

Felinology with Dr. Mikel Delgado

Ologies Podcast

January 8, 2019

Oh haaayyy, it's your stepsister's weird friend who comes over and eats all your good cereal, Alie Ward, back with another episode of Ologies. Also a mini episode went up today about some New Year's changes and they're very exciting, and they're very near and dear to my heart, so please take a few minutes to catch up on that news should you desire. It's a lot of really good stuff, and I'm excited.

So I have been waiting to cover this particular ology for *months* and hot damn, whether you are currently smothered in alive cats or are adamantly a dog or a turtle person, this episode is gonna inform you and endear you to our be-whiskered companions so hardcore. Because cats, you guys, they're not all dicks, we get into it.

Okay but first let's just wild out with a little business in which I thank the Patrons at Patreon.com/Ologies. You guys make this show possible. You're such good friends to this show! Thank you, also, to everyone wearing Ologies shirts and such from OlogiesMerch.com (PS: we now have black shirts available, science goths). And, thank you to everyone who subscribes, rates and leaves a review, which you know I read. Yeah, I read 'em! Yeah, I'm a creep! And this week's fresh review is from #1 Cthulu Stan, who says:

This is the science podcast my soul has craved since birth. It's an intoxicating blend of funny and mind-bendingly strange, 10/10 would recommend to any person, eldritch being, mythological creature, gaping void of existential horror.

All of the above, right here.

Okay, felinology. It comes from the Latin for cat, 'feles' and I started to go down this whoooooo rabbit hole... this whole cat-acomb (I'm sorry) whether or not felicity, like 'feliz,' and happiness, and feline shared an etymology and from what I found they don't, at all, but I did have a galaxy brain moment realizing that Felix the Cat is because of feline. Duh. Like, I never got that. Also pocket knowledge for your next bar trivia slaughter: A group of cats can be referred to as a clowder or better yet, a glaring. So, I hope that helps you somewhere in your life.

But it's taken me 70 episodes to cover Felinology because I just wanted to get the best person for the job. Boy howdy, did I. She is a Postdoctoral Fellow in Animal Behavior in the School of Veterinary Medicine at the University of California at Davis studying... kittens! Neonatal tiny kittens! And she got her bachelor's in Psychology, and then she got a PhD at Cal Berkeley in animal cognition, and she's co-authored various papers, for example — *Cat play: A review of its development, functions, and future research considerations* and *Beyond bossy: Feline status aggression*.

She also is the co-author, alongside Animal Planet's *My Cat from Hell* host, Jackson Galaxy, of the book, *Total Cat Mojo: The Ultimate Guide to Life with Your Cat*. Woman wrote the book on cats! And

if you deconstruct her last name, phonetically, it sounds like OF THE CAT in Spanish. I mean, come on!

So, I went to her home outside of Davis, California over the holidays. I petted her cat, first off, and then we chatted about cattitudes, litter boxes, how to keep your BFF from sitting on your face at 3 in the morning, cats on toilets, LOL videos, cat training, feral friends, optimal cat habitats, who will eat your CORPSE if you die alone, kitties and their domestication history, and cats: are they dicks or what? Stretch out on a patch of sun and learn what's happening in their minds with author, scholar, and felinologist, Dr. Mikel Delgado.

[Intro Music]

Mikel: It's very common. People think it's Mee-kehl, so yeah...

Alie: Yeah, I wasn't sure. And doctor, of course. And so how long have you been studying cats?

Mikel: So, coming up on 20 years. I got my start at an animal shelter in the behavior program there and got a PhD in animal behavior at UC Berkeley where I primarily studied squirrels, but I also looked at the cat-human relationship while I was at Berkeley and I knew when I finished my PhD that I wanted to finally have the opportunity to do research with cats. That's one of the reasons that I was really excited to do my postdoc at UC Davis where there's a veterinary school and there's also an animal behavior programs, so it's kind of the perfect place to be studying animal behavior, and the perfect place to study cats.

Alie: Are cats and squirrels alike in terms of behavior at all?

Mikel: I mean, I guess if you think of them as naughty. [laughs] I think they both evoke strong emotions in people, like people either really love them or really hate them, but they are kind of territorial. Their social lives are different, but neither of them lives in a pack. They're not animals that, kind of, naturally have really strong relationships that make sense to us, because we're very used to a group kind of structure where there's a clear hierarchy, and I would say neither cats nor squirrels have that kind of relationship.

Alie: So are cats more of a lone wolf than wolves?

Mikel: I think cats have this reputation for being solitary, and what they are is they're solitary hunters, so they don't need other animals to survive, right? They hunt very small prey that they can catch on their own and they don't share it. Which is different from larger animals that hunt and capture large animals. I think because of that cats got this reputation for being asocial where they don't need anybody, and we know that their social lives are definitely more complicated than that.

Aside: So it's like when you go out to a nice Chinese restaurant and you say, "should we all get a bunch of dishes, do family style?" and cats are the friends who are like, "Nah, I'm just gonna get my own noodles... Not into it." Solitary hunters, got it. I can respect that. Now this next tidbit: it's amazing, relatable, and dare I say, it's a little catty.

Mikel: Cats will form what call preferred associates where they have certain cats that they like to hang out with. Some signs of them being friends would be, they groom each other, they sleep together, touching, or what we call pillowing, where they're actually using another cat as a pillow. You might see playful behavior, and in general you don't see a lot of signs of antagonism, although I'd say just, you know, we don't get along with our siblings 100% of the time; you might see the occasional tiff.

Alie: So they have cliques!

Mikel: They do; and you'll see if you have a group of cats that, say, if you live with five cats, you might have two cats that get along with each other and not with anyone else. And the other three cats could be composed of: one cat who doesn't get along with anybody and another pair who get along, or maybe there's one cat who gets along with everybody, but the rest of the cats don't really like each other. So it can be very complicated. [*clip from Mean Girls, "That's against the rules and you can't sit with us."*]

Aside: Okay here it is, this is the secret: what makes a cat an asshole or not.

Mikel: What we do see is that cat groups are most successful when they have enough resources. So, you'll see feral colonies that exist because there's either plenty of prey around or there is human-supplied food. There has to be enough to go around, basically, for them to tolerate each other and then have the opportunity to become friends! If you don't have enough resources, either in your home or outside, or there's too much competition, they have to do too much sharing of those resources, then they tend to either have antagonistic interactions or they'll just avoid each other.

Alie: So they get bitchy when there's scarcity.

Mikel: Exactly. Like all of us. Right? If there's not enough cookies to go around, there's going to be...

Alie: I'll cut someone.

Mikel: Yeah, exactly. You don't have to be that person that leaves the last cookie, you know, everyone's kind of staring at the last one, like, who's going to eat it? No, you can just grab it.

Alie: I'll throw hands for it. So, getting back to your history, you have been involved with cats for 20 years now. Can you take me back to when you first, kind of, realized that you were maybe more of a cat person, or when you really started connecting with them?

Mikel: Yeah, I mean I've always been obsessed with cats since I was a little kid. I think my mom probably got sick of me begging for a cat. And finally when I was a teenager she relented, even though she was allergic. I don't know, I've always just thought cats were amazing. I loved all animals, but I definitely feel awkward with dogs, which is funny because a lot of people say they find cats hard to read, but I actually find the opposite is true. I can't understand dogs. Like, they don't purr, I don't know, I feel awkward. I feel they're awkward. Whereas with cats I just have always felt in tune with them and they're kind of easy to read for me.

But, you know, I definitely was not that kid who was like, “oh, I’m going to be a scientist when I grow up.” I really didn’t have a plan or a clue. I dropped out of college when I was 21 because I really didn’t know what I wanted to do. Well, what I wanted to do was move to California and be in a rock band, which is exactly what I did. I grew up in Maine and I basically was like, “I’m moving to California!” And so I moved to San Francisco and did not have any kind of plan that I was going to work with cats even though I loved cats. I worked at a health food cooperative, played in bands, I volunteered at a punk rock record store. So, my life was very much a revolving around kind of this punk scene and collective work environments. And it wasn’t until that cat that I had begged my mom to get me when I was a teenager... he died in 2000.

Aside: Oh nooooo. [*super sad, low-pitched, and drawn out*]

Mikel: And I decided to start volunteering at the local animal shelter, which was the San Francisco SPCA, just because I wanted more cat time. I had another cat at home but I knew that I just wanted to... I mean maybe I was on the market for a new cat? You know, which is... if you work in a shelter you see them all, you get first dibs. But you know, it was also just kind of missing that connection I had. It was actually a friend of mine, Casey, who was like, “Oh, you should come volunteer at the SPCA,” because he was volunteering there, and basically that just changed everything for me. And I realized that first of all, “oh, you can do this for a job? Like, you can work with animals? Cool!” [*DJ airhorn!*] And at the time the SPCA had a pretty involved behavior program. They had a whole program for cats that was, first of all, rehabilitating and working with cats in the shelter that were having difficulties coping.

Aside: So Mikel worked at the SPCA helping these seemingly impuurrfect kitties who were having a hard time getting accepted into loving homes. But speaking of that: let’s take a quick detour down an old cobblestone alley, into the past. So when did cats go from African wildcats and European forest animals to the little buddies who watch us pee sometimes and who we love more than our blood relatives? Let’s discuss domesticity.

Mikel: Okay. So the domestication story for cats is a little bit complicated, and depending on which person you talk to you, the question is, are they truly, fully domesticated? Because they don’t really meet some of the criteria for domestication, and their path to domestication was not a traditional one where we didn’t take them and modify them for human use. It was instead what they call commensalism where the cats benefited from human settlements, so that is really when cats started becoming domesticated when humans became, you know, Agrarians and started settling, and had large stores of grains which attracted rodents.

So, I think a lot of people think, ‘oh, the cats are doing humans a favor by catching rodents’ but it turns out that humans actually had other animals that did that just fine, like terriers and some of the weasel-type animals that are good ratters, so we didn’t necessarily need cats to do that for us. Cats actually benefited more from the relationship than humans did. What we believe is that cats that were taking advantage of this human resource, which was basically, indirectly leading to lots of mice and rats

gathering around humans. Cats who could take advantage of that, and were friendlier, were more likely to be maybe tossed a scrap meat from a human or given shelter by humans. So probably over time we helped cats become more tolerant of people and of each other.

And so, the question of whether or not cats are truly domestic... There's lots of reasons to think that they're not as domesticated and one is that they can survive pretty well without human support. The last estimate I read was that 97% of cats choose their own mates. Domestication is usually under much more controlled breeding. So in that respect it's more like they've become more tolerant of people and other cats over time and we've become more interested in them over time. It's only in the last, say, 50 years that we've, kind of, imposed this new lifestyle on them where we're keeping them indoors exclusively.

It's a pretty rapid change given that they're domestication is estimated over the past... like 8,000 or 10,000 years is, kind of, the range where you start seeing evidence of them being kept as pets and you see fossils where they were buried with people in the Middle East. But really only last 50 years that we've, kind of, asked them to stay inside all the time.

Alie: Oh. Because they were really more like barn cats and outdoor cats before that? The last 50 years, that's nothing!

Mikel: And that was really sped up by the invention of kitty litter. [*clip of TV commercial, "I'm Ed Lowe... Since I invented cat box filler in 1947, I've been improving it ever since. You might wonder what motivates a man like me. Simple! I love cats."*]

Then, recommendations by various veterinary and humanitarian groups that cats should be kept exclusively indoors to prevent injury, prevent predation of other animals. I think part of why we see that struggle a lot of the times is that we've asked them to change their lifestyle very rapidly and yet the person doesn't want to give them a litter box or cat tree.

Alie: So you have to meet cats halfway more than you would a dog.

Mikel: Yeah. You know, I think there's been a lot more selection with dogs for things even though it might seem really minute, but like, facial expressions. Right? So dogs have a lot more facial muscles and we probably selected them for that because we like the reflection back of human expressions, like smiling.

Alie: And their eyes having white so that we can see where they're looking. That's so crazy!

Aside: So what's more important to cats? Their owner or their living space? If a cat had to get a full belly tattoo of one of those things, surely it would be a portrait of their owner with the inked inscription, 'Snug Life.' Not a tattoo of the couch, right?

Mikel: So we know that cats are really territorial, and so what's more important to them than anything is the familiarity of where they live. Even before they'll form attachments with people they need to feel comfortable in their space. It's almost like we're part of the territory, especially because most cats live inside. This is where they live, right? And so

we're just part of their space. It's not like we're separate from it, we're a part of it. And that's what their primary attachment is, to their territory. [*clip from the Step Brothers movie, "this is MY house now"*] So if you rip a cat out of their home and away from their people into a strange environment with a bunch of other animals that are freaking out, they're going to be really stressed.

Some cats just had a lot of difficulty coping with that change. So they'd be very fearful, they'd be hiding, some of them would maybe be biting and scratching if you tried to pet them, which is not great for getting adopted, right? People who come into a shelter, they want to be hands on and they want the cat that's going to come right up to them and, you know, interact and purr, be friendly...

Alie: Not draw blood.

Mikel: Drawing blood is bad for getting adopted. Although those cats eventually will get adopted, but usually just because they start adapting to the environment. So, part of our goal was to just help them adjust.

Aside: Mikel really had a passion to make sure all these kitties found homes, and she found that a clutch part of the strategy was just educating the public to be fluent in kitty. She loved it.

Mikel: So we had classes for the public on cat behavior and how to keep your cat happy. Then we also had a behavior hotline where people who were having problems with their cats could call. We would get over 100 calls a month. I mean, there's a lot of people out there with cat questions and cat problems, or they just don't understand their cat's natural behavior and why their cats doing some of the things they would do. But one of the things I learned during that experience was I really wanted to see the home environment, like what's going on in the home, or be able to talk to everyone in the household at the same time.

And so in 2008, one of my coworkers and I left the shelter and started our business Feline Minds. And so we offered consultations, typically in home, although we do a lot of Skype and phone consultations nowadays as well; where we go to people's houses, you know, check out the scene, meet their cat if the cat's open to it, and then give them a modification plan to help them solve a behavior problem.

Alie: Oh, so you realized from being at the shelter that you could make a job out of this.

Mikel: It's a semi-living? Yeah. I mean, I remember the day I came home from the shelter and said to my boyfriend, like, I want to be a cat behaviorist. And he was like, "cool, let's make it happen." So, yeah, I really just sunk myself into the field of behavior, and it was around the same time that I started the business that I realized that I wanted to go back to school. I dropped out of college when I was 21, and here I was realizing that even though I learned a lot about cats and behavior, working at the shelter, that there was also this other world of formal behavior theory. And perhaps to do some of the things I wanted that I needed that college degree that I'd blown off when I was 21 to go play rock music.

And so now I was like, “okay, if I'm going to really be serious about being an adult and having a real job, maybe I should go back to school.” And so I just went to finish my bachelor's degree in psychology with an emphasis on animal behavior. And then I was like, “wow, being in school is awesome. I want to do this forever.” And so I decided I wanted to get a PHD, which takes forever, so I was able to stay in school forever. And throughout grad school I did the consulting business, which is still going, so, you know, still helping people with their myriad behavior problems with their cats.

Alie: And now doing postdoc, you mentioned that you work with neonatal kittens. So...
[*high-pitched squeaky modulator*] tiny widdle kittens!

Mikel: Yeah, it's gotten even cuter. When I was doing my PhD working with squirrels, I didn't know if it could get cuter, but I'm now doing a postdoc with kittens. It did get cuter.

Alie: And so what does your job typically involve?

Mikel: It really varies. In the summer when we were collecting data with the neonatal kittens, I might literally get a call from a rescue group that was like, “We just got some orphaned kittens in. We need a foster home now,” so then it's coordinating with one of the other rescue groups to find a foster parent for these kittens, and coordinating a lot of things. We were taking blood samples on these kittens because one of the things we're interested in is whether or not being separated from their mom at an early age has any possible effects on their health.

We're looking at a biological marker called telomeres, which are caps at the end of your DNA, and these have a protective effect when your cells replicate. They, kind of, prevent the important stuff from getting cut off because, basically, some stuff gets truncated when your cells replicate. What you want to get truncated is, kind of, the extra garbage at the end but not the important stuff. So the telomeres are, kind of, the extra stuff at the end.

Short telomeres are associated with, basically, a shorter lifespan. We see shorter telomeres in multiple species, including humans that have chronic disease, that live under chronic stress, have been subjected to adverse early childhood experiences. And so we're really looking at early maternal separation as a possible adverse experience for these kittens. We don't know... we were collecting blood from these kittens in their first week of life when they're very, very tiny, like 100 grams. And then right before they were getting spayed and neutered at, like, 8 to 10 weeks of age.

Aside: So for us metrically-challenged Americans, 100 grams is about the weight of half a medium-sized apple, or 1 stick of butter, or 50,000 termites. Mikel's lab work involves comparing the blood and telomeres of baby kittens separated from their moms with a control group of baby cats. Her daily work life involves coordinating foster volunteers who collect info about what goes into the kitties, and what comes out of the kitties, incubation efforts -- keeping the neonatal wee ones in special contraptions that are 90 degrees and 60% humidity. She notes: it's very similar to a bread machine. And sometimes she's running all over the place, driving vital supplies around town. And I

asked Mikel what felinological charity she'd like a portion of this episode's ad revenue to go to and she said KittenCentralofPlacerCounty.org, which I will link in the show notes.

They're helping over a 1000 displaced cats from the Camp Fire and their mission is to "Reduce euthanasia rates for medically dependent neonatal kittens through action and education." So that is, kittencentralofplacercounty.org. Okay, back to Mikel and her research. Some of it is... I'm not gonna lie, a little shocking. Little bit of an ohhhh noooooo.

Mikel: Other days I'm literally just sitting in front of a computer typing in data into Excel, or reading research papers that are relevant to what I'm doing, or watching videos. One thing that came out of this research that we started doing this past summer was that a lot of orphaned kittens... [*high-pitched squeaky modulator layered over Mikel's normal voice*] suck on each other's genitals. So, I've been watching a lot of semi-pornographic videos of kittens... um... goin' to town on their litter mates' crotches. The sad thing is that they will do it to the extent that they damage and injure their litter mates that they're sucking on. So some of these kittens have to have their penises removed. It's not a good scene.

Alie: No, that's bad on bad on bad.

Mikel: It's really bad. The videos are very risqué. Like, I don't know if I could show them in a mixed audience with children or whatever.

Alie: When you said you watch a lot of cat videos, that is *not* what I was thinking. Most people's cat videos are like, "Tsk, he knocked somethin' off the shelf again!" Not a, "he ate his brother's penis." Ooof! So they are just looking for anything that's like a nipple.

Mikel: Yeah. What it really just tells us is that the nursing instinct is very strong for obvious reasons. You need to nurse to survive, but it's obviously not just satisfied by food and there's probably a lot of other reasons that animals do it. We know that there's a lot of non-nutritive nursing that goes on. Who knows what the actual experience of sucking is doing for their little brains as far as releasing endorphins?

Alie: Oxytocin maybe?

Mikel: I mean, we don't know. Some kittens are victims *and* suckers, so you'll have like a little daisy chain of kittens.

Alie: [*sad and horrified*] It's like Human Centipede! [*Transcriber Note: if you've gotten this far and don't know what this is: for the love of all that is kittens, don't look it up.*]

Mikel: Because we became aware of this problem and there's very little information about it, no one's researched it, and no one's really come up with effective solutions for it. That's become one of the focuses of my research. Hopefully next year we'll be looking at some possible prevention strategies, including a surrogate mother-type situation. And then you have other people that do things like put clothing on the kittens, which, you know, ethically is a little questionable. May not be comfortable. Of course it's better than the kittens, like, yeah, basically destroying their litter mate's junk.

Alie: But I'd rather wear pants than have someone eat my dick off my body.

Mikel: We're trying to come up with some strategies to fix that problem and also try to understand what it is about these particular kittens that makes them more prone to this behavior.

Aside: Even though research like this can be a little heartbreaking, and honestly pretty gut-wrenching, Mikel says that after working with lab animals, like pigeons, in undergrad, she's a lot happier now doing research with wild or domesticated critters because she just loves animals -- especially cats -- and she wants her research to be good or at the very least neutral for the individual animals involved.

So let's look at the bright side: the kittens in her study end up adopted! So that's a happy ending. Oh and I asked what the outcome of the telomere length was and she says they're working with a genetics lab and should have the results in the next few months. So if you are around kittens all day, what happens in your off hours?

Alie: When you need to decompress after a particularly long day or project, do you watch cat videos like the rest of us do?

Mikel: Oh yeah, absolutely. I mean that's what Facebook's for.

Alie: Why do you think cat videos do so well? And do you have a favorite? I'm just going to ask you stupid questions, I'm sorry.

Mikel: Okay. So I have mixed feelings about cat videos because I think I'm more sensitive to their body language than people are, people that don't know cats as well. I sometimes see videos where the cats are actually showing signs of stress and people think it's funny. I also don't like cats dressed up in clothing, so... That's just philosophical. I don't like it when the cats are being physically manipulated. I like the, you know, cats shredding rolls of toilet paper. That never gets old to me.

Alie: How can you tell in a cat video if the cat is stressed?

Mikel: Well, I'm always looking at: is the cat showing signs of relaxation or showing signs of tension? What's their body doing? Does it look like they're being either threatened or coerced into something, cornered? If it's a cat who's showing signs of aggression, then I feel like that is not a good situation, cats being exploited. And like I said, people don't recognize that aggression, growling, hissing, all of those behaviors stem from fear. [*clip from the Wizard of Oz: Dorothy to the Lion, "Why, you're nothin' but a great big coward!" Lion, "I even scare myself."*] Even a cat who is actively attacking someone, the root of that aggression is always some type of anxiety or fear, and that means the animal is experiencing some level of distress.

Aside: Just like humans! Every time some jerkoff yells at you in traffic it's just because they're afraid of merging too fast and getting in an accident! Or they might be scared of being late somewhere and getting yelled at. And if you're the one screaming at people in traffic, here's some news, my fragile human: You're just afraid of things. Maybe take a minute, look inward, find some coping strategies; you can listen to my two-part Fearology episode with Mary Poffenroth, just sayin'. Calm it down.

Okay back to cats being scared for internet likes!

Mikel: So to me it's just not funny. If it's a cat who's trying to make a jump from the kitchen table to the couch and they don't quite make it, you know, as long as they're not injured. Physical gags. I like old style comedy. *[laughs]*

Alie: *[laughs]* And I do have a question about how they are able to land so well. Did you ever have to study their landing capabilities?

Mikel: No, but you know, they do have an amazingly flexible body. They have no collar bone, so that allows them to... If their head can get through, if their face is through, like under a door, they can just squeeze right through, which is why you shouldn't leave your window open just an inch thinking your cat won't get out. *[Ron from Parks & Recreation, "I'm out."]*

They have this amazing sense of balance. I mean, they have to catch trees. They have to be able to calculate distance when they hunt and be able to pounce right where they think they are. They have that amazing tail that helps them right themselves. A tail is a good way to orient your body. It's kind of a control to allow you to right yourself. What's interesting is that there's something called High Rise Syndrome where cats who fall from a higher distance often experience fewer injuries than cats that fall from a shorter distance.

Alie: So they have time in the air to go *[comically]* woaa-aaahhh!

Mikel: *[laughs]* "Okay, this is what's happening." Probably not a lot of time but enough.

Alie: Now, you have a cat. Let's say someone has a cat. How do they know if their cat is happy? Is sad? Is bummed out? Needs something? What body language markers are so important to know if you have a cat?

Mikel: First of all, is your cat doing the basics? Are they eating, using the litter box, and are they using their space? A cat who's spending all their time under your bed, probably not happy. A cat who is freely walking through the space, probably more relaxed. Specific body language we're interested in... for cats, when they're feeling friendly, they'll do what we call the 'tail up gesture.' This is a friendly greeting, and the tail is completely up, maybe in this, like, question mark, but that is something you'll see when they approach either a friendly human or friendly other cat, they will be exhibiting that body language.

You can also see when they're laying down, they should be either on their side sometimes or paws tucked, which tells you they're not kind of gearing to run away. *[old cartoon 'running away' sound]* A cat who is feeling defensive or unsure is going to be, kind of, crouched in a tense position where they could easily just, *pshoo!* take off if they needed to, as opposed to, "I'm laying down and just kinda melting in the sun over here. Therefore I'm not feeling any threat."

Then there are more subtle things like, are the pupils relaxed and somewhat dilated? I mean, of course according to the lighting in the room. Are the ears up? Ears up is more relaxed, can be alert as well but certainly flattened ears are a sign of a cat who's making themselves smaller. You'll see things that cats do when they're fearful, aside from

hiding, like tucking their tail, putting their ears back, hunching. So they're trying to, again, make themselves seem smaller.

A cat who is on the offensive might be trying to make themselves look bigger. So that's kind of the classic Halloween pose where they're, kind of, puffed up. And you'll see that more reserved for fighting with other animals where they're trying to bluff, like, "I'm big and scary. You shouldn't fight with me because [*deep, low-pitched voice modulator*] I'm big and scary." For cats in a home, it's really more about using the space, doing their normal kitty things. Purring is great, eye blinking is a sign of relaxation and a sign of trust. We know that staring is threatening to most animals, so you shouldn't stare at your cat.

Alie: Oh really? So, don't make loving eye contact with your cat for too long.

Mikel: Eye contact's fine, but make it soft and blink your eyes a lot, as opposed to hard stare. A Hard stare is what is threatening for them. And you'll see cats that don't get along, will avoid direct eye contact, or the one cat will be staring you down, or a staring the other cat down, like, "I've got my eyes on you." Eye contact is very important. Cats may be fearful of particular people in the house. Toddlers can be difficult for cats to cope with, but it really depends on the context and the cat's ability to escape and deal with the stressor in their environment.

Aside: To deal with it, some cats get high as fuuuuh. Like literally, elevated. Top of the fridge, et cetera.

Mikel: A cat who has a cat tree or shelving and can get up high away from a dog or a toddler is going to be able to cope with that situation much better than a cat who doesn't have those escape routes.

Alie: What do you do when you walk into someone's house who has a cat? How can you make the cat dig you? Is it better you get low, not look at it? What should you do?

Mikel: You should ghost them.

Alie: Really?! You should just ignore them a little bit?

Mikel: Ignore them a little bit.

Alie: So the opposite of a dog, because the dog would be crushed if you walked in and you're like, "What dog? I don't see a dog."

Mikel: I'm a dog ghoster for sure.

Aside: Okay, so, what we've learned: Just because they're not dogs, doesn't mean that cats are assholes. They could be scared, or just territorial. But, why do cats like you to be an asshole to them? Why do we have to play hard to get like it's 2007 and that dating book *The Rules* just came out, and we're not supposed to accept a Saturday night date with a cat if they ask after Wednesday. WHY MUST WE FEIGN ALOOFNESS WHEN WE WANT LOVE?

Mikel: For cats, yeah. Research has shown that they prefer interactions with humans where they control the interaction, when they initiate and not the human. If a person approaches a cat and pets them versus sitting back and letting the cat come to you, the cats who come to you, you're going to have a longer interaction. It's going to be more positive, which is pretty funny. What I would recommend if you do want to greet a cat is get down on their level, offer a finger or your hand to them, let them sniff it, and then let them decide if they want to rub against your hand, or come closer, or if they're gonna just, you know, "Okay. Keep your distance."

Aside: Let's say you adopt an elegant, furry enigma and it's so sweet to you but it hates your brother. Or your child. Or why does one cat file a lawsuit against you when you turn on the vacuum but the other is chill as hell about it?

Mikel: As far as your question, do cats prefer certain types of people over the others? You know, some of it is probably due to socialization. Cats have a socialization window that's really short and early, so between two and seven weeks is the ideal time for them to be exposed to different types of people, different animals and different experiences, like sounds in your house, like your coffee grinder or a blender. Unfortunately, most cats don't get adopted between two and seven weeks of age because they really need to be with mom still, or they're still on foster. Or they're not even in the rescue group yet, they're still out in the cabbage patch being wild.

Unfortunately, a lot of cats are what we would consider slightly under socialized. They didn't get a lot of exposure to lots of different things when they were young. For dogs, their socialization period is later and longer. So it means that they're more flexible and adaptable because they have this... You can take a slightly more laid-back pace with socializing them. They just have more opportunity to get exposed to different people, different things. A lot of cats probably grow up in a very quiet environment, maybe they're exposed to one person who's bottle feeding them at first and then taking care of them. When they get into a home it's like, "holy shit, what are you?"

So yeah, I think some cats prefer women because women have higher voices, we're quieter, our footfall is softer. We're not as threatening. And I think what's also important to consider about cats is that we think of them as predators, right? That's very much our focus on, you know, 'keep a cats indoors, they're killing birds" and they're hunters, and that's natural for them. But they're also prey animals, so they're not an apex predator. They're vulnerable to larger animals, including humans, also dogs. More outside environments; wolves, possibly even hawks.

So, they're always on guard. They're not going to be that relaxed, like, sleepy lion that we often think of them as because they never know when someone's going to come and eat them. That is why I think the kind of 'scaredy cat' stereotype prevails, [*Cowardly Lion sobbing*] is that they have to be cautious.

Alie: They're just watching their back. So you have this really, kind of, delicate balance of hunter and hunted in them. They're complex, psychologically.

Mikel: Yes they are. People really... because they don't understand cats, they like to project thoughts onto them. It's like they're, "I don't understand you. So I'm just going to make up stuff and hope that it is right. So I'm going to think you want to kill me." You know, or think that you're lazy, or you think people are stupid. I think a lot of the internet jokes about cats are that they're assholes and they want to kill us, they hate us, they know we're calling them but they just ignore us because they're assholes.

Alie: Right. "They're judging us all the time."

Mikel: Judging. Exactly. I mean, they probably are judging us all the time.

Alie: As we were talking about this, your cat has now hopped on the table.

Mikel: She is going to, perhaps, make an appearance.

Aside: Okay, so at this moment a wispy, white and gray li'l animal princess named Clarabelle suddenly appeared on the table. Just materialized. She's tiny, and beautiful with big green eyes, and I wanted to [*silly auntie voice*] scoop her up and stuff her in my sweatshirt and demand that she love me back. But, as I've recently learned, cats are not down with that vibe.

Alie: Helloooo! She's so pretty.

Mikel: She's very sweet.

Alie: And she's 15?! Okay, [*quietly*] I'm going to put my finger out. She can smell my finger. She's smelling the mic. [*gentle sniffing sounds*] Hello! Now... should I not pet her?

Mikel: I think the other thing about 'the laws of cats' is that the best thing to do is know the cat you're dealing with. So, we know from science that cats prefer to be petted on their head, like their cheeks and forehead, and that everywhere else is kinda, "eh." But some cats love belly rubs, and you know, there's only one way to find out which is: pet your cat and see what they do. If they tell you they don't like something then don't do it again. If they seem to like it, try it again and see.

Alie: So they're very individual.

Mikel: They are, I mean just like we are. Thinking of them as individuals is very important to understanding them and their general, kind of, guidelines that apply. But that doesn't mean that your cat is going to, of course, fit into every single one of those slots.

Alie: And when you're thinking about making your environment more comfortable to them, what kind of tips do you have?

Mikel: You know, the first thing is embrace that your house is going to look like you live with a cat. [*audience applause*] You know, it really drives me crazy when people say, "I don't want my house to look like I live with a cat." Well, why do you have four cats, then? Like, I'm sorry, but... You need to have a litter box that's accessible and not in the garage, you know, with some like 10-mile trail, and walking through a billion cat flaps to get to. And you need vertical space. You need to create spaces for your cat, and a lot of people are like, "oh, he just sits on the couch with me." What if he doesn't want to share the couch

with you? He wants his own space! You're not going to sit on his cat tree, so give him a cat tree.

It's definitely critical for a few reasons. One is that we're increasingly living in urban spaces that are small, and we want to have multiple cats, and we're trying to get them to share smaller and smaller spaces. So, going vertical is a great way to add to your square footage as far as the cats are concerned. You can have two cats literally on top of each other on a cat tree! They're sharing the same square footage, but they're not bothering each other. I think, you know, making it useful as well, like don't stick the cat tree in the back corner where they can't look at anything. Put it by a window where they can watch birds, put it in a sunny spot, make it something that's appealing to them.

Aside: Quick aside, I will say that when I walked up to Mikel's house, I noted a single, tall carpet-ensconced cat tree right in the front window, as if it were Cat Tree season and this was a Macy's window display. I was like, oh, hello. Oh, and right in the sun. I wondered if cats like that? TURNS OUT: YES. Like duh, how much better is a window seat than a middle seat? How have I never considered this before? Also, this part about heat was new science kitty information and it forever changes the way I look at cat behavior.

Mikel: The other thing that I definitely recommend for making your cats comfortable is a heated cat bed. Cats have a thermoneutral zone that's higher than ours. A thermoneutral zone is, basically, the temperatures at which you're not working to either warm up or cool off. So, we're not sweating, we're not shivering, we're just relaxed. And for humans, you know, because we wear clothes, our thermoneutral zone is pretty low. High 60s, low 70s is where we're comfortable. Cats, it's like starting in the mid-80s.

Alie: Really?! Oh my gosh. Because, but they're nude, but they're also so fuzzy. They're constantly in a fur coat!

Mikel: They *are* fuzzy. They're definitely not... They didn't necessarily, you know, imagine themselves living in chilly, frigid climes, except for... Certainly there's long-haired cats that, basically, were domesticated out of certain areas of Eastern Europe where they have longer, fuller coats. But your average cat is going to be much happier at a warmer temperature. Now, if you get a heated bed, will your cat stop sitting on your lap as much? Maybe, because the bed is warmer than you are now. I do think that it really makes them happier. It makes them more comfortable. There's a reason that cat's congregate around heating vents. They love to be hot.

Alie: Is that why they want to come on your laptop?

Mikel: Sit on a laptop, absolutely. Cable boxes, stereos, computers, laptops. If it's warm they're going to try to sit on it.

Alie: They're not just trying to cock block your work.

Mikel: Well, you know, the other thing, of course... the other motivating factor is human attention. What are we staring at more than almost anything? Our stupid-ass computer screens. So if they can somehow get in there like, "Hey, will you give me some

attention?" You know, cats will get attention when they can, and so the other question I get asked a lot is, why does my cat follow me into the bathroom and try to sit on my lap while I'm taking a dump? It's because it's the only time that you're not running around, texting people or... maybe you are texting people. Your attention is not divided and you can't get up and do something else. So they're gonna grab a little love while they can.

Alie: So you're held captive by the toilets. They're like, "is this a good time? Is this - you seem to be stationary. Let's talk about me." Oh my God speaking of bathrooms, how do you cultivate the best litter box scenario and also have your house not smell like a litter box? Your house does not smell like a litter box.

Mikel: I appreciate that. I clean the box daily. Just for the record, there's litter box around the corner. I have a litter box in my living room. I practice what I preach. I have three litter boxes in my relatively small house for my one cat. So, you know, there's kind of some basic rules for litter boxes, like have at least one box per cat.

Aside: *[with audience cheering, like Oprah]* YOU GET A LITTERBOX! YOU GET A LITTERBOX! YOU GET A LITTERBOX!!!

Mikel: More is even better. If you have two cats, three boxes would be ideal. Keep them clean. One of the reasons I don't recommend covered litter boxes is, I mean, it's up for debate whether or not cats don't like the cover or not. I mean, the cover definitely limits their ability to move around and find a clean corner and feel comfortable. But it also means that the owner is not cleaning the box as often. There's actually research that showed that cats with litter box problems with covered boxes, the owners were cleaning the box around every five days. *[clip of Luniz's' song, "I got fiiiiiiive on it"]* Because, out of sight out of mind.

So, I actually prefer, like, have it where you live because you will keep it clean. It should be accessible to the cat. I think because we don't like to take a dump in front of other people, usually, we think that the cats want a lot of privacy. And so people hide the box in some back room next to the washing machine, or in the garage because they think the cat needs privacy. The cat does not give a care. They will take a dump right in front of you. It should be... obviously, if you have a home that's heavily trafficked, then you probably wouldn't want the litter box in the middle of the most trafficked area of your house. Quiet but not too far out of the way. It should be accessible and easy for them to get to.

And just like we want a bathroom on every floor of our house, your cat wants to litter box on every floor of their house. And this is especially important if you have a cat who is either elderly or a kitten because access is going to be important. As far as other aspects of the litter box, most cats prefer unscented sandy-type litter that clumps. Really, the biggest thing is scooping it. There was a study done by Purina a few years ago that was actually pretty genius. The main question was whether or not cats were willing to share a litter box with another cat.

Aside: Mikel told me all about this study in wonderful, disgusting detail but Imma summarize it for you: cats prefer a clean litter box over a dirty one. Not any breaking

news there. But then a researcher made odorless fake 'number 1' and fake 'number 2', little decoy turds if you will, and between the real stinky stuff and the fake non-stinky stuff... You ready for this?

Mikel: So the question was really, does a stinky box bother cats? And it turns out that what they really don't like is trying to, you know, basically, walk around these bombs in the box that are creating probably a sensation that is unpleasant for them when they're scratching and digging around. So the most important thing is just scooping it a lot.

Alie: Scoop that box. What do you think the biggest myth about cats is? What's the biggest flimflam you'd debunk?

Mikel: Let's see. Well, I think one of the things I always encourage people to recognize is that cats are not small humans and they're not small dogs. I also think probably the biggest myth is that cats can't be trained. A lot of people don't realize that you can change their behavior. A lot of cats end up in shelters because of behavior problems and a lot of these behavior problems are fixable. See, you're surprised!

Alie: I am surprised. Also, can you train them to use the toilet? Do they hate it?

Mikel: Okay. They hate it. You can. I mean, you can train them to do anything under coercion, right? And I won't say they hate it. There's certainly the rare cat out there that just spontaneously uses the toilet. And if your cat does that, great. But I would say, still have that litter box handy. I've definitely had clients who had trained their cat to use the toilet and now their cat is peeing around the house. It's like, just give them a litter box.

Aside: Or maybe if your cat is very fancy, give them a glitterbox. Just kidding that's a very bad idea, not matter how into disco they are. And sidenote: I did some research to find out if kitty glitter is a thing and found a blog post from a cat owner all about a new Glitterbox brand sparkly gold litter that promises 'every scoop is like a treasure hunt.' And one might be inclined to fall for it, but the post was made on April the 1st and to really, uh, *gild the lily*, the brand was named 'Jester' so yes, that was a prank, and no, disco shit boxes are not a thing. On the topic of falsehoods:

Mikel: But back to this myth that cats can't be trained. Probably one of the more common reasons that we get called to help people is that their cat is, for example, waking them up at three in the morning for food, or to be let out, or just to be an asshole. It's actually a relatively easy behavior to fix compared to things like cats fighting. Some of it is training, and training your cat when to expect attention, when to expect food. And a lot of people inadvertently train their cats to wake them up. So it's actually that they're reinforcing the behavior because typically when a cat is walking on someone's head at four in the morning, or meowing for food, the person gets up and puts food down because they're like, "just shut the fuck up. I want to get back to sleep."

So in the short term, that's the quickest way to fix the problem. But in the long term, that's actually training the cat that "well, if you just persist long enough, your human will get up and give you what you want." Whether it's food, or petting, attention. Same thing with cats that get up on counters. Typically people go and chase the cat down or

pick them up and put them on the floor. The cat jumps right back up, person picks them up, puts them on the floor again. Well guess who's having the time of his life? The cat. He loves it. It's a game. And if your cat is bored, and under-stimulated, and doesn't have other ways to get praise, attention, or other rewards, then they're going to do things that piss you off.

Alie: Oh, is that why they knock things off shelves?

Mikel: Yeah, I mean, you know, a good clue is whether or not it happens when you're home or not. If you're at work and your cat does not knock things off your shelves, but they only do it when you're home? They're doing it for attention.

Aside: Never forget, your cat is a furry poltergeist who loves you. Or perhaps it's their spayed and neutered gonads trapped in a realm between the living and the dead that cause mischief, who knows! Either way, quick PSA: spay and neuter your cats. Okay, so they want your attention, though...

Mikel: And this gets back to setting up a good environment for your cat. So, the vertical space and bird watching, but also making sure your cat is getting daily exercise, whether that's with a cat dancer type toy or taking them out on a harness for a walk.

Alie: Do they hate that?

Mikel: No, they love it.

Alie: Really? I love a cat on a leash!

Mikel: Yeah, our cat loves it. I mean, she's old so she just wants to go outside and, like, roll around in the sun for 15 minutes and then come back inside. She's actually really bummed now that it's winter; when it was, like, 95 out, she would just happily lay in the sun for an hour. And now if she wants to go outside, we take her out and she's like, "ummmm, it's broken. The heat's off. Can you turn the heat on out here?"

Aside: So remember I mentioned that Mikel has written papers on what kind of play is the best for cats? Is it like... Sudoku? Is it having them jog behind you outside, chasing with a feather wand attached to your fanny pack? Probably not.

Mikel: For cats, a lot of play should be really more about the calculating their final pounce and not just running around chasing the feather wand, but stalking it and watching it while you move it very slowly. Maybe you're acting like a wounded bird, or hiding behind a piece of furniture and shaking like you're terrified and then, woo! You swoop out and that's your cat's moment to pounce and kill. I jokingly call it kitty foreplay [*swanky, deep-bass music plays in background*] because I think when people play with their cats, they really just want to whip the toy around, and then have the cat get tired and done. [*music fades*] Whereas the cat is like, can we go as slow as possible? And, you know, just move to the right a little bit, move to the left a little bit...

Alie: There's an arc to it. [*laughs*]

Mikel: There is. It is a buildup for the cat to again, that perfect moment where they would be hunting and killing. You really only have one chance to kill a bird, right? If you're a cat. If

you fuck it up, that bird's takin' off. You really have to plan appropriately and get close enough so you can make that last jump and like... *get* it.

Alie: So that is what stimulates them. Their brains, and their muscles.

Mikel: Yeah. And their body is really tuned into hunting. Their eyes are, you know, designed for hunting in, for example, lower light conditions, and to detect horizontal movement that's about three meters away from them. So up close, their vision's really terrible. When you're holding your cat and all lovey eyes with them, you are just a blur, but they can probably smell you very well. That's probably what they're most in tune with when they're that close to you.

Alie: And are they nocturnal?

Mikel: No. No. There crepuscular. [*repetition of 'crepuscular'*] So they're active at dawn and dusk, which is when their prey is most active. Now, cats that are not given enough to do during the day, I would say, are going to be what people would consider nocturnal because you haven't really taken advantage of their natural activity cycle. This gets back to that idea: your cat is keeping you up all night; it's because they're sleeping all day. A great time to engage your cat in play would be at dawn and dusk because that's their natural rhythm to be active. Certainly throughout the day it's good to keep them moving, stimulated, not just snoozing all day. Then play with them at nighttime before you go to bed. Maybe give them a snack before bedtime and that will help them sleep more soundly through the night.

Alie: Oohh, good to know. So, if you were sleeping all day, chances are you'd be up all night too. Right? So there you go. Can I ask you questions from listeners?

Mikel: Of course. I didn't know you had questions.

Alie: I do! Do you have time?

Mikel: Yeah!

Alie: I let people on Patreon ask questions. The patrons wrote in. I've never gotten so many questions, so I've *cat*-egORIZED them as best I can. Oh my gosh. So this is like a lightning round. You can just answer as fast as you want, or fast as you can. Tina Rautio wants to know: Why does my cat put her butthole in my face? [*clip from a cat-meow version of 'Despacito'*]

Mikel: So that is how cats greet each other. Butt sniffing is an important way to get information. There you go. Yeah.

Alie: It's just a, "Heyyyyyy!"

Christopher Brewer wants to know: Best way to tame a feral cat?

Mikel: So, as I talked about before, you know, you have the socialization window where if you can get a cat when they're young you can really turn them into a lovely pet. Once they're outside of that window, it's not that the door shuts, it just is... you have to nudge it a lot harder to get it to open. [*door creaking*] So, if you have an adult cat who's truly never

been socialized around people, then now you're not socializing. You're doing what we call counter-conditioning and desensitization where you're just gradually getting them used to your presence and trying to associate it with things that they find pleasant.

It would be like taming a wild animal. But it's going to be a long and slow road, and that cat may only ever adapt to one or two people that they're very familiar with. So the ways you would do that would be to build trust with something, gradually exposing yourself to them, keeping a distance at first and trying to pair your presence with something that they find pleasant, like food, typically tuna or something very high value. It would have to be like, bonus. It might be a very slow process. There have been some people that have found that rehabilitating an injured or sick cat has sped up the process and we don't know why that is, that's just anecdotal.

It was something that John Bradshaw wrote about in his book *Cat Sense*. Otherwise, like I said, you're really, literally, taming. The difference between socialization and taming is that socialization implies that you're able to change their behavior when they're highly plastic and able to be molded to your liking. Whereas after that door has shut, it's going to be really just like, "you're going to love me because you're going to think of sashimi when you see me."

Alie: So just getting them used to you and associations that are good.

Aside: I feel like this also works for *people* too. Like if every time you saw someone you were rad as hell to them, and you handed them a shepherd's pie or a tastefully potted succulent, they'd be like, "Whoa, you are dope. And now I like you." One thing that is not dope is toxoplasmosis, a parasitic infection often linked to kitties. According to the Centers for Disease Control, "Toxoplasmosis is considered to be a leading cause of death attributed to foodborne illness in the United States. More than 40 million men, women, and children in the U.S. carry the *Toxoplasma* parasite, but very few have symptoms because the immune system usually keeps the parasite from causing illness." Let's get into this shit, in every way imaginable.

Alie: A lot of people asked about toxoplasmosis. Oryx Beisa, Sarah Clark, Donn, Jen Durbin, and Ian Robertson, all kind of wanted to know: What's the deal with *Toxoplasma gondii*? Are cats unwittingly subjecting us to mind control, essentially?

Mikel: This is definitely one of my... this is probably, actually, when you asked about the myths about cats that drive me crazy? This is one of them. Cat ownership is not considered to be a risk factor for toxoplasmosis by the CDC. They don't recommend that you get rid of a cat. Now, what is true is that cats' digestive system is the optimum environment for toxoplasmosis to reproduce. They are definitely associated with it. How people typically get it is not from cats directly, but from eating contaminated meat or vegetables that have not been cleaned or prepared properly, which is probably from feces being... a garden where there's cat poop, there may be toxo in it. The best way to protect yourself from toxoplasmosis is to clean your cat's litter box every day because the oocysts need over 24 hours to hatch. So if the poop is fresh, it's good, you can just handle it, wash

your hands after, and you're not going to be exposed to toxo. Of course, keeping your cats indoors is probably the other safest way to avoid it.

The research associating it with psychological disorders has... I'd say it's mixed. There was a pretty lengthy publication a couple of years ago out of Britain that showed, with a longitudinal study, no association of cat ownership and Toxoplasmosis with mental health disorders. I think those stories get a lot of hype, and it really feeds into this idea that cats are somehow fucking with us because they're trying to control our minds. Certainly people who do have toxo, for example, the men find the odor of cat pee pleasant, which is weird. Rats that are infected with it also are not afraid of cat urine, which is not normal.

So, we know that it can have the effects on the brain. I don't question that at all. It's really the direct link from having a cat to getting toxoplasmosis that, kind of, drives me crazy because, again, the CDC does not consider it a risk. Of course, if you are immunocompromised or pregnant, then you have to take extra care about handling cat feces. But again, if you clean the box every day you are at zero risk, basically. It's really more about, perhaps, the link between your bad hygiene and your mental health. Diss on those people. But again, it makes it makes for a good click bait so I think people really latch onto this story quite easily.

Alie: That's, that's such a good flimflam to debunk. I'm so glad that they asked. Jaimee Drew and Jen Durbin both want to know about drool. Jaimee Drew's 11-year-old, Meredith asks: Why does my cat drool when he's happy?

Mikel: *[laughs]* There's different reasons that cats may drool and they may be as simple as they're missing a tooth, so there's more opportunity for the drool to drip out. Or they're relaxed so their jaw muscle isn't as tight, so the drool can flow more freely, much like when you're falling asleep and you're on a plane, for example, your mouth's hanging open and then you're like *[sucking in drool sound]*.

Alie: Been there. Done that.

Mikel: So I think it's probably just a sign of relaxation. It could be a sign of a dental problem if it's really stinky and your cat does not seem to be happy when they're drooling. So during their yearly checkup, I would say, have your vet check their teeth.

Aside: Sidenote: I double checked on this and yep — just a sign of relaxation and slack-jawed comfort. Some cats drool when they're happy, some don't. But unless it's sudden could be due to a dental issue, just look at it as mouth tears of joy.

Alie: But it might just be happiness! Which is amazing. Let's see, I had several people ask this question. Kellie Windsor, Andrea Motyka, Juan Pedro Martinez, Christopher Brewer, and Sarah Walker all wanted to know, essentially, about biscuits. Why do cats knead your lap or their bed? What are they doing when they're making biscuits? *[jingle from old TV commercial, "So I'm bakin' big ol' biscuiits" followed by the Pillsbury Doughboy giggle]*

Mikel: They're trying to get milk out of you. You are a giant boob.

Alie: *[laughs]* What are they... But if they're adults, are they just hungry or are they...?

Mikel: Yeah. So, one thing that has possibly happened through domestication, which is typical, is that we select for juvenile traits, right? We keep our animals somewhat stunted, emotionally, developmentally, through domestication. And honestly, I don't know if lions and tigers make biscuits. I don't know. That's a great question. Actually, I need to find out.

Aside: Quick aside: Do tigers make biscuits? They sure as shit do, my friends! I found an article on Mental Floss with Susan Bass of the Big Cat Rescue in Tampa, Florida and she says yep! But they don't purr. According to an article by the Library of Congress, lions, leopards, jaguars, tigers, snow leopards, do not exhibit true purring but can make a purr-like sound. But wild cats like bobcats, cheetah, Eurasian lynx, pumas, and wildcats, they purr. But let's get back to biscuits.

Mikel: But you know, the kneading or biscuits, muffins, whatever you'd like to call it, is how kittens get milk from mom. And it's adorable when you see them doing it, but they're kneading the mammary glands to get milk out. For some animals they stop engaging in juvenile behaviors and others continue throughout their life, and it tends to be at times where they're happy, right? Time with mom is a very happy time. There's a lot of oxytocin flowing, there's a lot of purring going on, which we believe stimulates oxytocin. We always just say they're, kind of, in the 'mommy zone' when they're nursing. And so they might be trying to comfort themselves or they might just be very, very happy.

Alie: [*adoring*] They might just like you?

Mikel: Yeah. I know a lot of people, it bothers them because mostly because it hurts if their kitty's nails are sharp. Either trim your cat's nails or get a nice fuzzy blanket to put on your lap when your cat does it, and then it won't make its way to your legs.

Alie: Now let's talk about cats and drugs. Christina, Don Schwartz, Dani Buchheister, Brent Monseur, Madeline Heising, and Mary Fuller all asked, what is the story with catnip? What happens to their brains? Like, are they stoned? What's going on?

Mikel: Another question where we don't really know the neuroscience behind it. Because as far as I know, one, you can't at this stage do like a functional MRI on a cat and see live what their brain's doing without, probably, doing some pretty heavy invasive stuff, in which case you might be screwing up the catnip response. The chemical composition of catnip is pretty similar to some of the chemical compositions of females' estrus... juices, I guess, for lack of better term. [*clip of Willy Wonka saying, "That's juice." With Mr. Beauregarde replying, "Juice?!" followed by a moist splatting sound.*] Not all cats respond to catnip. It's a genetic trait that seems to be an autosomal dominant trait.

But cats who don't respond to catnip often respond to other plants. Catnip is not the only catnip out there. There's Japanese catnip, which is silver vine, which more cats respond to silver vine than catnip. And you're starting to see... It's hitting the market. So if you're not hip to silver vine yet, don't worry, it will be at a pet store near you before you know it.

Alie: It's like a matcha latte. Thanks, Japan!

Mikel: Some cats also love... Valerian root and honeysuckle are two other very commonly used olfactory stimulants for cats. It seems to have different effects on different cats. So again, your cat is an individual. First of all, your cat may not even respond. About 60 percent of cats respond to catnip. Your cat might be the 40 percent of straight-edge kitties that are not interested. Thank you very much. But it's always worth a try.

Some cats get more worked up and excited on catnip and other cats get more mellow and just, kind of, roll around. Some cats like to eat catnip. Some just like to sniff it. It's one of those things where... Know your cat - are they a happy drunk or a mean drunk? Use accordingly.

If you leave it out all the time, they do stop responding as strongly to it. We typically recommend that you store it in a jar, maybe put all their catnip toys in a jar with fresh catnip and then they can remain potent, then when you take them out again later, they'll be excited again. But if you leave it out all the time, it will lose its excitement.

But as far as what is going on in their brains, I don't think anyone's looked at that carefully. There's been a lot of studies of their behavior while they're using catnip. And we typically see things like rolling. Some of the behaviors are playful, some of them are sexual or similar to sexual behaviors, like the, kind of rolling, and presenting type behaviors, and some are just very relaxed and mellow. I think there's still a lot of debate as to whether it induces play or something else.

Alie: Or if it's like Viagra.

Aside: Okay, I did look this up, and while up to a third of all cats just aren't into it, they lack the gene, they're like, "get this trashy mint out of my face," I did find one source that said some male cats, when exposed to catnip, get a little too rambunctious, bordering on aggression. Tournt up on the herb!

Alie: Katie Cobb and Bob Ogden both want to know: Why do cats love sitting in boxes? What is it with their boxes?

Mikel: Okay. It gets back to the predator and prey. They need like a safe blind where, basically, they can spy on the world without being detected. It gives them a sense of security as far as we can tell. Cats typically, for example, they're going to be hiding in a shrub, or like behind some grasses, and so it gives them some protection; offers heat, which is always a bonus. The smaller the box is the more heat it's gonna conduct. We also know that... Actually there was a study that showed that cats that got boxes in animal shelters were less stressed out than cats who did not. So, boxes can be a real place of security for cats and, again, it probably makes them feel safe. It's not like there's some magical - like your cat loves Amazon or anything. It's really just they like being enclosed and having this little sense of security where they can see what's going on but they're partly hidden.

Alie: Oh my gosh, that's so cute though.

Aside: And yes, tigers, lions and other big cats at sanctuaries just hang out in boxes. It's a cat in box, just real big ones. How many videos did I watch? One, got my answer for

this aside, and then I continued watching at least 8 more large cats playing in large boxes. Just wasting some quality American time on the Internet.

Okay, let's talk bird murder. Adam Hallihan and AJ Chlebnik said: Do outdoor cats really kill billions of birds each year? How bad is this for the environment, really? They hear different things from cat advocates vs. bird advocates. Curious.

Mikel: Okay. So cats do get 100% of the blame for bird deaths even though they're not 100% responsible for bird deaths. A lot of bird deaths are happening because of human encroachment on bird territory. First of all, we should recognize that cats are not the only killer of birds. Rats are also a huge killer of birds. So, what do we do about cats killing birds? I mean, I firmly believe that people should keep their cats indoors if they have pet cats. Let's reduce the damage, and be responsible pet owners, and take your cat out on a harness, or build a catio for your cat so they can enjoy some fresh air and outdoor time without being loose and catching birds.

Aside: I'm sorry, just had to bust in and say WHAT IS A CATIO? I had never heard this word before and you bet your buttcrack I looked it up: it's like a mesh enclosure; kind of a tasteful cage that either connects inside the house via a window, or tunnel, or cat door so they can just chill outside, but enclosed. It's a catio. It's a fairly new term; its Wikipedia is just three scant sentences. But I did a little digging and like all quality trends/lifestyle movements, it may have originated in Portland. The Portland Audubon society does an annual Catio Tour, so you have until September, Portland folks, to gear up for the next one. Okay, aside from a hip indoor/outdoor living space, what else can protect birds and other backyard critters?

Mikel: There are some products on the market that are supposed to reduce cat's ability to predate on birds. There's like these little ruffled collars that, if you look on the websites, the cats all look so pissed. Like, "I can't believe you fucking put this thing on me." *That* cat might leave a bird on your pillow if they can still catch the bird. So there are some strategies that people who insist on letting their cats go outside could try to reduce the amount that their cats kill.

There's been some research suggesting that the birds that are killed by cats are typically weaker. And, you know, I'd say the models that suggest that cats are killing like 10 billion birds a year, it's hard to know really what's going on and how much of that is cats. And I'm not trying to say that cats do not want to kill birds, but they're typically harder for cats to catch the mice. Some cats are generalists; they'll kill anything that moves. But a lot of cats are specialists, they have a preferred prey and as long as that prey is available, they'll hunt that. If they prefer lizards, they will hunt lizards as long as lizards are available. Big picture: it's complicated. I don't think the cat should get all of the blame.

Alie: Cat apologist.

Mikel: Yeah. And I also agree that we should make as many efforts to keep as many cats indoors as possible.

Alie: Keep kitties inside!

Mikel: Certainly, cats will still hunt even if they're fed, typically, but they'll maybe be less quick to hunt and kill. That's another argument for managing feral colonies instead of just letting them propagate and/or trying to exterminate them, which is usually not an effective strategy.

Alie: And it's also very sad. A big question I got from so many people; Ashley Burgamy, Oryx Beisa, Ben Hollin, Chelsey, Shea Goddard, Anna Thompson, Micah Eckard. All want to know: Will cats really just eat their owner if they die alone in their apartment?

Mikel: I think most of us will eat someone if we're alone in an apartment with them and they die and we don't have anything else to eat. Yes, actually when I worked at the shelter, we did have a kitty who came in, who... her owner had died and she apparently nibbled on the nose.

Alie: Oh no! Just the nose?

Mikel: As far as we were told by animal control. You know, it happens. You're starving. Donner Party? I don't know what to say. Your dog will do it too, so...

Alie: Really? Okay, so you're pretty much just, you are sashimi for whatever animal lives in your home.

Mikel: If they are stuck without food and you die, you are going to become food. We are meat.

Alie: Okay, so yeah, your cat's gonna eat your dead body.

Mikel: Absolutely.

Alie: What do you care? You're dead anyway! Yeah. *[laughs]*

Mikel: Do you want them to die too?! I mean, they're just trying to stay alive until they can get another home.

Alie: I know! Look at it this way. You're feeding the cat, *even if you're not able to feed the cat.*

Mikel: And it's like, you know, environmentally friendly.

Alie: What else are you going to do with your body?

Aside: Hey entrepreneurs: consider a niche burial service that involves having one's body dehydrated and made into pellets. So, I did look this up and boy oh boy... whew! There's a lot of dark stories from paramedics available on the internet if you want to scar your brain but essentially, a cat will start eating you *the same day*, usually going for the nose, lips and eyes first. A dog may or may not eat you but they DEFINITELY do eat their owners. SO MANY confirmed cases. Apparently, German Shepherds are way more likely to tuck in a bib and dive right in while you're still warm; and there have been reports of dogs who ate their dead owners down to the skeletons, even one stashing a bone under a pillow on the couch, just to enjoy later. So yes, dogs will certainly eat off your nose, despite your faith.

Mikel: I really love that so many people are converging on the same question. It's kind of fascinating.

Alie: I know. So many people. The last two questions... because I have enough questions to sit here with you for, literally, like all day, but I understand that you do have a life. Last two questions I always ask, what is the worst thing about your job or the thing that you secretly hate about cats?

Mikel: *[laughs]* I don't think there's anything I hate about cats!

Alie: *[teasing]* Oh, come on.

Mikel: Um, vomiting.

Alie: Yeah... Any way to prevent hairball vomiting?

Aside: This was also a question from patron Sandra Kirby.

Mikel: Brush your cat. One thing we know is that vomiting cats is actually not normal. I think people really normalized vomiting, but we believe that it's more likely a medical or stress related issue. But as far as my job, you know, I think one thing when I started working with cats, people would be like, "oh my God, you have the best job, just like, petting kittens all day! Oh my God!" And it's true, I do get to pet a lot of kittens and certainly when I worked in the shelter petted a lot of kittens and cats. But it's really about dealing with people. So much of my work is... Even now I'm dealing with research participants, and you know, I need something from them. I need them to collect data for me in an accurate way, and I need their help. And when I'm dealing with clients who are having behavior problems with their cats, I'm not dealing with their cats; I'm trying to get them to change, typically, their behavior in order to change their cat's behavior.

So, probably the most challenging aspect is often the human element because behavior change is hard, and trying to get someone to scoop the litter box every day when they've been skipping it once a week all of their life is not easy. Or getting them to change their habits when their cat is waking them up at four in the morning and telling them, "you have to ignore your cat until he stops and it might take a couple of weeks." A lot of people break down. I've had people cry, you know.

It's easy to make light of when people are having behavior problems with their cats but I've definitely experienced, for example, people who basically got divorced over their pet, or stop sleeping in the same bed because they have two cats that hate each other and they don't want either cat to sleep alone. So they're sleeping separately with their two cats. Or, people who are afraid they're going to have to put their cat to sleep because they can't live with the behavior problem, whether their cat has ruined their house and they can't have people come over anymore because their house smells like pee, or you know, their cat is aggressive to strangers and so they don't feel comfortable having people over.

I definitely think there are so many joys and benefits of having pets, but for people who are experiencing problems there can be a lot of guilt, and shame, and they feel like they're a bad parent when it's not necessarily them. So it can be really hard to deal with

that side where people are going through a lot of pain, and by the time people reach out for help they're, kind of, at their wit's end. Sometimes you're just the last stop on their way to the shelter. I've literally had people call like, "I'm driving to the shelter, if you don't call me right back and fix this problem, the cat's going..." you know, basically, going to be gotten rid of. So that can be a lot of pressure. That is probably the hardest part of this kind of work, is when you're seeing the complexity of the human-animal relationship. Sometimes they need someone who's a human psychiatrist and not a cat behaviorist.

Alie: So the hardest thing about cats is people.

Mikel: Exactly.

Alie: What's the best thing about cats? [*Jeopardy's "Think!" plays in background*] Especially if you want to say anything to any cat haters out there.

Mikel: [*record scratch*] They're fucking cute. I've never met a cat I didn't think was cute. I like the mystery, personally. They're not as blatant as, like, the dog who's like, "I LOVE YOU!!!" Cats, you gotta work for it a little bit and I definitely appreciate that. I like that they still have that little bit of wildness. We're still asking, "are they domesticated or not? We can't even tell!" Because they're a little bit wild, but they're also tame enough that they're curled up in your lap and purring. [*cat purring*] I think purring is magic. It's just a very soothing and wonderful little trick they have.

Alie: Do they do that in the wild? Same with meowing? Or do they just really do that to communicate with us?

Mikel: Moms and kittens will purr when they're nursing. We think, typically, positive situations where there's some love going on. And they'll also purr when they're distressed, so it's not just a positive. It might have self-soothing aspects to it. You will see cats and pain who are dying that will purr as well. But again, look at the context. If your cat's not dying and they're purring, they're probably happy. If they've got a broken leg and they're purring... not happy.

Alie: Do they meow just to communicate with us?

Mikel: Yeah. Meowing is something that they primarily do with humans. [*DJ airhorns play X-Files theme*] The communication they do with other cats is, typically, either more antagonistic, like yowling, growling, hissing, shrieking; or smaller, shorter, chirping would be a positive sound that cats would do to each other. But meowing seems to be something they reserve primarily for humans.

Aside: So cats, not dicks. Just a little afraid. And also they know how to play us, and that's why we love them.

Alie: Where can people find you?

Mikel: I have a blog, CatsAndSquirrels.com. I try to report on there about... primarily about science related to cats and squirrels because they're my two favorite species. I'm on Twitter @mikel_maria. My business website is FelineMinds.com.

Alie: So if someone needed some consulting they could...

Mikel: They could go to FelineMinds.

Alie: Okay. I have a feeling you're going to have a lot of cat questions. Thank you so much for doing this!

Mikel: You're welcome! Thanks for having me. This was super fun.

Alie: Oh my God. I could seriously ask you questions all day. Thank you so much.

[angelic choir fading in quietly with cat purring atop it]

Find Dr. Mikel Delgado, follow her, check out FelineMinds.com. This week's Ologies donation goes to KittenCentralOfPlacerCounty.org in case you want to check out what they do. Ologies is @Ologies on [Twitter](https://twitter.com/Ologies) and [Instagram](https://www.instagram.com/Ologies), I'm [Alie Ward](https://www.instagram.com/AlieWard) on both. To support the show via Patreon, head to [Patreon.com/Ologies](https://www.patreon.com/Ologies). You can ask the ologists questions, you'll be supporting a different charitable cause every week, helping me pay people what they deserve to work on the show, and maybe I'll call you.

You can also get Ologies Merch at OlogiesMerch.com -- black t-shirts, y'all! They're avails! Thank you Shannon Feltus and Boni Dutch for managing that. Thank you to Erin Talbert and Hannah Lipow for adminning the [Ologies Facebook group](https://www.facebook.com/OlogiesFacebookGroup). The theme song was written and performed by Nick Thorburn of the band Islands. And thank you to proud cat dad and host of the cat-themed show, *The Purrcast*, Steven Ray Morris - check that out - for cutting the episode together. This one's for you, pal.

Now if you stick around until the end of the show you know I tell you a secret, and this week you'll get two: Number one, I am legit so disturbed by reading so many stories from paramedics about devoured bodies. Wish I didn't do that. Ew. Blarrngh, barf. Two: I went to get something out of my pantry this evening and found a bag of baby carrots in there. I guess I'd tossed them in the pantry and not the fridge, just... hours ago. I'll continue to eat them. Also I feel bad because just last week, guest Dr. Julie Lesnik was specifically like, "don't buy plastic bags of baby carrots. Just buy carrots and cut them." And I feel this is an omen and a reminder. And I should never do it again. Anyway, carrots don't belong in the pantry.

Okay berbye.

[outro music]

Transcribed by cat lover and amateur deltiologist, Asriel King. They live in the outskirts of Ithaca, NY and you can usually find them rifling through antique shops for pirate maps and planning a conquest of the lost city of Atlanta. Wait, what do you mean that's a real city, are you telling me I've been duped?

Some links which you might find of use:

Mikel's + Jackson Galaxy's book, ["Total Cat Mojo: The Ultimate Guide to Life with Your Cat"](#)

[Ed Lowe loves cats! He invented kitty litter.](#)

[Here's how much 100 grams is](#)

["Wizard of Oz" Clip](#)

[African Wildcats: your cat's cuz](#)

[They've got five on it, but it's not about litterboxes.](#)

[The scoop on toxoplasmosis](#)

[It's cool to drool](#)

[Who's out there purring?](#)

[Catnip 101](#)

[Tiger in a box](#)

[Yep. they like boxes](#)

[Portland's September Catio tour!](#)

[Yes your animals will eat your corpse](#)

For comments and enquiries on this or other transcripts, please contact OlogiteEmily@gmail.com