

Daniel: Hello, I'm Daniel Zomparelli, and I'm afraid of everything and I want to know what scares you, so I've invited people to tell me what they're afraid of, then I talked with experts to dig a little deeper and get tips on how to deal. This is I'm Afraid That.

Daniel: My old roommate and I used to live in this basement suite that had a little mouse that would come visit us. It would show itself every year around Christmas, and at first, we thought this was cute, even named him Chris Mouse. It was on our third year of living there, when we ended up catching a mouse in a trap, that we realized there wasn't just one Chris Mouse, but two or three. Then, we moved our couch for the first time in a while and well, then we moved. Almost everyone has a mouse or rat story, and Claudia O'Doherty has several. You've seen her in Netflix's Love, the actress and comedian drops by to talk about her fear of rats. We then check in with expert Dr. Michael Brecht. He's head research scientist at the Bernstein Center for Computational Neuroscience Berlin. We talk about his experiment that teaches rats to play hide and seek.

Daniel: We're sitting with Claudia O'Doherty.

Claudia: Hi, thank you.

Daniel: Actress and comedian.

Claudia: That's right.

Daniel: Thank you for joining us on I'm Afraid That.

Claudia: Thank you for having me, Daniel, I'm very honored to be here.

Daniel: Well, we're honored to have you.

Claudia: Oh my God.

Daniel: Can you tell me what your fear is?

Claudia: It's rats!

Daniel: Rats!

Claudia: It's very straightforward, and when you asked me to come on, I was like, "It's got to be rats."

Daniel: It's got to be rats.

Claudia: I'm really scared of rats, and I never had a fear... I've got a true phobia, and I'd never had one in my life until I encountered rats in my early twenties.

Daniel: Ooh, that's a late in life phobia.

Claudia: I know, so here I was, thinking I was entirely mentally sound, and then I was living in my first share house, but it was actually quite a nice share house. I couldn't really afford it, and everyone else who lived there had a proper job and it was a very nice house. Two very clean girls. I was living with.

Daniel: Okay. Where was this?

Claudia: This was in Redfern, in Sydney.

Daniel: Okay.

Claudia: So, it's inner city. And one night, I was having people over for dinner. I was chopping some food up.

Daniel: I'm already scared.

Claudia: I was chopping food up, I was just making some kind of pasta, you know me, and I heard a soft thud, and I turned around and then a creature shot across the floor and ran under the fridge. It was, what I thought, was a mouse. And it had dropped out of a shelf, probably about 1.5 meters, in metric, so that's probably going to be five feet, five foot two, that's how tall I am.

Daniel: Yeah, I'm from Canada, I can do metric.

Claudia: Oh, thank you so much. Okay, good. And it broke my brain. I screamed, I screamed, I ran out of there. I didn't know what to do, but also... because I'd never seen a mouse or rat inside a house before, but it was such a violation. I cooked the dinner, I didn't see anymore, but I have a feeling, when I was in the dining room, people could see them running across the floor in the kitchen. And then, my bedroom was above the kitchen. And my friend who I lived with, she bought traps.

Daniel: Right.

Claudia: Classic, horrible snapping traps.

Daniel: Right.

Claudia: And so, then I had, sort of, one of the worst nights of my life because I was having nightmares about the mice being on me. And also, I could hear them screaming.

Daniel: Oh God.

Claudia: I could hear them scream.

Daniel: You could actually hear them screaming?

Claudia: I could hear them screaming in the kitchen, I could hear... and then screaming. So, it was really-

Daniel: Oh, they were getting caught.

Claudia: They were getting caught.

Daniel: I thought they were just screaming for no reason.

Claudia: Just for fun.

Daniel: Like they were also having nightmares. They saw you and then got scared.

Claudia: No, they were screaming because they were getting snapped, but also not snapped properly.

Daniel: Yeah, those things don't fully work.

Claudia: So, they were half-snapped. And then, Emelia also, out of everyone in the house, she was the vegetarian, but she's very capable, so she was the one who was having to deal with it. So, the next morning, she had to drown all of the, what we thought were mice, but turned out to be baby rats. She had to drown them in a bucket. So, you know, very horrific, traumatic experience. Even then, I was a comedian, I did have a job then, I did have a day job, but it was a part-time day job, so I was often at home when the others were at work. I think I was writing my first comedy show, my first live show, so I was at home all the time, and I was like, "Everything's fine. I'm not scared." I waited for the exterminator to come, and he came to our house and he was like, "Oh, I come to this house every year. They're rats, there's a nest of rats, and I just fill up this hole with wire and," what do you call it, the sprayable foam? Poly filler.

Daniel: Okay.

Claudia: It's harder for rats to chew through metal, but they can chew through metal. So, essentially, he just would build a wall, and then every year, they would chew through it. And then, we would have to call the exterminator again. But he was like, "Oh yeah, these are baby rats, they're not mice, and I'll sort it out." But that made it much worse me. So I was like, "Oh my God, it's rats. That's worse than mice."

Daniel: In a nest.

Claudia: A nest. They live, they come here every year. It's all very bad. And then, I was like, "Oh, I cannot handle this." So, I went back to my parents' house. I didn't move, but I was like, "Until this is sorted out, I cannot be in this house." I went back to my parents' house, and my dad is really nice. And I had told him about what had happened and, sort of, in a show of solidarity with my new fear of rats and mice... Well, I thought these were mice. He'd seen rats running across the back fence of their house. He did something he'd never done before, which is, he put rat poison out.

Daniel: Oh.

Claudia: And when a rat ate rat poison, it makes them really want water. So, they seek out water, which is not necessarily what they're normally doing, so they go places they wouldn't normally go. And then, when they have water, their insides explode. Something really horrible happens, like that.

Daniel: Wow. I did not know that that's how it works.

Claudia: I know a lot about this stuff now. And so, I was sitting in the lounge room on my own, and a huge rat walked into the room, which is really not something that had ever happened in my life, ever before. But because it was moving slower than it... Normally, a rat's just going to dart round, you know, terrorize you, but it's not going to just saunter in. But because of the poison, it sauntered into the room, it was huge. I screamed, "No!" And then, it ran and hid in my dad's amplifier, my dad's musician, it hid in the amplifier until he shoed it out of the house. Then, I lived in London after that, actually with the same friend, Emilia, who had drowned the original rats.

Daniel: Right.

Claudia: And this was... We were living in Stoke Newington, which is a nice neighborhood, and we had just, a very shady real estate agent. And it was the kind of thing where it was like, oh this house is like nice, but it's been very cheaply renovated. And they're like, "It's a new kitchen," and you're like, "It's made of cardboard." And so, we lived there, everything was fine. And then, we did get mice.

Daniel: Okay.

Claudia: And that was a really horrible situation for me again. And that was a crazy one because there was so many mice. I know this makes it sound like I am a filthy pig, but I'm really-

Daniel: That is not what I'm thinking.

Claudia: But I'm not. These shady real estate people, they were very elusive about getting someone to come and help us with the mice, which were really their fault because they had done such a horrible renovation on the house, so there were just so many holes into the house. The real estate agent kept sending his very old uncle, who I don't think was a pest control expert at all, who would just scatter like a powdered poison under the cabinets to sort it out, which was also... Once again, as someone who's had experience with poisoned vermin, I know that that's bad because then you just get them acting crazy because they're going to be searching for water. And one night, I think I saw one in my bedroom, which was a real next level of violation because I'd only ever seen them in the kitchen, and then it was like, oh they're upstairs.

Daniel: Yeah, they travel.

Claudia: I'll kill myself. Why would you even want to come upstairs? I guess in Australia, as well, because it's warm, we don't have the thing of them needing to come in to get warm, but in England, they need to stay cozy, which I understand. If there's holes-

Daniel: If they can find holes, they get in. Yeah.

Claudia: If they can get in, they're in.

Daniel: It's not about, necessarily, cleanliness.

Claudia: If winter falls and you're in England, the mice want to come inside. And when my sister lived in England, my sister lived in London, she actually lived in an apartment that suddenly had mice. And one day, she threw on her shoes to go buy some milk, and she could feel something.

Daniel: Nope. I thought it was going to be something less disgusting than this. Keep going.

Claudia: She could just feel something twitching against her toe, and it was the tail of a mouse that she crushed inside her shoe.

Daniel: Oh, that's so disgusting and good.

Claudia: It's bad. It's really bad. So, I mean, it is actually a good genre of tale. Lots of people have a horrible rat story or mouse story. Especially in London, actually, everyone had a horrifying mouse or rat story. And I do love hearing them because it makes me feel like I am right. that they are bad.

Daniel: Yeah, they are bad.

Claudia: They're very bad.

Daniel: Well, because also, they leave gross poops that can get you sick.

Claudia: Yeah, exactly. It's not great, but lots of people are like, "They're cute!" And my friend, actually, she was like, "Oh, I had a rat that I would carry in my sleeve, to high school, for like two years."

Daniel: Oh, you got a rat girl.

Claudia: And I'm like, "I can't... I don't, I don't like that."

Daniel: I feel like every school had one rat girl.

Claudia: Right, not in Australia. I guess we're not allowed to bring rats to school.

Daniel: Okay.

Claudia: Maybe it's a North America thing.

Claudia: In Australia, we have native rats, which are like bush rats, and they're actually like relative to a European black rat. They're much nicer, cleaner. They've got fluffier tails, bigger eyes, much cuter, fluffier, sweeter. They don't go inside. Ideal, gorgeous. But, when white people came to Australia from Europe, they brought European black rats with them. And also the diseases that they bring, and they're much more aggressive. They go inside houses. Filthy, disgusting rats.

Daniel: Double colonizer.

Claudia: Yeah, exactly. And I know that in Australia, they're trying to get rid of the black European rats and bring back the native rats, but it's only in the fanciest neighborhood. It's in Mossman, which is in the North shore, so it's like this one neighborhood gets the nice rats, which is funny.

Daniel: I love how much you know about rats.

Claudia: Oh, I'm really keeping an eye on what's up with rats, but it's a double edged sword, where because I'm scared of them, I kind of want to know everything I can know about them.

Daniel: Yeah, you got to know your enemy.

Claudia: You've got to know the enemy. So, Netflix put out a really horrifying documentary about rats, called, I think, Rats, a couple of years ago on Christmas day. And I did make my entire whole family watch it. And it was really horrific because it was rats around the world, and I just remember them dissecting a rat in somewhere, maybe in Southeast Asian, with a bot fly. It was really bad.

Claudia: I did watch Ratatouille on a plane, recently, because I had heard people like, "Ratatouille's great though," you know, sometimes at work, "I hate rats," and they're like, "But what about Ratatouille?" Well first of all, I hate the dish ratatouille. I don't like it.

Daniel: Yeah, I don't care that much for that dish.

Claudia: I mean honestly, it's like the worst meal in the world. Because it's like... wouldn't you love every vegetable... It's like putting every bland vegetable together, making it soggy. It's just a pointless meal. It's my worst nightmare. Bland, bland, bland, bland, bland, bland and wet. Disgusting. But the movie Ratatouille, because it's a CGI rat, I wasn't scared of it.

Daniel: Okay, so CGI rats are okay.

Claudia: I love a CGI rat. Although, there was one sequence where there's lots of rats doing something, and I was like, "Ah, no."

Daniel: It's crazy that they're in the kitchen.

Claudia: Yeah. I mean, it's disgusting.

Daniel: I love that somebody was like, "What if the rats were in the kitchen?" It's like, they're usually there.

Claudia: I know. And then at the end, doesn't the rat open its own restaurant?

Daniel: Yeah. I was like, "Why... It would automatically get a C or..."

Claudia: At least a C.

Daniel: That's all I kept thinking. I'm like, "This thing would be shut down because there's vermin in the kitchen."

Claudia: At best, a C. Yeah, I know. I was like, "No." I am so anti-rat, that... obviously, it's a very whimsical premise and that's great, but I just... No. I'm not into it.

Daniel: Also, choose a different animal.

Claudia: I do... Yeah, any other animal.

Daniel: Any other animal.

Claudia: A giraffe, right.

Daniel: Yeah. That's actually funnier. A giraffe is funnier.

Claudia: I love that.

Daniel: They have to have high ceilings. How do they even use their utensils? It's great.

Claudia: Exactly. There's so many more questions, but just... they're disgusting. The tail, it's pink, it's disgusting. This went on for many months, for like eight months, we were having mice. It was a very bad situation. And then, one day, I had a tiny part in a movie, so they were like, "We're going to pick you up. And so, you have to be at your house at this certain time for your pickup for the movie." And both of my flatmates were away, and the day before, I dropped my phone in the toilet, so I had a burner phone. I didn't have a phone you could go on the internet with.

Daniel: Right.

Claudia: And it was a very heavily raining day, much more poison had been put out than ever before. And it was just like, suddenly there were so many dazed, dying mice just walking across. And it was so rainy, so I couldn't go outside, and I had to stay at home to be there to get picked up for this movie that I had one line in. And there were mice everywhere.

Daniel: Oh God.

Claudia: So, it was really a very bad situation for me. Lots of them, then, would just die in the middle of the floor, so it was also a thing where it's like, I couldn't pretend I hadn't seen the mice because they were in the doorway if I wanted to go into the bathroom. But I also couldn't look at them because of my phobia. So, what I did was, I got some kitchen tongs that were really long, and then I wrap them in foil, and then I wrapped the foil in toilet paper. And then, I wrapped them in foil again. I tried to make them as long as possible and also, obviously, so I wouldn't feel anything when I grasped the mouse's body with the kitchen tongs. But even then, it was very hard. I was not looking, I was nearly throwing up because I was picking up these stiff but soft dead mouse bodies with these kitchen tongs and putting them in a plastic bag.

Claudia: It was another thing where I'm like... It was the worst day of my life because also, I was meant to get picked up at midday, but they didn't pick me up until six, so I thought I would just not be in the house, but I was just here trapped. Oh yeah, I had no one's numbers because my phone had dropped in the toilet, so I couldn't call people to come and help me because I didn't know anyone's phone number because we no longer know phone numbers. And so, it was a very scary day.

Daniel: This is a very earned phobia.

Claudia: Oh yeah, it's true. It's real.

Daniel: You really did the work to get there.

Claudia: Oh yeah, and there's been many other incidents. Also, I love asking people their stories. Can I tell you one of my favorites?

Daniel: Yeah.

Claudia: This producer I know in London, she was living in a basement flat, and one morning, she could hear splashing. She could hear splashing from her toilet, and she lifted the lid and a huge rat jumped out of the toilet and ran into her apartment.

Daniel: Oh God.

Claudia: And so, because you know, rats can swim and they can swim up toilets. That's completely real.

Daniel: I did not know that.

Claudia: So, she was in her pajamas, and she was just like, "Whoa." You know, absolutely horrified. And her work was around the corner, so she went to work in her pajamas. She put on shoes, went to work, and she was just like, "I don't know what to do." She called her mother. Her mother was like, "I don't know what to do." She called an exterminator and they're like, "Okay, we'll come this afternoon." So, she went back to her apartment and they looked everywhere for the rat and they couldn't find the rat anywhere, and he said, "Oh, well rats have a very good sense of direction, so it will come back the way it came in. So, we know it ran down this hallway. It's going to come down the hallway and it will go back into the toilet."

Daniel: That, for some reason, is so nauseating.

Claudia: It's bad.

Daniel: The return to the toilet is more nauseating than the coming out of the toilet.

Claudia: But he was also like, "I think it's probably gone back. I can't find it anywhere, you're going to be fine." She was very freaked out because she like didn't want him to leave, and he was like, "I have to leave. I can't just stay here with you." And he put a trap in the hole, along the wall, the way it had run in. So, he was like, "If it hasn't already gone back, it's going to get trapped in this trap." And so, she went to sleep and then at four in the morning, she heard... and then screaming and then... because it had snapped on the rat's tail. And so, the rat was banging the trap against the wall, and she went into the hallway, the rat was screaming at her. I think she sort of pushed the rat into the bathroom with an umbrella, and then it was five in the morning by this stage, the worst night of

her life. And then, she got the exterminator to come and it dealt with it a few hours later. But just like, horror.

Daniel: Great. I mean, it does make me feel bad sometimes, where I'm like, "That's the podcast where you just relive all your scary things, and that's it."

Claudia: You're like, "Okay, I've dredged it all up." And that's rats.

Daniel: Yeah. Thank you, so much, for coming on the podcast and telling us about rats.

Claudia: You're so welcome. I hope I don't sound completely insane.

Daniel: No, I don't think so.

Claudia: Okay, good.

Daniel: But people online will let us know.

Claudia: I can't wait to hear.

Daniel: That was Claudia O'Doherty and her fear of rats. Before we check in with expert, Dr. Michael Brecht, let's listen to one of the voicemails you left on our fear line.

Evan: Hi, my name's Evan, and I'm really afraid of those bottles of orange juice in convenience stores when they've been on the shelf for way too long, and they have that gunk at the bottom. It's really friggin' nasty. And yeah, ban it, okay? Just ban it.

Daniel: Hi, Michael Brecht, welcome to the podcast.

Dr. Micheal: Hi there.

Daniel: So, you did an experiment where you got rats to play hide and seek?

Dr. Micheal: Correct.

Daniel: Okay. Can you tell me a bit about the process behind that?

Dr. Micheal: Yes. The way you do this is you familiarize rats with the room, and they need to be very comfortable, I say, when playing. And then, you teach them step by's to do the hide and seek. What we think is that they actually have an innate preparedness or so, to play hide and seek. They get very good at it in a short time. They just need a week or two to learn this, and they are very strategic players.

Daniel: What's the goal of getting them to play hide and seek.

Dr. Micheal: Oh, okay. We've been interested, for a long time, in playful behaviors. And sort of, what has been looked at in rats, a lot, are more simple forms of play. Like, their rough and tumble play. It's a bit like the wrestling that little boys too. This has been studied very carefully, but we were more interested in more complex forms of play, namely role play. And then, we looked at web reports and YouTube videos and what you see a lot there, is that pet owners talk about how much their rats love to do hide and seek. And so, that's what we followed up.

Daniel: I feel like I read there was other work you did with rats besides hide and seek, what were the other games?

Dr. Micheal: Yes, we did. We studied quite a bit of rat behaviors. Another related thing that got us into it is the study of their ticklishness. Yes, so they're also very ticklish. It's also actually something we used in the hide and seek paradigm, and this is something we also very carefully looked at.

Daniel: What drew you to these types of research?

Dr. Micheal: Oh, okay. Generally, we think that play is a under studied thing. People often dismiss it, a little bit, as childish and some saying maybe not so important. A lot of neuroscience typically focus more on negative symptoms, pain, autism, and the like. These fun behaviors and these playful behaviors, they're sort of, a bit, under studied. I think the assumption that play is something simple and childish is very wrong. If you look closely at, for example, what the rat did in our study, it's very complex behaviors. And we often think that these playful behaviors, the brain is at its best and in many ways, does do more complex behaviors than you would see under other circumstance. I actually even think that science is, in some ways, related to play or that good science is often very playful.

Daniel: I like that idea. Do you, on a non-research level, do you ever have scientists who are afraid of rats?

Dr. Micheal: Yes. Not all people work equally well with the animals and their big individual differences. And it's not so easy to tell why that is so. So, we have a couple of people, or different people working in the lab, and, superficially, it looks the same, but then still, for one person, it works much better than for the other. And these are things that we don't understand all that well.

Daniel: Are you personally afraid of rats at all?

Dr. Micheal: No. No, no, no. But, okay, to be honest, I'm a bit allergic.

Daniel: Oh.

Dr. Micheal: So, the way it runs is that a lot of the actual work, then, my collaborators do. I think, if you get to know them more, they can be very cute. I mean, most of all, in rats, much like in other animals, the young animals are incredibly cute. And

they are, yeah, really very lovely animals. Yeah? Then they get older. I can see how you can be afraid of a old, nasty rat. right? They are not as cuddly as the younger ones, but the younger ones are very, very nice animals.

Daniel: Is there something you're all working on for the future of rat experiments?

Dr. Micheal: Oh, okay. We want to continue some of the work that we did there. So, the paradigm, we do this hide and seek, they are very smart about it. We have the impression that they have a relatively good understanding, ourselves, of our behavior, and we wonder if they, sort of, are thinking about what we are thinking, sort of, for example, they wouldn't hide in bad places. In a transparent box, they don't hide, but they hide in a non-transparent box, in good hiding places. And it's something where they seem to factor in their visibility in their behavior. And so, this is something we want to understand better. Do they have a [inaudible 00:28:16]? Yeah.

Daniel: Cool. In your research, was there a big a-ha moment when you realized that the rats were giggling from being tickled?

Dr. Micheal: Now, the ticklishness has been, sort of, discovered earlier. So, the phenomenology of ticklishness, it's really remarkable. They are also sort of differentially ticklish. They're very non-ticklish on the tail, and then they are very ticklish on the belly. And then they do these [inaudible 00:28:49] These are remarkable. The behavior itself is very remarkable. What was, for us, also very interesting is then looking in the brain. We could pinpoint, pretty much, the place in the brain where this idea of ticklish is made. This was fascinating.

Dr. Micheal: Now, what we always thought is that these had, basically, touch cells. So, there is a response in the cells when you touch the body. Now, what was very striking about the tickling is that the responses in the tickling behavior are really more complex than that. So, what you would often see is you approach the animal, and just before you touch it, the cells already fire like hell, which made us think, "Oh okay. He says... somehow the enemy sees you coming, and it's sort of thinking that their body is going to be touched, and this makes the cells fire." It makes a lot of sense, though. When you a tickle a child, yeah, it's also when you extend your hand and just before you touch it, the child already giggles like hell because anticipation is so important in tickling. And then, you see this anticipation extremely clearly at cellular level, in the brain. And it was very fascinating.

Daniel: That is a very cool, I love that. Thank you so much. That was so wonderful, to learn so much about rats.

Dr. Micheal: Okay. It's been a pleasure.

Daniel: I'm Afraid That is produced by me, Daniel Zomparelli, Gabe Liedman, and Little Everywhere. If you have a fear you'd like to hear on the show, please share it

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