Vet School Clinical Skills Lab with Dr. Melanie Boileau

[00:00:00]

**Dana Zook:** Welcome back to the Extension Experience Podcast. I'm Dana Zook. We are recording this morning from the OSU College of Veterinary Medicine. I'm joined by Dr. Melanie Boileau to talk about the Clinical Skills Lab for OSU Vet students.

But Dr. Boileau is a professor at OSU Vet Med and she's originally a native of Quebec, Canada. So, welcome to the podcast. Yeah, thank you for taking the time. She has an extensive teaching appointment. So, do you mind giving listeners a little bit about your background, about yourself, Um, and a little bit about your journey to OSU?

Because being from Canada, that's not an automatic transition to Oklahoma.

**Dr. Melanie Boileau:** So I was born, born and raised on a dairy farm. And, um, I was the nerd in elementary school. I was the nerdy student that always was finished with homework and things like that. And I knew that I wanted to be a teacher. And then, as I aged, I decided to combine the two. Veterinarian and, and being a teacher, so I did my DVM at Montreal University, all in French.

And And then I did an internship. It was just kind of a one year special, specialization, especially in food animals, so that's cattle. That was cattle primarily then. And then I decided to go to the United States to do a residency program and a master's degree, which I did, and I came to Oklahoma State University, and I was quite fortunate, because it's been a Game changer for me, because I'm still here,

**Dana Zook:** must have enjoyed it here. Yeah, and I went away
Dr. Melanie Boileau: I went away once I got done with my three year residency in my master's degree. I went, I completed my internal medicine board certification, went to Kansas State University for a year. And then I've been back since 2005 as a faculty and I spent Pretty much up to maybe a year and a half ago ish my time in the clinic, primarily still teaching second year students, third year students, but primarily spending time looking at sick animals, helping clients,

[00:02:00] Teaching veterinary students, senior students, fourth year.

And then lately I, my passion for teaching just kind of kept bubbling at the top. There was an opportunity to apply to the Large Animal Clinical Educator, which is, inherently associated with a clinical skills lab. And so I pretty much said to the administration that was very interested and they gave me the position.

So,

Dana Zook: Very cool. Isn't that nice when you have a passion that they say, well, go with it. Yeah. Right? Very cool. So, now that you mentioned that, so tell us about the Clinical Skills Lab. And you might preface it with, the trajectory of the students through the program.

It's a four year program. But traditionally in the past, maybe they hadn't had as much hands on until the

Dr. Melanie Boileau: Correct. And so, so that kind of came about because we are currently redoing the veterinary curriculum.

So the new curriculum started this past fall, fall 2023.

2023.

And we wanted our students to have more hands on experience right off the bat. And so.

We wanted them to be exposed to communication, which they were in a regular quote unquote curriculum, but just have more experience with that.
Getting the chance to take a history from a similar client, uh, on a normal animal, just to kind of get that experience as a practice. And then also have the opportunity to do what we call clinical reasoning. So going through a sick animal, um, in a lecture setting and going through the steps on how you would think through the case,

Which is something they've not had.

And then practice basic skills from medical math. You know, if you think about medication, it's based on weight and so they have to be able to calculate that. So getting that to practice basic instrument handling, suturing technique, and then performing restraint, and then a physical exam on a dog. That's kind of what they got to do [00:04:00] last fall. And then this spring,

Continue the same skills, but we've added the large animal handling and physical exam. So currently the first year I've had the opportunity to practice a physical exam on the cow and a horse, which they've never had the chance to do before. And so our hope, and this is like, we call it a thread course that will continue first year, second year, third year,

so that they could really polish and get experience and get exposure to all of these over time. And then now we're also adding ultrasound, uh, exposure for them, how to, you know, look at a blood smear, et cetera, et cetera. Like things that they're gonna get exposed to and doing over time, but they already have that exposure as first year.

We are always proud to say that we graduate practice ready veterinarians, but I, I personally feel that this particular lab and [00:05:00] kind of what they get to do is gonna make them even better.

Dana Zook: Yeah, that's very cool. In

Dr. Melanie Boileau: in a, in a pinch, that's pretty much what it's about.

Dana Zook: So if I think about it, is it a little bit like they have a, so say I'm a Traditional OSU, you know, animal science graduate.
I have a chemistry class and I have a lab with it. Is it a little bit like that? Or do they all go through the same lab throughout the whole semester? Or is it special little labs with each class?

**Dr. Melanie Boileau:** Um,

**Dana Zook:** It's the same

**Dr. Melanie Boileau:** thing.

It's the same course, but it has so many little labs and, and kind of lectures and classes that goes with it. That's, from what I've heard anyway, that's probably the course that they like the most, so far, just because of the various things, and they get in small groups, and they get to discuss, and they get hands on opportunity.

You know, doing an exam on a dog, even if they probably have dogs or cat, you know, just kind of go through that process,

**Dana Zook:** Mm hmm.

**Dr. Melanie Boileau:** is, um, I think gonna be very beneficial for them in the long run. And, and hopefully we can compare those that are going through this and are having the, you know, the opportunity to be in this clinical skills lab.

, how did they do once they graduate versus those that did not have that opportunity. So hopefully we'll get to investigate that and see. I mean, in another institution it's been very beneficial from what I've heard.

**Dana Zook:** I can't imagine why it wouldn't

**Dr. Melanie Boileau:** Yeah, yeah, yeah.

**Dana Zook:** the enjoyment I would

**Dr. Melanie Boileau:** think, would be there, too.

Yeah. As well. Yeah.

**Dana Zook:** So you're part of the large animal
Dr. Melanie Boileau: faculty here. Um,

Dana Zook: what are some specific lab opportunities for students in that area. What are some, tell some listeners some of the things that they're actually doing?

You did tell us a little bit, but like, ultrasounding, suturing, which is really important for any, any surgery.

Dr. Melanie Boileau: any surgery, any animals. And so they get to practice that. They have the little, fake skin model and then they have their instruments and they, the suture and they practice and they practice and they get, they get to practice different types of suturing and then they get graded and they have to do multiple over time, not just once.

And so that's applicable to all species. What I have been mostly involved for the large animal part Because my training is food animals, so, you know, getting to teach them basic handling and physical exam skills on the cow in, in the classroom and also on a live animal, going through that and not tying and placing a halter and things like that.

And then, the clinical reasoning part where I go through large animal cases. So it's not just dogs and cats that we talk about and they have to think through. some of these cases as well. And there's a fair number of students that want to do at least mixed practice currently in the first year course.

Dana Zook: Okay. That's great.

Dr. Melanie Boileau: And just so that I don't forget, so the rest of my team, I'm not the only one, associated with the clinical skills lab. So Dr. Jill Ackerman is the directors of the lab. She is a, an anatomist by training, and she's been wonderful at really helping us, kind of guiding the process.

And then Dr. Allison Biddick is my equivalent, but for small animals.

Dana Zook: Okay.

Dr. Melanie Boileau: So we all have kind of our parts to play, and then we have, Sarah Dyer, she's an RVT that also is helping as well. So there, it's a team. I suspect that the team may have to expand over time, especially as we roll in new curriculum for second year and third year, but we'll have to see.
Right now it has worked pretty well.

_Dana Zook:_ Very good.

_Dr. Melanie Boileau:_ It's a team effort. Team effort. That's

_Dana Zook:_ That's what we like. We

_Dr. Melanie Boileau:_ want team effort. I

_Dana Zook:_ uh, just recorded with Dr. Jones

_Dr. Melanie Boileau:_ earlier and I

_Dana Zook:_ said as Extension, as veterinarians, we're

_Dr. Melanie Boileau:_ all a team. Yeah. Producers are all part of the team. Yeah. Yeah.

_Dana Zook:_ So, what is the value of this clinical skills lab? To say, a beef, goat, or sheep owner, any livestock owner, um, a veterinarian's future clientele.

_Dr. Melanie Boileau:_ Um, I would say

I would say that. You know, those first year students currently, you know, they get the exposure to clinical cases and we're, we're, you know, we're gonna, um, presented common cases. For example, a choke or a bloat, just so they have that exposure and they get to practice physical exam and basic handling skill

we're gonna keep adding on to that and so by the time they graduate, they'll be much more knowledgeable, confident, comfortable with their. skills, overall, and look more likely to be willing to do mixed practice and include cattle, sheep, goats, pigs, whatever, within, their practice because they will be comfortable with these species.

_Dana Zook:_ Yeah, and I would say,

_Dr. Melanie Boileau:_ especially in rural Oklahoma, that could be really, really, that's really needed. Um, I feel like this will really help them to, Get that confidence, the knowledge, and the skills to really be, to be like, Oh yeah, I can
look at a cow. Oh yeah, I can look at a dog. You know, and just help the clients and help whatever, you know, wherever they're at.

Help those clients, help those animals.

Dana Zook: I would think that that as a, you know, just moving out, say, into a, a, a practice, joining a practice, it would

Dr. Melanie Boileau: know, just moving out, say, into a, a, [00:10:00] a practice, joining a practice,

Dana Zook: be pretty overwhelming.

Dr. Melanie Boileau: Mm hmm. Mm hmm.

Dana Zook: You know, because I know in rural Oklahoma they see everything.

Dr. Melanie Boileau: Exactly. And sometimes they may not want to see certain species for whatever reason. But then if they hire a new graduate that has been through this, then they'll find out that they are, oh, yeah, they,

They got to do this and that, you know, they got to.

Dana Zook: We've seen a little seen little bit of this.

Dr. Melanie Boileau: Yeah, yeah, exactly.

And, you know, of course, this is, in my opinion, very important. There's also lots of extra electives that the students can take, whether it's cattle oriented or small ruminant, and so that can add to, their overall experience. Um, but I feel this is just a, a big fundamental need that has been fulfilled that we've been wanting to have and that with the new change of curriculum that has really, I think, um, we kind of got it.

running right away. You know, like it's just been, it's just been going pretty smoothly and we've had some good feedback. So, overall, I feel like it will [00:11:00] be just so helpful for those graduates that, you know, want to do especially mixed practice. They're gonna have that confidence. And I think if you have the confidence and knowledge and the skills, you're just gonna do it.

And that's gonna be super helpful for the clientele.
**Dana Zook:** Well, and also if they feel like they need some more practice on something, then that's there.

**Dr. Melanie Boileau:** for them. Uhhuh. Yeah. To, you know, on simulators for instance. Yeah. Uhhuh. So.

**Dana Zook:** sort of simulators do you have?

**Dr. Melanie Boileau:** We have several. Of course, some of those bigger ones are gonna be quite expensive.

like, you know, 30, 40, 50 k kind of, kind of expense. So we currently have. a cow head model, so they can practice halters, they can practice ear tagging, and you can also do a jugular vein, you know, a blood sample, mimicking blood samples. There's a lot of small animal models as well. one, I can't remember the name of the actual

Dog model, but you can hear the heart, and you can, you know, it's just really cool.

It has, [00:12:00] you know, you could do CPR type of things with it. And so they get to feel. The pulses, et cetera, et cetera. So, our plan and our hope is over time to accumulate more of these models. We have a, a horse one that is currently in the hospital that is also Dr. Danielle Barba, who, who did the equine or is doing the equine currently this spring, helping them with physical exam and restraint.

Had them practice on that model before. So, you know, get to practice some and then get to apply it in the live animal. That's pretty much what we're trying to do so they get some confidence, some knowledge, and then they get to practice it. And it seems like they are better at it once they get to apply it on a real case.

Right. Yeah. Which is the goal, but then I have seen that it has worked really well.

**Dana Zook:** Well, we have in extension, and you probably know

Dr. Whitworth has the calving simulator and that has really been popular. I will say people are kind of hesitant to do it in a group,

but I, I, I've heard from several producers that they were more prepared
in

a certain situation by being able to, put the chains on, you know, by, can being able to see, because that's not available animals, so,

so valuable, I know a lot of us in the livestock industry take for granted the training of veterinarians. We just see them set up shop and we go to them and we expect them to be able to know everything, so it's really cool to get a behind the scenes look at what you guys are doing.

And so I'm, I'm glad that the vet school kind of said, Hey, here's your passion, with it. So that's pretty awesome. For and, and that they're able to enhance their, their skills and practice a little bit before, Going out into the field. So, as a final takeaway, Dr. Boileau, as a vet yourself and someone who teaches at the college, I thought you would be someone that would have some pretty good advice for maybe some future veterinary students.

What advice do you have for young people that are really serious about vet school?

Dr. Melanie Boileau: Well, well they, they got to apply. You got to apply. Yes, it's

Dana Zook: we know several people who can answer Your questions about that, right, Dr. Boileau?

Dr. Melanie Boileau: I think one of the things that is very helpful is if they can get some exposure,

Dana Zook: exposure to even

Dr. Melanie Boileau: even cleaning kennels at their, their regular vet or the local vet in their area, even if they don't get paid at first.

And then over time just get more exposure and get more experience. And I think that's helpful just to give them an overall kind of concept of what veterinary medicine is truly about. And then once they apply, let's say they get in, I feel like it's also important to,
Well, of course, go through the program, but expand their experiences by going on preceptorship.

So going to other practices, whether it's small animal, mixed animal practice, large animal, large animal. And it's, and then ideally, if you can kind of make two to one, two for one in an area that they want to practice and then potentially in a practice [00:15:00] that they would likely want to join, you know, that's nice to spend a couple weeks there.

So it seems like a lot of the,

especially, especially second year, but you can start first year, first year, second year, third year and fourth year also do it. Try to really have an overall idea of what is out there, where do I want to go, what do I want to do, and then get that experience, and have the mentorship of the private practitioners,

Um, in addition of what they learn here at the college, and I think that they can make, you know, really good decisions as to what their career path is going to look like.

Because, yeah, you can do, you can do a veterinary medicine practice in a clinic, but there's, you know, research, and there's industry. There's teaching, like there's just so many opportunities. And so they could, they could look at all of that and then have a, you know, kind of come up with what they want to do.

You might not know

Dana Zook: that unless you have those experiences. So, thank you so much

Dr. Boileau for joining us. . [00:16:00] Listeners, thanks for tuning in. And if you have any questions about the OSU Vet College, reach out to our Extension educators or reach out to me.

Um, reach out to the OSU Vet College if you have any questions about application or that sort of thing. Um, it sounds like a really awesome opportunity. So they're adding really good things to their program every year. they are just a really, um, important, um, entity to our state. So thanks Dr. Boileau. Thanks for tuning in listeners and have a wonderful week.