

## “Writing for Experts and for Nonspecialists” An Interview with Dr. Robin Tinghitella<sup>1</sup>

by Emily Vandenberg

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--Robin Tinghitella



**Dr. Robin Tinghitella** (she/her/hers) is Associate Professor of Biological Sciences at the University of Denver. A behavioral ecologist, Dr. Tinghitella studies crickets introduced to Hawaii that have evolved through natural and sexual selection to no longer sing so they can avoid a parasitic fly. Her published articles on this subject have appeared in high impact peer reviewed journals and featured in *Newsweek* and *USA Today* and she has even begun looking at different influences that humans have on these crickets, such as traffic noise. She holds a Ph.D. in Evolution, Ecology & Organismal Biology from the University of California, Riverside, and a B.S. in Biology from the University of Portland.



Interviewer **Emily Vandenberg** says of herself: “I am a senior at DU, studying biology and French, and am also a team captain of the women’s varsity swim team. I enjoy doing interdisciplinary work, because I think that disciplines are intertwined and work better together as a whole. I hope when I graduate to either become a teacher or a doctor.”

Vandenberg further notes: “I first met Dr. Tinghitella in her general ecology class, Fall of 2019. In every class she taught, it was always clear from her eccentricity and positivity that she was passionate about teaching and her research. It was for this reason that I looked forward to coming to class every morning and even joined her lab. Though her

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<sup>1</sup> This is one in a series of nine interviews of University of Denver professors. Each was conducted by an undergraduate in the Minor in Applied Writing, as part of a course, “Theories of Writing.” The interviews explored professors’ early memories of writing; influences on and thoughts about their own development as writers; some of their current writing practices; and other matters related to writing and teaching. For more information about the interviews, the course or Minor, or about writing at DU, please contact Professor Doug Hesse, [dhesse@du.edu](mailto:dhesse@du.edu).

one passion is these crickets and evolutionary biology, she is also passionate about science communication. She hopes to make science more accessible to everyone, especially those in marginalized communities who have been historically excluded from STEM. Through her writing and speaking, she is determined to make every word understandable and interesting, no matter her audience. Our conversation took place over zoom, early on Wednesday, March 10<sup>th</sup>, 2021.”



*Emily Vandenberg:* What writing do you do in professional and academic settings?

*Robin Tinghitella:* I think writing is actually one of the biggest parts of my job and it's one of my favorite parts of my job. It's personally very rewarding, and you get a real product out of it, so that always feels like a true sense of accomplishment when it's done.

I spend a lot of my time writing and a lot of my time working with graduate students and postdocs on their writings so that we can get it to a place that's going to allow them to flourish in their own careers when they're on their own doing this. I think it's really difficult to teach writing without going in and just changing things to the way that you would do it. So, I spend a lot of time trying to make sure that that's not the approach that I'm taking with my grad students, especially because I want them to get there on their own and to figure out their own style.

Most of my writing these days is articles; we publish lots of scientific papers and that can be anything from a primary literature paper where you're reporting on an experiment you've done to a review paper that you're writing with a big group of people, where you've been reviewing literature together for a while and getting that all out. So, there are various degrees of collaboration we use in our writing. I also spent a lot of time writing grants, although I am lucky to have grants right now that are supporting a lot of the work that we're doing. Most of the grant writing I'm doing now is really to support grad students and postdocs getting smaller grants that would support their own work separate from the things that we already have funded in the lab.

*Vandenberg:* Do you approach those various types of writing differently? Do you have a method? Do you sit down and try to get a lot done at once? What does your process look like?

*Tinghitella:* I think one of the things that's changed a lot for me over my career in terms of writing is the way I approach it from an individual versus collaborative perspective. I've discovered that at different parts of the writing stage I prefer different types of interaction with the writing. I'm one of those people who has a harder time putting the initial words on the page if they're not perfectly correct right away. I've gotten better with that over time, but I have colleagues who are really good at that sort of brain dump, the “let's just get it on the page and then fix it later” type. So, when I'm writing academic papers, I actually prefer to do that in a group now instead of relying on my own approach in the initial stages.

I actually do a lot of group writing. I have scheduled blocks of writing time every week on zoom with a specific group at a specific time and we meet for two hours on this paper each week. We'll set goals each week, for what we want to accomplish and the next time we get together, and we literally

sit and have a conversation and say out loud what we think we should be writing on the page. We'll work on a single Google Doc and sort of write our first draft of a paper that way.

One of the other big parts of academic writing for me when I really get into an article is you have to be really critical of your own ideas and make sure that you are thinking broadly about them and considering all of the literature and what reviewers might say and poke holes in your own story. That way you make sure that it's tight and you really know what's going on.

I prefer to do that kind of work on my own. I tend to spend a lot of time just reading it as if I were a reviewer and trying to identify things that are not clearly stated or might not be entirely correct or need more references.

The other thing that I have really loved over the last few years is writing accountability groups. I run a group in NSM open to all faculty, grad students and postdocs at Belle Rosette. We sit down for three hours a week for individual writing time but you're there writing with friends so there's some accountability. We make sure everybody turns their email, nobody is on the internet looking at random things, nobody is grading papers. It's just scholarly writing time. We borrow a method from IRISE groups where we write quietly for 50 minutes and then for 10 minutes we talk about goals and accomplishments with respect to that writing. We get feedback on anything, show each other a figure and ask if it makes sense or try and figure out how somebody else would go about solving a particular problem and then we'll come back after that 10-minute window for 15 minutes again and repeat that multiple times. It's really fun. You sit there with your coffee and your croissant and it's lovely.

*Vandenberg:* I feel like it's definitely important to change up the atmosphere when you're trying to do different types of writing. Do you find there's a difference in your approach to writing or your revision strategies between those different types of writing?

*Tinghitella:* That's a great question. I do. The big difference between my types of writing is one is geared toward experts and the other is for a non-specialist audience. I like your point about having different environments for different types of writing. That is like dead on for me. When I'm thinking about how to share something [to] non-scientists, it often comes to me in the shower. It's the kind of thing you'll be thinking about in the back of your brain. It needs to be approachable to a general audience. I have to think about making connections in ways people will relate with when they don't care about the evolution of insect songs or whatever. I have to figure out how to make things meaningful and that tends to come in spurts. I feel like if I schedule a time to sit down and do that, I don't always have that creative burst of energy to figure out what's the hook that's going to help this crew to really get on board and to be interested in what I have to tell them. So, for that type of writing, I tend to be more of a list person, where the idea will come to me and I'll be like driving in the car or in the shower and I'll end up recording like a voice memo: "hey you know you could get people interested in that anthropogenic noise problem if you talked about, how traffic noise has increased in Denver over the last 20 years." If you're going to grab this local audience, then you have to have this like local factoid that they can all relate to. At that point, it's really just a matter of letting your personality shine through, getting rid of jargon and infusing yourself a bit more instead of writing like an objective scientist.

*Vandenberg:* Do you think there are any benefits to having different types of writing? Like writing in an academic sense to your scientific colleagues versus your non-traditional public audience?

*Tinghitella:* I am actually a huge fan of everybody having to do all of those things because I think we overestimate what subject experts actually know. A lot of times when I go to a seminar or try to read a paper that's outside of my area of expertise, I often have absolutely no idea what's going on. I have a terminal degree in this area, so you'd think we were speaking the same language and we're absolutely not. So, I think it's incredibly important to avoid using jargon in any situation.

My PhD advisor was a really prolific writer in non-academic contexts; she wrote about science and scientific discovery, but for a general audience. She had four or five novels and she said your goal, regardless of your audience, should be that they always understand you. It is your job as a communicator to make sure that they're on board. You can assume everybody's smart but assume that they don't have the same training that you do, and so I try and approach every seminar, every paper that way.

My PhD advisor gave me a hard time in grad school once because my mom read something of mine and said that she was really excited because she understood 90% of it. And my advisor glared at me and said, your mom should always understand everything that you've written. That's stuck with me so much, so every time I write something I try and write it from the perspective of an intelligent person who doesn't do exactly what I do. There's no harm in doing that. You're not alienating subject experts, you're just making it easier for them to understand, too, I don't see the negative side to that.

*Vandenberg:* Yeah, neither do I. I don't really see the point of speaking in jargon, if you could get your point across in simple terms.

*Tinghitella:* Exactly, then you're not making them work hard. That's one of the most common comments I'll give to my grad students and postdocs. We're often trying to sound smart and that just makes your audience work really hard, and if you don't have to make your audience work hard, why would you? Just make it easy. They're going to come out of it feeling really smart and understanding it, and that's what we all want. Then of course they can ask nice questions.

*Vandenberg:* Of course, and by understanding and not asking clarification questions, that furthers the conversation and makes the research go deeper.

*Tinghitella:* Exactly it's an equity, inclusion and diversity issue to write like we're in this ivory tower and write about all of these things that nobody else can understand. That's just ridiculous. We're all trained to do different things; everybody has different expertise and there's no reason that we should be alienating people before they have an opportunity to say, "Wow that's cool."

*Vandenberg:* You mentioned the influence your PhD advisor had on you. Do you have any other experiences or people that influenced your development as a writer growing up?

*Tinghitella:* Yeah, my mom was a teacher when I was growing up. She was a really young mom, so I was a little kid when she was going through teacher education. She used me as the model kid she would work with and have do different things for assignments. So, I did a lot of writing as a kid and one of my best memories (and probably why I decided to go into science) is I used to do the science fair every year. My favorite part of that was actually writing up what you [did] and sharing it with other people.

I actually still have my first-grade science experiment that won first place at the science fair and it's an exercise in science communication and an exercise in writing. I had to write up these full paragraphs of what I did in the experiment and how I did that and why I was interested in the question. I think the process of having somebody so invested in that with me really made it a super fun part of what I was doing instead of like this drudgery at the end of doing the cool science fair. And so, I always had really positive writing experiences as a kid. I also had those very classic, "get in trouble in high school, write essays for my family," you know, for my mom as a punishment. So, there was a lot of writing that went on.

*Vandenberg:* What is your earliest memory of writing in a non-science subject?

*Robin Tinghitella:* My other favorite writing experience was actually taking AP English classes in high school. I had this really awesome teacher, junior and senior year in those two AP courses. He was a super entertaining person in general, but also one of those teachers who would call you out on your crap. If you wrote something, and you were just not into it and you didn't put in your best effort and he knew what you were capable of, he would call you on it. I really always appreciated his feedback because he took it seriously.

It was always really clear to me he was somebody who genuinely wanted to develop your ability to write and would do that not only with positive reinforcement when it was great, but also with no BS. So, I think that was my other really formative experience, was having somebody say like, "come on you're better than that, you can do this."

I think those are my two big experiences. When I went to college I didn't actually know if I was going to major in science or in journalism. Those were my two big interests and I dabbled in both early on. Then I got hooked doing biology by a really cool professor and figured that I'd be able to weave the writing back into that job eventually. Turns out it's most of the job.

*Vandenberg:* I can definitely see that: you mentioned earlier about having the [writing] accountability group, and you had that experience with a teacher when you were younger.

*Tinghitella:* For sure, especially when your accountability group is a group of people you genuinely trust. I'm like everybody else: I have pretty serious imposter syndrome about things, so I don't like sharing writing with people really early on, unless I absolutely trust them and know that they know that I'm capable and have these abilities.

We go through a lot of revision. One of the things you learn over time, is that a first draft looks absolutely nothing like the final published product. And so, in choosing these writing groups and collaborators on papers, I choose people I trust implicitly and who aren't going to make weird judgments on version three when it's version thirty that gets published.

I think that's really important to have people around to give you a hard time when you're not pulling your weight, but who also know you're super capable.