestern Campuses Host Virtual Career Events For High School Students

After classes and events went online this spring due to the pandemic, many programs at MWU pivoted quickly to create exciting new virtual options for what are usually on-campus summer career exploration programs for high school students.

In Downers Grove, high school sophomores and juniors enjoyed the Virtual PharmAcademy from June 22 to June 26, hosted by the Chicago College of Pharmacy. The program offered a fun and comprehensive learning experience about the diverse career paths in pharmacy and explored patient care in a variety of pharmacy practice environments.

Students spent five half-days learning and engaging with Midwestern University faculty, practicing pharmacists, alumni, and current pharmacy students. Activities in pharmacy practice included pediatric medication administration, blood pressure assessment, IV admixture, compounding, infectious diseases, veterinary medicine, pharmacy research, and many more. Students also had the opportunity to build communication skills, learn team building exercises, and hear about public health For more information, visit www.midwestern.edu/pharmacademy.

In Glendale, the Health Careers Institute for High School Students, a hands-on summer camp for high school juniors and seniors, took place over five days from July 13-17 via interactive WebEx workshops. The event was supported by the BHHS Legacy Foundation and included a "care package" of anatomy books, skeleton kits, reflex hammer



and stethoscope, and other items that the 34 participating students utilized to practice medical techniques along with the 50+ Midwestern faculty and student presenters.

Among many other activities, student participants had the opportunity to try their hand at suturing, take their own vital signs, test the efficacy of toothbrushes versus miswack sticks, explore interactive models of the human heart and skeleton, and analyze the mental and emotional elements in student-created paintings.

To create more of a sense of community and provide daily mentorship, Midwestern students guided the attendees in small groups throughout the week via Zoom calls as well.

We hope you have enjoyed seeing just a few of the ways that Midwestern University enriches the communities we serve. Thank you for participating in our Body Donation Program, which supports our students in the detailed study of human structure (anatomy) through the ability to study the whole human body. The integral knowledge provided by this opportunity is foundational for the education of our nation's future healthcare professionals.

We recognize the thoughtful consideration that goes into the decision to donate to our program and wish to acknowledge and express our gratitude to those individuals who generously choose to invest in the future of healthcare by making this donation. To learn more, visit www.midwestern.edu/bodydonation.



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