Kerry Gilbert

Tell us about the Clinical Anatomy Research Lab.

00:06

So the clinical anatomy research lab is part of the Institute of anatomical sciences, we've had a clinical anatomy research lab. In the past, it was part of the Center for rehabilitation research, which was run by the School of Health Professions in the Department of Rehabilitation Research. We've done some collaborative work in the past. The challenge was though, that the cadavers that we were using for our studies needed to be used in the space in the cadaver lab, whereas our research space was disassociated from the lab. So as we built the new facility, it was important to us that we have a space for interprofessional collaborative practice, so that we can do research across multiple disciplines within the institute and anatomical space. So we're excited for the opportunity to collaborate with groups like orthopedics and surgery, nursing, other groups that will allow us to work together to answer clinical questions with an anatomical spin.

How is the research lab related to the IAS?

01:02

The room that we're in currently, is the clinical anatomy research lab. It's dedicated for research on cadavers, but it's housed within the much bigger Institute of anatomical sciences in general.

What is the IAS?

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The Institute of anatomical Sciences is a new Institute to the university. It was established in 2019, just last year, and the institute was designed to create an interdisciplinary approach, or a university level resource for anatomical sciences resources, and that includes both access to cadaver material, cadavers and space. So, the Institute, our mission is really to create an interdisciplinary approach to anatomical sciences within the university. Now, as we see it, it has really two branches or arms, you might consider the anatomical sciences side of things, is really focused on education, research and training. Whereas the willed body program side of things is what we've built the whole system on the willed body program, has was established a long time ago, over 50 years ago. And without the generous donations from families and individuals to donate their bodies. We don't have the resources to do the work we do here for education, research and training. So those two pieces fit together really formed the backbone of the Institute of anatomical sciences. And then of course, you had the faculty and staff that help the teaching and training run.

What do the IAS facilities consist of?

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Our current space is about 7000 square feet, and we're very blessed within the university to have the space that we do. The old space was established and has been renovated a few times over the years, but effectively reached about 7000 square feet in about 1994. The facility that you're sitting in now in total is the first floor in total, the first floor of the pod D of the Texas Tech University Health Sciences Center. pod D is a five story building, but the first floor is dedicated completely to the Institute of anatomical sciences. And whereas currently in our old facility, we have 7000 square feet. We're at 20,000 square feet dedicated to anatomical Sciences here.

Kerry Gilbert

Why are these facilities important?

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It's important that our physicians and our clinicians, our physical therapists and occupational therapists, and athletic trainers, nurses all understand the importance of anatomy, and how better to do that than working on a real human body with dissection and prosection activities.

Describe the technology being used in the IAS.

03:40

But from a teaching standpoint, I coordinate and teach the School of Health Professions anatomy course. And with that course we have 165 students on campus there from physical therapy, occupational therapy, athletic training, PhD in rehab sciences. And then we have a physician's assistant students that are at down in Midland. So I broadcast my lectures to midland. And then when we do our lab sessions, we do those here on site, and my local students will dissect the cadaver, they'll work in teams of four to five people, and they'll dissect the cadaver to learn the learning objectives of different muscles and bones and nerves of blood vessels.

How does the technology help students learn?

04:23

But each one also has a monitor. And that monitor is going to be driven by an iPad, each tank, a group will have access to an iPad, that iPad will deliver material to that monitor, so that it a group of four or five people. If somebody has a really good video that they want to show, they can push that video to the monitor and their whole group can benefit from it. If somebody found a really good teaching aid that they wanted to show, they can show that. Likewise in the larger room, the faculty has the control to push whatever content they desire to any of the monitors in the system.

What is the most important thing to know about the technologies in this space?

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So we're excited about the technology. I think it's important to recognize, though that the technology is an adjunct to the teaching tool, we're going to teach the way that we always have but the technology is an adjunct, it helps us build those stories better, it helps us understand how to present material more effectively. But in this space, the most important resource is the cadaver on the table and the gift of that donor who said, I want you to learn from my body. And so we still want to always come back to the idea that this is a cadaver lab. And that's what we want to focus our attention on.

What separates this program from others?

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While some programs and universities are decreasing their reliance on cadaver anatomy, we're wanting to to further promote that activity. And the reason is, is that virtual anatomy programs that use computer programs, they're excellent, we're going to use them in this space. But like I said, we're going to use them in the context as an adjunct to the tool of the cadaver dissection.

Kerry Gilbert

Why not use fully virtual teaching tools?

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What we feel like we've been able to do is put together the best of both worlds, and honestly if you ask the students, there's never a time where they would choose virtual over learning from the cadaver itself. The cadaver provides the real anatomy. It provides the variability to anatomy, it provides the three dimensional component to learning anatomy that you have to get if you're going to be a good clinician, so we believe that this is critical to our mission.

How will the lab be used for research?

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The clinical anatomy research lab, is part of the Institute of anatomical sciences, it's simply one of the rooms within the space. And that clinical anatomy research lab will be the location where clinical anatomy research will take place within the university. So what we anticipate is the opportunity, we want to provide the opportunity for different groups around the university to work together collaboratively, interdisciplinarily, to answer clinical questions using the cadaver.

What do you hope students take away from this program?

07:03

And what we convey to our students is, this is the greatest gift that someone could give at the end of their life to say I want you, the student, faculty staff to learn from me, we have a saying that's mortui vivos docent it means that it's Latin for the dead teach the living. And while that may sound a bit morbid at first, if you really think about it, that's the greatest gift their life was lived and we hope it was lived to the fullest. And we know that they were loved by many people. But in their death, they have given one of the greatest gifts they could ever give to a clinician, which is to allow a clinician a physician who's going to go and save lives, a clinician who's going to decrease pain and increase mobility. They've given them the greatest gift to learn what it means to look at the body and to analyze what is normal and what's abnormal.

Additional comments about the program.

07:59

What better way to learn about the human body then to study on the human body. And we make we make every effort to make sure that these bodies are taken care of with the utmost respect from the time that we receive them to the time that we return them to their loved ones as the cremated remains.