From the Director’s Desk

It has been another excellent year at Midwestern University (MWU) Body Donation Program, made possible by the generosity of our community of donors and their families. This year, more than 850 health profession students learned anatomy in cadaver-based courses. These courses are a keystone of their education and provide a solid foundation upon which their clinical courses can build. As our students’ “first patients,” the donors also help the students to develop compassion and empathy and to appreciate the importance of individual variations in structures.

The program also contributed to educational workshops and career days for local high school students and healthcare providers. We participated in continuing education of many local healthcare providers, including emergency department physicians, first responders, and nurse anesthetists, by allowing providers to practice life-saving techniques.

The MWU Body Donation Program continues to educate the community about the importance of anatomical study and the role of body donation in medical education. This year, we were honored to be interviewed by ABC15 for their television show Sonoran Living. The segment aired in March 2020, and included information about how body donation benefits the community. To view the ABC 15 television segment, visit: www.midwestern.edu/BDP-ABC15.

We also contributed to health expert columns in Arizona Health & Living magazine and Arizona Nurse, presented numerous free seminars, and visited local events and organizations.

Thank you for your support and your generous contribution to tomorrow’s healthcare team.

Heather F. Smith, Ph.D.
Director, Anatomical Laboratories and Midwestern University Body Donation Program
The First Patients

It is often difficult to engage people outside of healthcare about the importance of anatomy and dissection to medical students. Few people realize what whole body donation is and what it means.

“Effectively, the cadaver is your first patient,” explained Midwestern University Arizona College of Osteopathic Medicine alumnus Dr. Marcus Dee (AZCOM 2019). “As doctors, we will be working on real people. The human body has hundreds of structures. Books, anatomical models, and other resources are good complementary tools, but they focus on classical anatomy. When you work on a human body, you see departures from classical anatomy that are different from what you are expecting. Being able to interact with the body allows you to adapt to that, which is important down the line when you work with patients.”

Over the weeks of study and dissection in anatomy class, medical students exist in a perpetual state of fascination over the complexity and intricacies of the human body. The overarching sentiment, however, is one of deep respect and seriousness, both for the magnitude of their task and for the immense gift given to them by the donors.

“I think the body donation program is the best educational tool that you can have as a medical student,” said Dr. Kaitlin Oliver (AZCOM 2019). “You can learn anatomy from books and videos, but it is not the same as seeing and touching the actual structures—even if you are not going into surgery or another invasive specialty. In gross anatomy lab, you have the opportunity to learn from the inside out.”

“Cure sometimes. Treat often. Comfort always.” This was the mantra of Hippocrates, the father of modern medicine. In other words, doctors may not always be able to cure their patients’ ailments, but they should always strive to be compassionate. Body donation is a key factor in cultivating and inspiring this all-important compassion in medical and healthcare students and offers them an intimate connection with human anatomy.

When medical students enter the healthcare field, it should be a matter of great comfort for their patients to realize that, thanks to the immeasurable generosity of body donors and their families, the students have been prepared to see and care for patients as unique human beings. “I am a visual and hands-on learner,” explained Dr. Oliver, “so that was the best way for me to learn about and respect my future patients. It is far and away the most significant gift we receive throughout our education.”
Perspectives on Anatomy: Midwestern University Faculty and Student Profiles

**Faculty Profile:**
Kathleen Muldoon, Ph.D., Associate Professor, Anatomy

Dr. Kathleen Muldoon has been with Midwestern University since 2014, teaching extensively in the osteopathic medical anatomy course, as well as anatomy courses for occupational therapy and biomedical science students. These classes offer an opportunity to experience the variations in human anatomy, embryology (development), and histology (cellular anatomy).

**Fun fact: Dr. Muldoon serves as the Chair of the Scientific Advisory Committee for the National CMV Foundation, a non-profit that educates the public and funds research about cytomegalovirus (CMV).**

**Dr. Muldoon’s Perspective:** The anatomy lab is one of the very first experiences that a Midwestern University student will have with a “patient”. In the anatomy lab, our students learn to identify organs and tissues, understand variations within and between human bodies, begin to work as a team, and acquire the vocabulary of healthcare professionals. Dissection isn’t just about learning anatomy. Above everything, it is an act of shared humanity through which students will piece together the stories of their donors, develop an idea of their donors’ lived experiences, and cultivate empathy. It is my tremendous honor to guide Midwestern University students through this process. In terms of technical medicine, the first steps in dissection are among the simplest a Midwestern University student will make. Emotionally, however, they are often the most memorable.

**Student Profile:**
Kimberly Schiller, Second-year medical student, Arizona College of Osteopathic Medicine

Kim earned her bachelor’s degree at Western Washington University, where she studied operations management and chemistry. She was so inspired in her undergraduate anatomy course that she served as an anatomy teaching assistant (TA) up until her graduation in 2017. After starting medical school and excelling in her first-year anatomy course at MWU, Kim jumped at the opportunity to return to a TA role for other students in the medical, physical therapy, physician assistant, and nurse anesthesia disciplines. Under the supervision of Dr. Heather Smith, Kim and 14 other TAs helped students with their anatomical laboratories, held review sessions, and assisted with examinations.

**Fun fact: Prior to medical school, Kim worked with the Lummi Nation outside of Bellingham, Washington treating and advocating for Native American patients with Hepatitis C.**

**Kim’s Perspective:** The opportunity to learn from a cadaver has been invaluable for my medical training. Many of us are inspired to pursue careers in healthcare because of our fascination with the human body; in doing so, we attend countless hours of lectures describing the intricacy of human anatomy. However, it is difficult to truly grasp the complexity of the human body without tangibly experiencing it. Through anatomy lab, I was able to hold a kidney after learning about its role in filtering the blood, physically trace blood vessels after spending hours drawing them on whiteboards, and feel the stark difference in texture between muscle tissue and fat tissue. Each body has its own unique intricacies that give students an opportunity to think critically about how and why variations may occur in a human body. This level of critical thinking would not be possible without the selfless gifts of donors and their families. The knowledge and skills I have acquired through anatomy lab, both as a student and a TA, will without a doubt make me a better physician—and for that, I am truly grateful.
What is the Difference Between Organ Donation and Body Donation?

Organ donation and body donation are different but related processes. In organ donation, a person’s organ(s) is provided to a living recipient. **Organ donation** in Arizona is organized through the Motor Vehicle Division and Donor Network of Arizona. This registration is often indicated on a person’s driver’s license or other state identification card.

**Body donation** is the donation of the whole body to medical education for the benefit of medical students and those in other health professions. Learning anatomy from a human cadaver is an unparalleled experience in which the body donor becomes the students’ first patient and most important teacher. The process of body donation is coordinated through individual medical schools, such as Midwestern University. Pre-registrants of Midwestern University’s Body Donation Program receive a separate donor identification card to keep in their wallets containing our contact information and instructions.

Does being a registered organ donor exclude me from being a body donor?

The short answer is “no.” Some minor transplants, such as corneal transplants, are still permissible for body donors. Therefore, people interested in both organ and body donation are encouraged to sign up for both. That way, you can feel comforted knowing that your donation will have a lasting impact on the next generation.

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](http://www.midwestern.edu/bodydonation).