

“I Might Have More of a Knack for Science Communication Than for Doing Actual Science”



Jens Foell



Abstract In our interview with Jens Foell, we discuss his prior research work in neuropsychology and neuroimaging and recent transition to a full-time science communication position. For several years, Jens has been involved in a large-scale “rotating curator” science communication project called Real Scientists. More recently, Jens led the launch of the German language spin-off. Jens shares his insights in how to be a science communicator and how this has become a full-time job for him. Jens also discusses how labs can differ in their culture—such as their working environment and expectations for working hours.

Jens Foell

Contents

Chris: Can you introduce yourself and tell me a bit about your current position?.....	40
That was a great introduction. I have lots to ask you about! Let’s start from the “beginning.” What was the focus of your PhD?.....	41
How did you decide to move to the USA? Was the cross-lab collaborative project first, or did that emerge after you moved?.....	42
As you were finishing your PhD, what were you thinking about your career plans?.....	43
Based on your journey, what is some advice or suggestions you would want to pass on to someone who’s currently finishing their PhD?.....	44
Can you tell us a bit more about Real Scientists and then the DE spin-off?.....	44
Is there anything particularly interesting that you learned about through someone else’s curation of the Real Scientists DE account?.....	46

J. Foell (✉)

Department of Psychology, Florida State University, Tallahassee, FL, USA

maiLab, Heidelberg, Germany

e-mail: foell@psy.fsu.edu

© The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

C. R. Madan (ed.), *Academia and the World Beyond*,

https://doi.org/10.1007/978-3-030-82606-2_5

39

Can you tell us more about how you realized you would rather pursue a science communication career rather than staying in a research position?.....	46
What is day-to-day life like in your current position?.....	47
What do you like most about your work?.....	48
And what do you like least about your work?.....	49
How do you think having a PhD has helped you succeed in your current position?.....	50
A lot of people like academia because they feel it gives them an opportunity to work on a topic that they deeply care about. Do you think this is also true in your current position?...	50
Early in the interview you mentioned that you found that different labs have different expectations and approaches. Can you tell us more about what you were thinking about there?.....	51

Chris: Can you introduce yourself and tell me a bit about your current position?

Jens: Up until very recently, I had a pretty standard research position: I was an Associate in Research at Florida State University. I was with the same department for almost eight years and have been involved with different interesting projects over this time, including helping to build up a new MRI imaging facility and investigating phenomena such as aggression/impulsivity, fearlessness, cognitive flexibility, depression, and pain. Before that, I worked on my PhD back in Germany. The transfer from there to Florida was facilitated by working on a paper that had both my PhD mentor and my then-future boss as co-authors. Apart from the change of scenery, it was also fascinating to see the differences in lab culture: at least on paper, my line of research is the same all over the world, so it's quite easy to move countries and start in a new lab. But of course every lab has different expectations and different ways to approach the same thing.

However, just over the last few months, my life and career have taken a big turn. The start of this was that during my time in Florida, I have gotten more and more into science communication and have written articles, set up a Twitter platform for scientists, given public talks, and so on. Importantly, this was always at the level of a hobby; something I did for fun in the evenings and on weekends. But I noticed that I might have more of a knack for science communication than for doing actual science. It felt to me a bit like the difference between building a car and driving it: doing research shows you the nitty-gritty of it, why things work the way they do, similar to designing and constructing an engine. You have to know your way around, and you might get dirty. On the other hand, if you're driving the resulting car, you don't necessarily have to know how the engine works. It requires an almost entirely different set of skills and understanding, but doing it well can still be hard. And you can always find yourself in a situation where knowing a lot about how the engine works ends up being quite useful.

The big turning point arrived when I was invited to Germany to present a German-language science communication project that I set up: Real Scientists DE is a spin-off of the popular Real Scientists Twitter account, on which every week a new scientist talks about their methods, their life, and their research findings. What I did was to help expand the concept by setting up the same thing for

German-language researchers. This entailed creating the actual account, reaching out to scientists and scheduling their curation weeks, and trying to promote the account in the German-language research and science communication communities. The main motivation was to provide a service for an audience that might not be fluent enough in English to follow science content. In some ways, the German-language landscape for science communication sometimes seems less developed or less extensive than the English-language market, so I figured there might be an eager audience for it. I was very happy with the result: apart from a steadily growing audience, there was a lot of fascinating science that was being shared, and everybody seemed to have fun with the account.

That's also what I told at the meeting in Germany. It had been organized by a science communication institute and brought some of the biggest names in German science communication together. Among them was Dr. Mai Thi Nguyen-Kim, an MIT-trained German chemist who started out as a science YouTuber and presenter but very quickly grew to be the most important science communicator in the country. Her accolades include a best-selling book, virtually all major media and journalism awards, the highest medal of merit that can be awarded by the German President, and a YouTube channel with more than a million subscribers. At the time, I already knew a member of her team (again, the German science communication landscape is smaller than its English counterpart), and we stayed in touch after the meeting. A while later, she looked to expand her team, and we started talking about a position for me.

This position has brought me and my family back to Germany just a few short weeks ago, and I am still learning the ropes. The transition back after almost a decade abroad can be a bit disorienting, as it turns out, and developing content for a million-subscriber platform is just as dizzying. Being already familiar with the team certainly helps, and so does working for a tremendously talented and yet very down-to-earth boss. My actual job consists of everything from keeping an eye on current trends in order to identify interesting topics, to researching familiar and unfamiliar scientific topics, to reaching out to researchers for background conversations or interviews, to coming up with ways to frame scientific content so that it is accessible and entertaining. The skills I've developed as a researcher are surprisingly helpful for this, especially when examining the methodological quality of a published study and when chatting with researchers from various fields.

That was a great introduction. I have lots to ask you about! Let's start from the "beginning." What was the focus of your PhD?

I had the unique chance to do PhD research on a fascinating topic in the lab of one of the world's leading experts on it: studying phantom limb pain under Dr. Herta Flor in Mannheim, Germany. I had developed a strong interest in neuropsychology during my undergraduate studies, and I was particularly interested in topics that had

the prospect of tangible results, such as something that might be able to actually help people in the foreseeable future. The core of my PhD thesis was the following: by the time I started, we knew that the intensity of phantom limb pain is correlated with the amount of cortical reorganization after amputation. This reorganization can be measured using neuroimaging, and its relationship with pain is something that had been discovered by Dr. Flor in the mid-1990s, using the comparatively crude fMRI brain scan technology that was available at the time (and the finding has since been replicated and expanded). In other words, while the best and most precise measure of pain is still asking someone how much pain they're in, at least for phantom limb pain, we seem to have a reliable physiological correlate at our disposal. The direction of this correlation, i.e., whether changes in the brain cause phantom limb pain, or whether persisting phantom limb pain changes the organization of the cortex, is still being debated.

Also, shortly before I started my PhD work, it became known that a simple and cheap procedure might be an effective treatment for phantom limb pain. What I mean by that is the so-called mirror box therapy, in which a patient after amputation is presented with the visual illusion of the lost limb being back. After having been anecdotally reported to work for around a decade, the early 2000s saw the first controlled evidence for its effectiveness. With these data available, as well as a state-of-the-art fMRI setup, I wanted to investigate whether successful mirror box treatment would be able to reverse some of the cortical reorganization that has been associated with phantom limb pain. Spoiler alert: that's indeed the case. Post hoc findings included a lack of correlation between mirror treatment effectiveness and time since amputation (i.e., how long a patient had already been living with phantom limb pain did not predict treatment success in either direction) and some speculation on whether properties of the phantom limb itself might be impeding treatment success in some.

To my delightful surprise, the resulting paper would later win me a prestigious German pain research award, which might very well remain the pinnacle of my research career (at that time, I was already living in Florida, and the fact that I wasn't able to travel back for the award ceremony still bugs me considerably). During those studies, I got involved with others that were closer to the patient experience, like helping develop an augmented-reality-based mirror box system and evaluating new prosthetic devices.

How did you decide to move to the USA? Was the cross-lab collaborative project first, or did that emerge after you moved?

Right after my PhD thesis, I was at a crossroads both regarding research topic and regarding where my wife and I would live and possibly start a family. We had already lived in the USA before, and doing that again seemed like a fun thing to do. The other big neuropsych research topic that had always interested me was

psychopathy, or aggressive/delinquent behavior in general. It touches on several important societal topics (most prominently the question of whether our brains are "hardwired" in some way to go against society). As coincidence would have it, I became involved in a collaborative psychopathy project between Dr. Flor and Dr. Christopher Patrick in Tallahassee, Florida. At the same time, Dr. Patrick was looking for ways to include more neuroimaging in his lab work. This situation developed into me moving to Florida to help build up an fMRI component for the lab while also conducting non-fMRI research in the lab, such as an investigation into cognitive flexibility when confronted with similar tasks requiring different sets of rules.

While Florida is a very different place from Germany, there has always been a healthy exchange between the two regions, and overall we had an easy time fitting in. However, a few years after transferring there, the country fell into a period of political turmoil. By that time, we had already started a family in Florida but also kept up strong ties to the home country. The position also allowed me to branch out into interesting side topics, including working with the defense team of a prominent criminal case—specifically: answering the question whether the defendant's clinical MRI scans could somehow be used as part of their psychopathy assessment. At the same time, I tried to hone my skills as a communicator, which was facilitated by such things as a locally organized TEDx event and by being in the same time zone as many interesting and friendly scientists who I started to interact with on Twitter.

As you were finishing your PhD, what were you thinking about your career plans?

The most obvious thing to do at that stage was to start a postdoc in the field of pain research, to further carve out a niche for myself and work toward a professorship. But as may or may not already be apparent based on what I've stated so far, I've never had a clear career plan cut out. I've always followed the topics and methods that interested me most out of those that were available, based on a conviction that those will also be the ones that I would be best at. So far this approach has worked, although it's hard to tell (a) whether this has been mostly due to sheer luck and an overestimation of my abilities by the people making hiring decisions and (b) whether there will come a day on which I will regret this zigzag course and wish I would have stuck with one topic and area. But at the very least, I can demonstrate that a clear career plan is not a necessary condition for doing research and science communication in interesting labs and locations.

One factor that might be important to understand my decisions is that I did not grow up in an academic context and so its career paths have always felt somewhat alien to me. So even when I was working toward building an academic portfolio for myself, the prospect of being a tenured professor somewhere never seemed as desirable to me as it might be the case for others.

Based on your journey, what is some advice or suggestions you would want to pass on to someone who's currently finishing their PhD?

One thing that I have definitely learned is to try and find the environment (including topic, methodology, and workplace conventions) that fits you best. An example of what that might mean in a research context is if you're more or less okay with fuzzy data or incomplete interpretations, or if these things make you uncomfortable and you'd rather have strictly defined problem spaces and solutions. Either of these things is available in today's scientific efforts, and I think it's important to find the landscape that fits you. And by "fit," I don't necessarily mean the one that is identical with your own way of doing things—you might actually seek out the other way so that you'll find work that challenges you on a day-to-day basis. In summary, this mainly means that you shouldn't underestimate your own gut feeling, even in a head-centered enterprise such as scientific research.

For science communication, this extends into the medium that you will be using. Maybe you're someone who is good at writing long-form articles or bite-sized commentary. Maybe you have a good voice for podcasts. Or maybe you're a happy extrovert and most comfortable when you're jumping on a stage and giving people a funny impromptu rundown about your scientific field. The important thing to remember is: there is an audience for each of these things. That means that you might find it useful to try one or the other and see what works best for your style. Knowing how best to express your own voice, both in terms of content and medium, is an incredibly powerful skill. Or to phrase it differently: if you're funny, be funny. If you're cold and analytical, be that. Trust that someone out there will find your way of framing things the most accessible one. Challenge yourself to find something new, but don't contort yourself in order to fit into a niche that's not yours.

One notable difference between working in research and working in science communication is how often you will change your topic. In academia, it's common to work on the same tiny aspect of your subfield for a decade or more. In my current sci comm job, I might look into a topic for 2 to 4 weeks before moving on. Again, it's not like one of these things is inherently better or worse; it's more about balancing your own preferences for stability or flexibility and finding or choosing what suits you best.

Can you tell us a bit more about Real Scientists and then the DE spin-off?

The Real Scientists project was initiated by scientist and science communicator Upulie Divisekera in 2013. Its primary component is a Twitter account that changes hands every week. Even if you're entirely unfamiliar with Twitter, it's likely that

you have encountered this part of the platform before: because another example for this type of account is that for the US President, which is assigned to whoever currently holds that position. And just like the account for the President, the Real Scientists account is a very direct way into the mind of whoever is currently at the helm. The concept is known as *rocur* (short for rotating curated) account. One big advantage of a rocur like Real Scientists is that as a reader, you'll get to know someone new every week. So if you find yourself disinterested in the current curator or their science, you can just wait for the next one. And over the weeks and months, you'll get an overview of the entire spectrum of scientific fields and personalities. And it's free! It's no surprise that after the initial success of Real Scientists, other science-themed rocurs have started to appear. But Real Scientists remains the oldest and the one with the broadest appeal, as it doesn't tie down the scientific area that is being displayed.

The project fascinated me right away when I set up a personal Twitter account for myself in 2014. What makes Twitter unique as a platform for science communication is how direct and unfiltered it is—for better or worse. It's a lot like chatting with people at a scientific conference. You might not understand everything that's being said (and if you do, you certainly won't agree with all of it), but you'll gain the most current possible insight into what bothers or excites the experts at any given moment. Also, as you know if you've ever been to a science conference, the social aspect is not to be underestimated; and so it can also be fun and useful to chat with scientists about personal interests or leisure activities.

The moderators behind Real Scientists were kind enough to have me on as a curator for a week in 2015. It was a quite exhilarating experience; at the time, the account had a bit over 20,000 followers who were eagerly asking questions about my work and discussing my field in general. Shortly after that, I was offered the position of a moderator myself, which meant that I had the opportunity to learn how the account works behind the scenes. At the time, there was already the idea of branching out into other languages, and I was excited to spearhead the first spin-off. Given my native language and the lack of anything like Real Scientists for a German-language audience, it felt natural to launch Real Scientists DE, which I did in early 2017.

The most important thing to know in this context is that providing the infrastructure for the project is not difficult at all. Instead, the biggest potential bottleneck is finding curators who provide content that is interesting and regular enough for the audience to keep tuning in, which is the only way to grow your project's user base. The other important thing to know is that, while it is idle to only focus on the number of your followers, a larger user base will help you to attract new curators, which in turn grows your base—in essence, you want to end up with a self-perpetuating system. But that means that the fate of your project is mostly not in your hands but in those of the curators that you invite (or that you schedule after they reach out to you). And luckily, Real Scientists DE has had a constant level of wonderful curators and has been able to grow its base at a steady pace (to currently about 11,000 followers, about 3 ½ years after launch).

Is there anything particularly interesting that you learned about through someone else's curation of the Real Scientists DE account?

In terms of science facts, I learn new and interesting things basically every week. But what has been even more striking was learning about the researchers' own motivations and concerns about science communication. After talking to and scheduling around 200 curators over the last few years, it is easy to recognize patterns in the questions that they have before taking over the account. Many of them worry about not tweeting enough to keep people entertained and excited, when in fact this doesn't seem to be a problem for the audience at all: if there's a lull, people just tune in the next day. And if they're not interested in your field of research, they'll be back next week. The thing that might actually cause trouble is likely something that you won't see coming, like a statement about your personal beliefs about science that parts of the audience might be opposed to. It's rare to see a debate become uncomfortable or nasty on the account, but if that happens, it's likely about a current hot-button issue. Overall it has been most interesting for me to see what catches curators by surprise and how they might deal with it. Luckily, neither the English-language account nor the DE account has ever seen a big meltdown.

The other very interesting thing is to see where curators go after their week. Often they're people that I still stay in touch with on Twitter after, and for many of them, Real Scientists DE is a first gateway into sci comm. As a result, I have seen several of them switch to full-time science communication later, and whenever possible, I have tried to have them reprise their role as a curator after their transition, which provides an interesting perspective.

Can you tell us more about how you realized you would rather pursue a science communication career rather than staying in a research position?

It started early but still took a long time. Right when I started my undergraduate studies, I noticed that it was a lot of fun to talk to others about the psychology and neuroscience studies that I learned about in class. And I quickly realized that the questions and comments that came back from my friends helped me sort through my own classes as well. In other words, in order to explain something well, you need to understand it well yourself. One fascinating example for this is statistics: in undergrad research, it's most important to be able to run the analyses you need to run and to clean and organize your data in a useful way. But when talking to non-specialists, they will very soon ask you *why* you are running the analysis, or if there are other ways to find out the same thing. To answer that, you'll have to take a step back and see the whole picture, which is often very helpful. At the time, I didn't think about a career in science communication, but I felt myself gravitate toward situations that allowed me to talk about these things.

My first moment of testing the waters came in 2009, during the first half of my dissertation, when I offered a science class in an evening school. For this, I combined information from psychology and basic science to create a course on critical thinking and hypothesis testing. While there was never much interest in the class, the people who did take it always gave me positive and useful feedback and often asked for additional information afterward. This experience taught me not only that I have an interest in doing science communication but also that it's important to have an effective platform. Over the few years that I offered the class, attendance ranged from something like 8 to 12 people, which didn't feel like a giant audience (although I was grateful for everyone who was there). This is something that changed from 2014 on, when I started being on Twitter. I was lucky to be accepted into what people often call "science Twitter," which is a circle of current and former scientists, as well as science enthusiasts, that regularly interact with one other on the platform. Becoming part of this group allowed me to build a relatively large audience fairly quickly. This provided me with a new playground to test science communication ideas: like what does a science fun fact have to look like so that people will read or share it? What hook do you need at the beginning of a longer thread to make sure the audience will read the whole thing? Mind you, some of these questions I still can't answer even after more than half a decade on Twitter. But over time, I realized that thinking about these things was much more fascinating to me than, say, writing a grant proposal, which is a surprisingly large part of having a research career.

What is day-to-day life like in your current position?

We have a lot of virtual meetings and chats within the team to develop new ideas for topics. Usually there are more topics available than needed, so that some might be put on a back burner or might be dropped entirely. Once a topic has been selected, we pick the best person to take the lead on it. Since the team members all have different backgrounds, this is often an easy question. After that, the part that I spend most time on by far is researching the topic at hand. One thing that has made this particular channel popular is that the conveyed information always represents the best and most current science. Making sure that this is the case might entail several extensive literature searches and/or reaching out to experts for chats and interviews. My main job is writing the script for videos, but the narrative always follows the science, not the other way around. This means that the actual script might only start to come together after a lot of time spent on the topic, when the status of scientific consensus becomes clear. At the same time, every team member checks, edits, and scrutinizes the writing of the other team members. How much planning, researching, or editing is being done on any given day mostly depends on what day of the week it is and how far along the current video is. New videos are usually uploaded on Thursday morning, and that deadline automatically leads to a rough schedule of when the script should be done, when graphics should be done, and so forth.

Talking to other people is a surprisingly large part of my work: talking to the other team members and to experts in whatever field is important for the next video. A large part of the rest of the work feels like the reviewing of research papers that I have always done as part of my research work—both as a researcher and as a science communicator, it is important to know how to read a research paper and to be able to identify the most important methodological weaknesses. Every PhD student collects a tremendous amount of experience with this: even if you're not reviewing for journals very often, you will still scrutinize the manuscripts written by your friends and colleagues and those that you review when planning or reporting your own studies. You might not realize the development of your own skills, but over the years, you'll inadvertently develop a keen eye for the overall quality of a published paper and the limitations inherent to the most important methods in your field. This skill can be incredibly important for science communication and something that you might be better trained for than someone who has studied science journalism (although, of course, that person will have other skills that go beyond those of a researcher).

What do you like most about your work?

So many things! Obviously, being part of a great team and having a good connection to your colleagues helps in any job. But what has always fascinated me about science communication in particular is the potential impact: I myself am always very happy when I learn some fascinating new fact about the world, and part of my work is now to spread this fascination to others. And my current position is a perfect opportunity for this.

One example to illustrate what I mean: statistics has been a central part of my scientific education from the very beginning. Subsequently, I noticed that this knowledge helped me even outside of science in everyday life, for example, when trying to interpret or contextualize numbers presented in the news. Over time I tried to identify those aspects of statistics that were most useful and to find ways to explain them in an accessible manner. My motivation went back to something that Carl Sagan once wrote, about how news services and politicians would have to be more honest and transparent about their numbers and statements if the overall level of understanding of statistics in the population was higher than it is. In the end, I picked the statistical concepts of median and variance as those that I found most helpful. My efforts to create accessible and understandable explanations of these concepts have led to a medium-length blog post. But even after submitting the blog post to a science blogging competition and winning third place, the readership was quite limited. Which I understood: after all, there are more exciting topics to click on than statistics. However, my current position gave me the opportunity to present the same concepts in one of the channel's YouTube videos. It's still obviously the case that statistics is a less attractive topic than others, as the resulting video got a below-average number of views for the channel. However, it still got more than half

a million views, which is much more than I ever could have hoped for. And from the YouTube comments, it is apparent that a good number of people found the explanations helpful or at least not exceedingly boring. So while the size of the audience that will see my work can be intimidating and brings with it a higher intensity of scrutiny than what I am used to, it has the tremendous advantage of being able to reach out to many people and to have an impact. And if there's only one person among them that is enjoying my science communication work as much as I enjoy that of others, it will have been worth it.

And what do you like least about your work?

So far I haven't identified any real downsides, although I still have to get used to working 100% from home. It has some very real advantages, especially with a family at home as well as, of course, during a global pandemic. But I've also always enjoyed working in an office with my colleagues around me. And I think I will miss scientific conferences, although, again, the pandemic has pretty much made those impossible for the time being, so it's not really a result of me changing fields.

One element that could be considered a downside, and that I hinted at above, is the scrutiny that comes from a larger audience. The Internet can be an unforgiving place, and if you're a science communicator, there are several things that can lead to intense pressure from a large group of people: saying something inaccurate, of course, but also just discussing a controversial subject or inadvertently using terms or phrases that can be misleading or that are prone to misunderstanding. Some of these issues can be avoided by thorough vetting of every statement before it's being put on the Internet. This is something that my current team is taking very seriously so that the contents that are going out are factually accurate and phrased in an unambiguous manner. It also helps to be part of a team that includes non-scientists to avoid the tunnel vision that can sometimes plague researchers. Something else that helped me with this is the years I have spent listening to people on Twitter, which have given me at least some experience in recognizing science issues that have to be approached more carefully than others. It is tempting for a researcher to view one's own field as something that is neutral, objective, and somewhat removed from politics and society overall. But this can often be an illusion, and people might in fact have very strong opinions on one's findings, research methods, or funding structure. Twitter can be a useful training ground in this respect because users often speak their mind and can often provide constructive criticism.

All of these strategies and experiences can help avoid any potential flood of Internet-based criticism. But, and this is crucial, some negative reactions are impossible to avoid entirely, at least if you want to tackle scientific topics that are not fully settled yet or that have political implications. In those cases, there will always be some who will attack a sci comm video, or the people behind it, regardless of its accuracy. But that's just a part of working with a large-scale platform.

How do you think having a PhD has helped you succeed in your current position?

My PhD work has definitely taught me things that help me every day with my work in science communication. A big part of it is knowing my way around different research methods and data analysis. For example, I might not be working with fMRI anymore, but learning fMRI methods has taught me some common pitfalls of analyzing data that can be less than ideal in regard to its stability and reliability. And that is something that comes up quite a bit when looking through results reported from different fields.

A surprisingly important experience from that time was acting as a reviewer for publications. By that, I mean both being a peer reviewer for submissions by others and discussions within the lab of manuscripts that were still being put together. As a learning experience, it's great to review both excellent papers by seasoned researchers and texts that might be only half-done, or that were thrown together quickly for a conference deadline, by one of the more inexperienced lab members. Reviewing a range of these manuscripts, and trying to provide feedback that is as constructive as possible, is a powerful way to train one's own eye so that it can recognize gaps that others might miss. This could mean a logical leap in an argument, a misapplied analytical method, or just a phrase that is not entirely clear. I've lost track of how many reviews I have actually done or assisted with, but I would call myself an experienced reviewer, and I think this might be the strongest asset that I have when compared to science communicators with less of a research background.

A lot of people like academia because they feel it gives them an opportunity to work on a topic that they deeply care about. Do you think this is also true in your current position?

Absolutely. One reason for this is that my team is giving me the liberty to choose topics that I find important. It is no coincidence that some of the first sci comm videos that I have been involved with were on the topics of statistical testing and phrenology, two topics that are close to my area of expertise and that I believe are shrouded in a lot of mystery and misunderstanding. On the other hand, we try to stay on top regarding topics that currently interest or challenge society (there have been several on the pandemic or vaccines, for example). That means that I'm sometimes tasked with topics that aren't necessarily of personal interest to me but that are fascinating enough to cause a wider discussion. That makes it easy to care about these topics even in the absence of prior individual interest.

What might help me with this is that I've never felt tied to one particular topic and was more focused on staying within one method. In other words, I have been co-authoring papers on topics as diverse as pain, depression, aggression, fear, even all the way to topics such as dreaming and necrophilia. For some of these, I didn't

have a preexisting deeper interest but rather let myself be introduced to them by seeing if I could apply my favorite research methods to study them. And this is still pretty much what I am doing now: using the training that I have to work on several different topics that I think are important.

Early in the interview you mentioned that you found that different labs have different expectations and approaches. Can you tell us more about what you were thinking about there?

In a lot of ways, labs are like families, with different expectations and different levels of interdependence. I have been very lucky in that I've always worked in labs that functioned like "good" families rather than "difficult" ones. Still, depending on your personal way of working, you could find yourself in a situation that can make it easier or harder for you to do your job. One example would be lab (or office) layout and how much privacy this affords you. I've seen it happen that people chose to work all in one large office space, even though individual offices would have been available. This phrase might be confusing to some, who would always go with the personal office and only share spaces if nothing else is available. But depending on the structure of the teams as well as their tasks, working closely together in an open space might be what works best.

A similar topic is working late nights or on weekends. Both are frequent in academia and, to a certain degree, are expressions of a work culture that allows many to structure their work day more flexibly than it would be possible in other positions. For example, if you have kids that you drop off at school in the morning, you might want to start later than others or to push some of your non-urgent tasks to the weekend or nights. If that happens out of your own volition, academia is offering you something that you might not find elsewhere. However, it might conversely be the case that nights and weekends are the times you can spend quality time with family or friends. In that situation, there might be pressure from others in the lab to work at times that will cause you stress or other problems.

There doesn't seem to be a good solution to this type of conflict. But given that lab culture differs from place to place or from PI to PI, it is at least possible to find the workspace that is most conducive to your own style, which will ultimately make you a happier and more productive scientist. This is one reason that I recommend talking to graduate students and undergrads when visiting a lab that you might be considering as a future employer: it will likely give you an impression of the overall working environment there, which should inform your decision on whether or not to work or study there.

It was great to hear about your work and advice! Thank you for telling us about your experiences, Jens!