

Smologies #5: VETERINARY BIOLOGY with Dr. Vernard Hodges & Dr. Terrence Ferguson

Ologies Podcast

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Oh hey, it's that ladybug that just landed on your arm and it's like, "Hello!" but way too quiet for you to hear, Alie Ward, back with episode #5 of *Smologies*. What is *Smologies*? So glad you asked. We took full episodes of *Ologies* and then we sliced and diced 'em up to make these bite-sized, also classroom-friendly edits of deep dive *Ologies* classics. So if you haven't listened to the original, full-length episode of *Veterinary Biology* and you don't mind the occasional salacious detail, maybe a little bit of swearing, go back and listen to that at the link in the show notes. But if you only have 20 minutes or you need a G-rated version that is suitable for all ages, you are in the right place.

In this episode, we sit down with not one but two veterinarians who also happen to be best friends for over 30 years. Dr. Hodges is one of the vets. He has kind of an edgy, hip, asymmetrical haircut, almost like a half mohawk. And when we sat down to record, he was wearing a dark button-up shirt and a blue sport coat. And Dr. Ferguson has a lower voice and is wearing a t-shirt with the red Critter Fixer logo underneath a plaid blazer, and his head is neatly shaved to a perfect shine.

They both grew up in Georgia. They got their bachelor's degrees from Fort Valley State University and their Doctorates in Veterinary Medicine from Tuskegee University in Alabama. And they worked elsewhere for about a year before they teamed up and started Critter Fixers, their own practice together in rural Central Georgia, south of Atlanta. And they also are the start of the NatGeo show, *Critter Fixers: Country Vets*. So these guys have seen it all, from exotic pets, to diet fads, to hairballs from a variety of species, to medical breakthroughs that have the potential to extend the life of your favorite pet.

We covered their vet practice, how they learn and retain so much information about so many animals, how hard is it to get into vet school, things they wish animal owners knew, and how to deal with a chonky, chunky, cutey baby such as mine. So saddle up and get ready to ride on out to the sunset with real-life critter fixers and veterinary biologists, Dr. Vernard Hodges and Dr. Terrence Ferguson.

Aside: Dr. Ferguson starts off by telling us that even though being a veterinarian is his dream job, he still faces some on-the-job challenges. For example, no two days are ever the same.

Dr. F: And being a veterinarian, we see multiple species. So, you know, I may get an animal in that we've only seen one animal that year, maybe a monkey, maybe something that's very strange or rare. And I may have to give him a call, like, "Hey dude, I have this monkey, and I'm looking through the books, and I don't see it!"

Alie: When it comes to veterinary medicine, how do you even prepare for that? Because you've got a ruminant with four stomachs, you've got a toad that breathes through its skin... Where do you begin?

Dr. F: School. A lot of people wonder... you know, you get out and you may practice large animal medicine, or you may practice small animal medicine, or you may practice exotics. We kind of do all of them. But when you're in veterinary school, you don't specialize. So, we had to learn about all the species. And once you come out, you know, you're kind of refining your skills. Are there times

when you have to go back to the book or call someone? Of course there are. There are a lot of species and you don't see them every day.

Aside: Dr. Hodges says that in the early days they'd have to do dip tank x-rays, wait for them to develop, and then send a snail mail envelope with a question, to a specialist, wait for it to get there, wait for the specialist to write something back, and snail mail back. But now modern technology lets them get an x-ray in less than a minute and they can get a complete pathology or cardiology report from a specialist in, like, half an hour. This is good news for vets. It's better news for pet owners, which by the way, in America, according to a 2019 study, there are 94 million pet cats in the US. 90 million dogs! And hey, guess what, fish people! 157 million fishes out there in your houses. So yes, technology helps them too.

Dr. H: Even though we're in rural Georgia, we do have the specialists that we can reach out to, and modern technology has definitely... I would say, in our lifetime... [to Dr. Ferguson] Don't you think we can keep an animal alive, maybe, 2-4 years longer?

Dr. F: Yeah, because of advancements. We can detect things a lot earlier. We have chemistry panels of blood we can run now to check kidney problems a year or so before it happens. At one time we only thought when an animal came in, it was sick, we ran blood, had kidney failure.

Dr. H: And we had to send that blood off and wait a day.

Dr. F: Yeah, and we had to wait. But we know 2/3 of all kidney function is lost once we see the values are abnormal. So, now we have tests where we can detect that and we can do something to slow that process down.

Aside: For more on kidneys and how they work, you can listen to the Nephrology episode, or the *Smologies* Nephrology when that comes out in the future.

Alie: When it comes to your typical day, I know that you're sometimes, maybe you're out looking at a llama in a barn, and maybe you're delivering puppies in the office... What is a typical day like? And then, also add cameras on top of that.

Dr. F: There really is no typical day, and I'm not being... I'm being facetious, but then again it's serious because we will make schedule-out calls, but you never know what you're going to see when you go out and you never know what's going to come through the door that's not scheduled. We try to do our surgeries in the morning because we like for them to be done about 10 and taken care of so that they're able to be up and go home that same day, depending on the procedure. And then in between surgeries and the rest of the day we're seeing clients and we may... You just never know what's going to come in.

Dr. H: What about that c-section that comes in in between.

Dr. F: Right. I might be in surgery doing a cruciate surgery that it may take a while to do, and he calls and hollers in and says "Look, I have a dog that's..."

Dr. H: "Hey man, I need that room."

Dr. F: Right, because he has a C-section.

Dr. H: That actually happened on the show.

Aside: Another reason to watch their show *Critter Fixers* on NatGeo Wild. Next, we tackled the topic of exotic pets and how everyone should do at least a basic googling on how to care for their new animal.

Alie: What do you wish that pet owners or your clients did differently or knew? Is there something that you wish you could just telegraph it into pet owners' heads?

Dr. H: In society today, it's the bigger, the better; the more exotic, or unique the better. And everybody wants to go-big-or-go-home and these things. But a lot of times it's simple things. Like these exotic pets, [*Phil, there is a TIGER in the bathroom!*] I really wish they were educated on how to take care of them. You know, I had a case last week, it's a simple case. There's this bearded dragon, which is a type of lizard. It came in, I took X-rays. It had brittle bones, it wouldn't move, it was dragging itself across the floor. It needs calcium! It needs a UV light or sunlight! Obviously, you can't stay outside with your lizard all the time, so you need some UV light. You try not to make the person feel bad.

But I was talking to her and I was like, you know, "This is what's going on." And it was something simple, I was like, "I want you to google something. Just google ultraviolet light and metabolic bone disease." And I said, "I'm going to go take an x-ray." When I came back in, she said, "Wow, Doc, thank you. I see what's going on. It's simple."

But those kind of simple things, something... a \$20 light could have prevented this, you know? So it's just, I wish... Everybody wants to get more and more exotic. I mean, we're seeing all kinds of different animals, you know? And so I just wish that people were educated more.

Aside: Speaking of education, we chatted about the competitive nature of veterinary medicine and how being different might set you apart from all the other folks with the same dream.

Alie: What do you wish people knew or what is, like, some encouragement that you would want to give to your younger self or people who are like, "I want to be a vet but it's hard!"?

Dr. H: So the first thing I'd like people to know is – and this is not to discourage, but I want them to realize it and what I tell the kids – there are only 31 veterinary schools in the United States.

Alie: Really? Only 31?

Dr. F: Yes.

Dr. H: So the average GPA to get into veterinary school now is about 3.7.

Alie: That's very high.

Dr. H: That is very high. So, not only that, there are a lot of people with high grades, so you have to find that thing that makes you different.

Dr. F: That separates you.

Dr. H: You know, go to your local veterinarian and ask them, can you volunteer? Or go to your local shelter. Find that thing that makes you different. But yeah, that's one of the things I want people to see. I know we have 50 states, and there are not even 50 vet schools. There are only 31.

Aside: Let's say I made it through vet school and I'm now a practicing veterinarian. How do I go about diagnosing a sick critter? Dr. Ferguson explains.

Dr. F: When I talk to kids I always tell them that you have to use your senses – except one, we don't taste.

Dr. H: [*laughing*] It has happened a few times. Unfortunately.

Dr. F: [*group laughter*] Unfortunately, not knowing. Or even when you approach the animal, or if we're in the clinic and it walks in the door, it may not even be coming in the room yet, but you're already getting a visual. And one thing that we always learned, probably the first time we walked into

veterinary school, is you have to know normal before you know abnormal. There's no way to know what's abnormal unless you know what's normal.

So you know, you're watching the gate, you're smelling, what does it smell like, there are different things that clue you in. So almost like investigators, you know. We try to clue in on all of these things to try to figure out what's going on with them. But you have to be basic and work your way up.

Aside: On to your questions. Man, you had some great ones. But first, every episode we donate to a cause of the ologist's choosing, and this week it is going to It Takes a Village Foundation, which instructs children in all aspects of business fundamentals and it helps them to come up with ideas for their own businesses. And it also provides assistance to local adults, conducts community business outreach, and they host seminars on different topics. And this donation we made is bookmarked to go to Testing and Test Prep. And Drs. Hodges and Ferguson are eager to use some of this donation to ensure that students are given every opportunity to succeed. Learn more about what they do at ItTakesaVillageFoundation.com, which was founded by Dr. Hodges, and the VP is Dr. Ferguson. That donation to them was made possible by some sponsors of the show.

[*Ad Break*]

Okay, your questions. Now, this first one regarding just general weirdness was asked by Gabrielle Jolin, Ford Gonzales, Unuseful Spoon, Aerial, PJ, Sakura, Janie Martin, Courtney Williams, aaand...

Alie: HR Bumga wants to know: What is the weirdest animal you've ever treated?

Dr. H: Probably for me, I would think, a spider.

Alie: [*incredulous*] A spider? What kind of spider?

Dr. H: Yes, we had this tarantula this guy brought in and it wasn't eating like he thought; that was different. I did have to research and think about that a little bit. I mean, he had these big spiders. I don't know if it made the show. I know they did tape it, but I don't know if it made the show. It would get in the web, but it would kind of stand in the corner, it would be there. But the biggest thing is this, his cage was a little small so it didn't need to eat as much, so it was more of a husbandry issue actually. Once I got it out, which was weird, this thing was as big as my palm of my hand, so you know... and it actually kind of shocked me. And then when it bites, it's almost like a...

Alie: *When* it bites?

Dr. H: Yes. Almost like an electrical shock, it's not terribly bad. But that was probably the weirdest. I was wondering why would somebody want a spider, but it was interesting. I think that was probably the weirdest. But the biggest thing is just knowing about what these animals need in captivity. A captive spider obviously wouldn't need to eat as much as a spider that, kind of, lives in the desert or doing everything. So that was pretty weird.

Alie: What about you?

Dr. F: I guess the weirdest... I don't have a spider, but I think because we're in Georgia, whether it's rural Georgia or Atlanta, doesn't matter. I think the camel.

[*clip from Critter Fixers: "You don't see a camel every day." "You don't see many camels." "Surely not in Georgia."*]

Alie: Sarah Trevino, first-time question-asker wants to know: Very important question. Do dogs love us as much as we love them, and do they know how much we love them? Do you think?

Dr. H: I don't know if they know... In veterinary school, we used to talk about the human-animal bond, and I definitely can see it. I think my dog loves me as much as... I think so. I mean, I love my dog a whole lot.

Dr. F: I think they have unconditional love, yeah. I mean, you just think, when you go to work you can have a great day or you can have you a horrible day, and when you get home it doesn't matter. You're going to be greeted the same way with excitement, with love. I don't know the level, but I definitely know they know that we love them and it's unconditional both ways.

Dr. H: Kind of like that movie *50 First Dates* [*clip from 50 First Dates: "Don't call me Luce, I barely know you" "Sweetie, you're sorta dating him." "Wha?" "Sorry I'm not better looking."*] [*laughs*] Every time, it's a new day. They love you like... It doesn't matter. It's the first date every time we come home.

Dr. F: Yeah, that's it!

Alie: Awww! Rachel Weiss wants to know: Why do dogs like to eat grass when they have upset bellies? Or is that a myth?

Dr. F: You know, we used to be, "They have tummy aches, or they have this..." but I've seen dogs that just like to eat grass.

Dr. H: Just like to eat grass!

Alie: Okay!

Dr. H: A lot of times in the wild, a lot of these guys eat a lot of berries, and grass, and different things. So I think it's just a palliative tool.

Aside: And by palliative, they mean it makes the dogs feel better. So, I guess the grass is always greener on the inside.

Alie: Mo Casey wants to know: What is the number one thing we can do to protect the health and well-being of wild critters? And Brianna Moczynski says: This! Yeah. Anything we can do for wild critters?

Dr. H: Protecting the environment.

Dr. F: Protect the environment, conservation, things like the US Fish and Wildlife, organizations like that to try to conserve different species. Those are the most important things. I think a lot of times we can get in trouble too by trying to domesticate everything. And I think we get in trouble then because we kind of mess up the natural balance of things.

Alie: Veronica says: CAT HAIR BALLS! Oh my god they're so gross! Is there anything I can do, or give the fur babies to prevent it, or lessen the amount that they hack up? Did I mention, so gross?

Dr. F: [*laughs*] Yeah, there are different products that we have. Cats are naturally groomers, so they naturally lick themselves and groom themselves. And basically when you see the cat that is ungroomed or not thrifty looking – probably a sick kitty. So they have mats or hairballs. Some of them get so large and heavy they can't groom themselves. But normally they groom themselves and they're going to ingest hair. So there are products that you can give, different laxatives and lubricants that you can give maybe a couple times a week that will help clear them out and they can pass them out in the stool rather than having so many hairballs.

Dr. H: And what are those products, bro?

Dr. F: Laxatone, Purrge... I didn't know we were gonna name products. Mineral oil.

Dr. H: Mineral oil. We gotta give her some uses! [*Alie giggling*] And I would tell her, personally, be thankful because... I'm going to give her a fancy word and she's welcome to google this. It's called a trichobezoar. That is a biiiig [*morphed to extra deep pitch*] BIG HAIRBALL.

Oftentimes we see that in cows. When cows... sometimes these things can be as big as basketballs.

Alie: [*confused and bewildered*] How did it get hair in there??

Dr. H: Because they're licking themselves! So, she's very fortunate that she doesn't have a cow. [*laughs*]

Dr. F: Or maybe she does! [*laughs*]

Dr. H: Maybe she does and she's got a trichobezoar. [*laughs*]

Alie: Heather Shaver has a question, financially: In your opinion, how much is too much to spend on a pet's vet bill? Like, how do you make the decisions, taking into economics and the animal's suffering? And is it good to have health insurance? How do you guys feel about that?

Dr. H: My thought when it comes to that is, definitely, if you can, start out... Pet health insurance has definitely evolved over time. It has evolved over the years, and we have it in our practice quite a bit now. And they usually pay pretty well, but you can't have any preexisting things.

But this is the thing I always ask: "Doc, what will be the quality of life?" Quality of life is everything. I mean, before you get to finance. I have people who come in and they have unlimited funds and they're willing to do anything. But I'll talk to them, at least give them the option. I never tell them what to do, but I explain the quality of life and what will be the quality of life if they choose a procedure, if they choose not to do a procedure, if we keep moving on. It's something you could ask your veterinarian. It's a tough decision.

Aside: This next nephrological question was shared by Joni Waldrup, Morgan Alexandra Coburn, and Samantha J Guenther.

Alie: A few people asked about preventing kidney disease in kitties, and is adding water to their food a good idea? What else can people do?

Dr. H: Low protein.

Dr. F: Yeah. You want to have water available all the time.

Dr. H: Low-protein foods definitely help because proteins have to be broken down. And a lot of times that puts more on the kidneys. So that's one of the things. That's why they have these special diets with less protein and ash. Diet is one big thing that we do see. And I definitely see that angle that we're coming from because we see a lot of kidney disease in animals. And going back to technology, they have a new test, what, SDM...A?

Aside: I know. You want to know what SMDA means. And I looked it up, and it's symmetric dimethylarginine. SMDA.

Dr. H: Which tells us before they even develop it now. [to Dr. Ferguson] What would you say, that test maybe came along about two years ago?

Dr. F: At the most.

Dr. H: Which is just amazing. It's amazing technology, where before, we looked at creatinine and blood urea nitrogen, which tells us, "This animal is in kidney failure." But now, a totally healthy kidney, we can find out those things by just something called a SMDA test. It's pretty cheap. And we recommend doing those as an earlier preventative, at least after, what, six?

Dr. F: Yeah, five, six years old.

Dr. H: Five, six years old, and we'll know it before and we can start making some different medical-type changes to prevent it. So that would be the one thing. Try to do some preventative tests.

Alie: A few people, including Lacey Allain, Jennifer Lemon...

Aside: Kim Bonacker, Katie Viles, Anna Elizabeth, Emily Jean, Demi Espinoza, Jessica Drew, and Justin Darr, who wanted to know about grain-free versus grain-inclusive diets.

Alie: Everyone seems to have an opinion. Nobody knows what to eat. How do you feel about it?

Dr. H: Phew.

Dr. F: Whew. Do we need to go down this road?

Dr. H: Whoo boy. I'll tell you, I'm asked this every day. So, I'll tell you, I don't know the answer. But this is the thought, though, because I've talked to the actual drug reps. There was a test, and there was a trial. And they found that a small sample did develop cardiovascular disease.

Alie: On grain free?

Dr. H: On grain free, right.

Alie: I read that study.

Dr. H: So there was a study... There's been millions and millions of dogs that have eaten this, and this was a small sample. Now, I don't *know*.

Dr. F: One thing I can say is, a lot of times when different fads come out... maybe they're not fads, but things that are for humans, we transition those things right over to the animal world, and we fashion them to make them look pretty, and we label things that are attractive to *us*. They may not necessarily be good for your animal. It may not make a difference, but because they're attractive to... It's marketing. We grab it because "they said it was good for us, should be good for my animal."

Aside: Okay, then this is for all the people who may be ashamed to ask how you deal with a chonk, and when to intervene if your one-emaciated rescue orphan becomes an absolute unit.

Alie: She's, like, 12 pounds. Maybe she's gotten to be about 13 and a half. How much should I be walking a little dog a day?

Dr. H: When you say 13 pounds, is that a –

Dr. F: What breed is she?

Dr. H: Right, is that a *Georgia* 13 pounds where you got a little bit... you been eating some collard greens and a little bit... [*laughing*]

Alie: She's definitely... I got her in July, she was a rescue, and she was *emaciated*, and she's seven. You could feel every bone, and now she's definitely not.

Dr. F: I can tell you one thing that an old veterinarian told me a long time ago: [*drumroll*] You can kill them with kindness. A lot of issues come from being obese and overweight. So just because you're telling me that you *think* it is – it is.

Alie: Okay, okay.

Dr. H: Typically that's how it works.

Dr. F: That's how it works. [*Alie laughing*] You want to be careful because of joint issues, you know, being too heavy and not being mobile when we get older.

Dr. H: Diabetes.

Dr. F: Diabetes is another big thing. What you may want to do is find a diet that's lower caloric value, or maybe even weight reduction, I don't know.

Dr. H: This is the number one question I ask: The food product's fine. What kind of treats are you getting?

Alie: Oh, Greenies.

Dr. H: How many?

Alie: Maybe like three a week. Not a lot, not a lot! But I think I need to...

Dr. H: This is what maybe we would try.

Alie: We both need to go walk.

Dr. H: We're gonna use green, but we're gonna say *green beans*.

Alie: Ooooh.

Dr. H: Yeah. Green beans is a good treat. Let's try green beans.

Alie: Are you supposed to be able to feel a dog or cat's ribs?

Dr. F: Yeah, you don't want to see them, but you want to... if I'm standing behind a dog or cat and I'm reaching on both sides, I want to feel them without having to press too hard. I should be able to feel them by rubbing. If I have to press a little bit, then we got a little bit too much fat there. But I don't want to *see* them, because we're too thin. That's a good way to judge where we are, as far as scoring them, body condition.

Aside: [*in a babying voice*] So, guess who got a treat of a green bean today? And didn't hate it? That's right! Mah chunky li'l love muffin, my small monkey, my li'l smunk.

Alie: What about the best thing about being a vet? What is something that just gives you butterflies and gets you out of bed?

Dr. F: You get to play with the babies every day.

Dr. H: Every day. And it's different. When I'm driving to work, I can be a dermatologist, a cardiologist, an oncologist, a surgeon, a pediatrician, a – who delivers the babies?

Dr. F: An obstetrician.

Dr. H: Obstetrician, I may do a C-section, all before lunchtime! [*Alie laughs*] So that's the best thing.

Dr. F: Yeah. I always say, the veterinarian has a special job, because we can make everyone in the house happy. If you bring me your animal, your dog or your cat, and it's not doing well, and I help you make it well, not only does that dog feel better, you feel better. So we can make the whole house happy.

Dr. H: There you go.

Wow, okay. So we learned that becoming a veterinarian is super competitive but doable, you need to know what normal behavior is for an animal before you can diagnose a problem, sometimes your exotic pet might need a \$20 light to fend off metabolic bone disease, protecting the environment of wild critters is the best thing we can do to help them, even cows get hairballs, low protein foods can help extend the life of our pet's kidneys, and green beans might be a suitable treat for your doggo!

So to learn more about Dr. Vernard Hodges and Dr. Terrence Ferguson, you can visit their website CritterFixerVet.com, or individually you can follow Dr. Hodges @DrHodges_CritterFixerVet on

Instagram. We'll also include links in the show notes to all this. Links to their Instagram and even a link to Dr. Ferguson's book *C is for Critter Fixer*. Thank you Dr. Vernard Hodges and Dr. Terrence Ferguson, and thank you to any new Smologites who are listening. New episodes will be out every other Sunday. We took a break for a little bit because not all of our advertising was kid-friendly, but it now is. So, we're back. *Smologies* episodes every other Sunday. Ads are also kid safe.

Links to the episodes from which we cut down are all available on AlieWard.com or in the show notes. A full list of credits for this episode can be found on there as well since we like to keep things small around here.

And if you listen to the end, you know I give you a piece of advice. And this week's piece of advice is actually about dogs. So, if you see a dog and you want to pet it, you should always ask the owner first. "Can I pet your dog?" And then they'll let you know whether or not the dog is skittish or maybe tends to nip at little hands. So it's always good before you pet a dog you don't know to ask the owner if that's okay. Now we know that, which is great to know.

Until next time, Smologites. Berbye.

Transcribed by Emily White at TheWordary.com

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