**New Faculty Institute 2015 | Katia Bertoldi, James Mitchell, Laurence Ralph**

ELIZABETH ANCARANA: So now, I turn to our panelists. And thanks again for coming and talking to our new faculty here today. It's just a delight that you're here. We have Katia Bertoldi who's the John L. Loeb Associate Professor of the Natural Sciences at the Johnny Paulson School of Engineering and Applied Sciences. After earning her Ph.D. in Mechanics of Materials and Structures from Trento University in 2006, Katia did a post-doctoral fellowship at MIT and then served as an Assistant Professor of Engineering Technology at the University of Twente in the Netherlands. She joined the Harvard faculty in 2010. Katia's work focuses on the relationships between the internal structure of a material and its mechanical properties. Her research on materials, especially those with tunable properties, has direct use in many critical fields, including acoustics, optics, and electronics.

Next to Katia is James, or Jay Mitchell who's is an Associate Professor of Genetics and Complex Diseases at the Harvard T.H. Chan School of Public Health. After completing his doctoral training at the University of California at Berkeley on Human Telomerase Biochemistry, he did his post-doctoral studies also in the Netherlands at Erasmus University in Rotterdam where he focused on the genetics of DNA repair and aging. Jay came to Harvard in 2008, where since, he's been focusing on the restriction of calorie or nutrient intake to increase stressed resistance, particularly during major surgery, and the improvement of metabolic fitness and the extension of longevity.

We also have Lawrence Ralph, who's the John L. Loeb Associate Professor of the Social Sciences in the Departments of Anthropology and African and African-American studies in the Faculty of Arts and Sciences. After earning his Ph.D. In Anthropology from the University of Chicago in 2010, Lawrence served as a Mandela Rodney Dubois a post-doctoral fellow at the Center for African and Afro-American studies at the University of Michigan. He then joined the Harvard faculty in 2011. His scholarly work explores how the historical circumstances of police abuse, mass incarceration, and the drug trade [? naturalized ?] disease, disability, and premature death for urban residents, showing how violence and injury play a central role in the daily lives of black urbanites.

So we have a nice array, a very interesting array of work and backgrounds. Each panelist will speak for about 10 minutes, and then we'll open it up to questions from the audience. So would you want to maybe start with Katia?

KATIA BERTOLDI: Yes. OK. So first of all, welcome to everybody to Harvard. So I was here in 2010, so a long time ago. So as Elizabeth told you, I started in January 2010-- no, sorry, it was in 2009 because I started in 2010. So now you might think it's a long time ago. But you'll see, time will fly. And soon you will be on this side of the table speaking to a new faculty.

So what do I remember of the first days? The first days are kind of mixed feeling, right? At least for me was. On one hand, you feel the pressure. On the other hand, you would like to do things, but you don't know what to do and you don't know how to move. And then, you need to adjust. Adjust to the new place. In my case, I was moving back from Europe, so you need to fix your family life. My husband needed to find a job. So all these sort of different pressure coming to you.

So what can you do to deal with that? So I think the best suggestion I got was, before coming here, I was deciding whether to leave Europe and come here and to accept this offer or not. And my mentor in the Netherlands just told me, look, Katia. This is a unique opportunity. We know that there's going to be-- probably you're going to have some pressure. It's going to be tough. But it's really unique. And there, you have the opportunity really to do great things because mostly the environment. The people around you, the resources.

It's a seven year period that is tenure, yes. It's not so easy to get tenure. But forget about it, and try to enjoy every day, and really to make sure that at the end of the seven years, you can say it was worth doing it. And just make sure that you take advantage of the resources. And this, I think, was the best advice I really got. So try it try to forget about the fact that there's going to be a promotion. There's going to be several promotions. One in between, and then the final one. And just really take advantage of the resources.

Now how of take advantage of resources. So in my case, I was lucky because people in my area-- so I'm in the School of Engineering and Applied Sciences. So people working in an area related to my area of expertise go for lunch together every day. I was the only junior faculty. Now there are a couple more. But this has been very, very helpful. It's true that maybe you waste one hour of your day every day, noon to 1:00. And maybe you could write a paper or do something. But now I realize how important it has been because in this informal discussion, you get to learn how people move around.

And I was assigned, as probably most of you, to a mentoring committee at the very beginning. Honestly, because of these informal lunches, daily informal lunches and discussion, I never used the committee just because I have this informal committee every day. And I find it much more useful, because after a while, after you go for lunch every day, you can also ask these sort of questions that maybe are intimidating. You don't want to ask to somebody that you just meet once a year. So this has been quite helpful for me.

And what else can I tell you? Clearly, at the beginning for me was also difficult to suddenly manage so many tasks. Before, I was a post-doc. I was a faculty for a while in the Netherlands. But there, the environment was very different. I was sort of a senior post-doc because the structure of the academic system is very different. So suddenly, I was pretty much spending all my time doing research. And then when I started here, suddenly I had to manage a group. I have currently 20 people in my group. So it's a medium-sized group, I would say. You need to write grant to make sure that you get money to support the group. You need to teach, mentoring these people, and write papers.

So it took me a couple of months to adjust. But then what I figured out was in my case very useful. Every morning when I wake up, I just try to make a list of things on a piece of paper and just cross lines during the day as things move. And make sure that I try to balance all the different things, because sometimes, I have the tendency only to focus on one. And then it's 5:00 PM, and suddenly you realize you have to do other three things. So trying to find a balance is always useful.

Beginning, I found it particularly difficult to manage students and manage post-docs. So maybe I was a bit unlucky. At the beginning, I had some cases that were not so easy. Also, this was also because of me, because probably at the beginning, I was not so sure about the quality [INAUDIBLE] into the people I was hiring. So I can see that now, over time, I improve a lot. Now I can select people in a much better way, and I'm much more sure that the people I'm hiring are exactly what I expect. But you learn by mistakes. So I spend quite a bit of time also dealing with managing people.

I didn't take much advantage of the resources around campus that I-- I just mostly talk with senior colleagues around me. And this was after I solved the cases, and to try to basically smooth out all the issues, I figured it out. Something I found particularly useful was to try to put a limit on travel. So at the beginning, I look at this as a compromise with my husband. Clearly you can travel, and you can spend almost all your time on planes and visiting beautiful places. And not only visiting, but also giving talks at conferences.

But you also need-- life is a compromise. So clearly, my husband was not at all up for that. And so we realized, OK, why don't we try to limit. We came up with sort of agreement, let's try to limit the travel to once a month. It's not a strict rule. But let's try [INAUDIBLE]. Sometimes it's two. Sometime it's zero. Sometimes maybe three, but try to put some limit. A cap, at least. At the beginning, I look at that, I thought a fine compromise, but a limitation. Now what I realize is that helped me a lot. The fact that I need to think where I want to go and I need to think why I want to go, and I need to be selective, because traveling is tiring and takes out time that you need to spend doing other things.

So I find it really-- now that when I look back, I'm thinking that this is helping me a lot. So basically compromising between all the different tasks. So still keep visibility, but also being very selective and making sure that you choose where to go in such a way that you maximize some of the visibility. And make sure that you meet the people that you need to meet and you want to meet. And yeah, I don't know. What else do you want me to tell you?

ELIZABETH ANCARANA: Well, that's a good start. Maybe we'll have each panelist talk, and then we'll open it up to questions.

JAMES MITCHELL: Yeah, OK. I'll take over then. Jay Mitchell from the School of Public Health. I was going to apologize at the outset because I'm a research scientist. I run a lab. And I thought that might be not so common with what people in the Engineering School do, but perhaps not so different. So I'm going to take you through some of the things that I've done over the last eight years that have gotten me to this point, and some of the lessons I've learned.

So what Elizabeth told you, just to refresh on what I do specifically, basic research lab. I'm trained in genetics and biochemistry. And my lab focuses on aging and nutrition, and the mechanism by which, when you eat less, you live longer. That is you if you were a rodent. And we work on mice primarily. Or if you were a fly or a yeast, the same thing holds true. But what I actually do is study how the mechanisms that allow you to live longer actually increase your stress resistance. And that turns out to be very handy when you have a planned stress in your life. And so what we actually work on is surgery. And we're trying to figure out what you should-- or in this case, shouldn't eat-- before you go into a major surgery to increase your body's resistance to stress.

So that's what I do. And the reason I tell you that is because the first key lesson I learned at Harvard is to be able to define what you do in two sentences. And it has to be hopefully exciting, and it has to sound really important. And most importantly, you have to be the best person in the world at that. So you really have to define your niche carefully. And I still struggle with that, because my lab actually does a lot more than just that. We work on different organisms, different pathways. And I continually struggle with how exactly to define my niche, my role. To make myself that most important person doing that most important thing. But I think it's a good lesson.

And for me, learning that lesson has helped with a lot of other aspects of the business that are very important. Publishing, for example. Getting grants. It's easier to publish and get grants based on things that people know that you're the best at. Things that they trust that you know how to do. When you get outside of your core business, you're area of focus, people don't have that trust. They don't know you. And unfortunately, a lot of this business is based on personal interactions. Who you know, their judgment of you personally. So it's enormously helpful just to keep that focus. What is your core business? What do you work on? What are you the best at? And build out from there. Not easy, but very important.

So a corollary to that is writing. And I wasn't a particularly good writer coming in, and I've really had to sharpen my skills. Communication in general. I wasn't a very good speaker. And I've tried to sharpen my skills. These days, it's not good enough just to write well and speak well, but I think you have to be even more clever with social media and other ways of getting your message out. So the more often you can get your message out, I think it does have benefits. And this can be at meetings, traveling, perhaps in the public realm.

The media itself, sometimes they find something you do interesting. And you can try to use them as a route to convey your message and how interesting it is, and how it should be funded, for example, by the NIH. That's a bit of a double-edged sword, too, because the media can take what you do and twist it into something else. But it's by and large probably worth it to try to get that attention on what you do. So that's the key lesson, the two sentence, the elevator pitch.

Setting up a lab. An assistant professor is like a small business entrepreneur. You have to run a group. You have to obtain funding. You get your investor. The university gives you, in our case, about two and a half, three years. At least that's how it was eight years ago. But you probably have no training-- at least if you're a geneticist like me, you're not trained in organizational skills. You're not trained in finance. And you're certainly not trained in choosing people or managing them. And for me, that's been the biggest struggle is to choose good people.

Of course, Harvard's wonderful. The students, the post-docs, even the technicians that we have access to is tremendous. But I really wish I had a sixth sense to know, that's the one that's a good fit for my lab. A mutual good fit. And I don't. And talking to my colleagues, even the senior ones, they get better. But I don't think anybody really has the secret to choosing people that are a good match. But we keep trying.

Grants after the three year start-up package runs out fund everything, including, in my case, 70% of my salary is through my grant. So that's primarily what I do these days is write for grants. But of course, to get grants, you need to have the papers. And for the papers, you need to choose the good people, the students, the postdocs who then deliver the data. And it's that preliminary data, then, that allows you to get the grant. So it's just a revolving circle. And where do you start? You come in here. It's your first year. I've seen two different patterns that people follow to break into the business. One is to hire senior people, a senior lab manager or technician, senior postdocs, and to have a very high burn rate. Just churn out mature data rapidly, and then enter the publications and the grants.

I chose a fundamentally different route-- to do everything myself very slowly, and to learn and make all the mistakes along the way. I think both paths can be successful. It probably just depends on your personality. So there are unfortunately no generalizations that I can make. I've seen both succeed, I've seen both fail. The one thing that I can say is choosing my path, at least I do know how to do everything. And also coming from Europe, there was some necessity to that because I didn't have any idea how things here worked. So that's maybe situational. But I think those two paths can work.

Taking advantage of resources. Of course, as we've heard, they're tremendous. And I already mentioned the students, and we heard from Alan Garber, the faculty are also wonderful resources not just for what you do, but for things that are tangentially related, which might have some influence at some point. Collaboration is a wonderful thing, but I'll give one example for me that it was enormously enriching. But I entered it with a false pretenses of what I thought I might get out of it.

So being in the School of Public Health-- and we have a Department of Immunology and Infectious Diseases-- I struck up a collaboration with a biologist who works on malaria, which I know nothing about. We were interested in how what the host eats-- and the host being the mouse, in this case-- how what they eat affects the course of disease. And we found some really interesting stuff. Namely, that if you restrict food intake, you don't succumb to the illness. So very interesting. And I thought, this is wonderful. It's really enriched how I think about my core business.

But the mistake I made is to think that I could turn that into another core business. And that has been enormously difficult. To go, then, to different study sections, different journals who don't know me. I'm not a malaria guy. And to try to recapitulate the same thing that I'm doing in my core didn't work out, in my case. That was my expectation, to diversify my funding. And it was a false expectation. I keep trying, because it's really interesting. And so I would say the take home was that it was so interesting and so enriching for my core business that it was totally worth doing. But it's hard to predict ahead of time. So I just don't have false expectations of what you might get out of it.

Equipment is another thing maybe specific to the lab sciences. But it's all out there. You just have to figure out where, and who to ask, and how to ask. And I don't have any good advice except for perhaps things like this. So if there's anybody who has a GC that detects hydrogen sulfide, I would love to talk to you. It's worth a try. Navigating the Harvard environment, there is very little here that is as it appears. And you get to learn that probably pretty quickly. You've probably already figured that out.

So for me, mentorship was really a key to surviving this opaque environment. And mentorship from the tenured faculty was enormously helpful in figuring out how the school, the School of Public Health and the university, how they interact. How that works. What's important, where I should spend my time. But wasn't really helpful for how to climb the tenure ladder because they had done it in a different era. So for that, getting to know your colleagues who are just one step above you is enormously helpful, because it's different, I think, now that it was even five or 10 years ago.

Lastly, the relationship with your department chair, who you can't, choose, by the way. It's like kids and parents. You're here already. You've got a department chair. But it really is of critical importance. Although I don't see my department chair except once a month at faculty meetings. He's also my formal adviser, so I see him annually to discuss mentorship-related items. But my relationship with him it's critical if I run into a gap in funding. It's going to be my department chair who's going to pull me through or not. He's the one who sets the pace of the tenure ladder. So again, it's not something you control, but it's certainly something you should be aware of, at least in my case. And I've heard this in other institutions in the lab sciences, too, of the critical importance of your relationship with your department chair.

Finally, a piece of advice. And I think we just heard it from Katia. Don't worry about the tenure too much. In our case, it's a 10 to 11 year process. So maybe it's easier for me to say. I have other colleagues who it's a five to six year process, and that seems far more stressful. But in any case, with the longer clocks, you can really say-- I can say in all honesty, possibly I'll get another job with a bigger salary running a department somewhere before I make tenure. That's something I see happens to my colleagues all the time. Another thing that might happen is you run out of funding and you don't have to worry about it anyway.

But hopefully you will enjoy, you'll find a good work-life balance. And that period of time, you won't just be focused on making tenure, but you'll actually learn and enrich yourself during that period.

LAURENCE RALPH: Hi. Again, I'm Laurence Ralph. I'm in the Department of Anthropology and African and African-American Studies. I guess I'll begin by just reaffirming some of the things that the panelists have said, and offering some concrete details. I think the first thing is use the people around you as a resource. I think not only professionally, but personally. One of the biggest things in my first year was that the people that I met in orientation in this Institute as well became people that I would hang out with for happy hours or what have you because we were all new to Cambridge. And we were all going through the same process at the same time. And we still have sustained relationships. So I think that's a critical thing. Or at least it has been for me.

The second thing I'll say is that my first year, I had a striking experience at this very faculty club. And it wasn't during this Institute, but shortly after, when my department had an event here. And we were upstairs in one of these rooms, and there were waiters with gloves on and silver trays passing out lobsters or something like that. And it was like a glee club in the background. And I was looking around, and I was like, where am I? And I had just came from the University of Michigan State, a state school. And just as I'm having this thought, like, what is this place? One of my colleagues said, man, before the recession, we got two lobsters.

And I couldn't believe it. I say that to say that there will be moments like that here at Harvard. And those moments can intimidate you, right? Because at the same time, you need to interact with people. And what's especially jarring is the juxtaposition between those moments and the conversations that you have with people who are actually down to earth and friendly and funny. But you might not think so in particular environments here. So I would say that that's an important thing to remember because again, the people in your department are resources that you can turn to for particular things, right?

I'm in two departments, so I've had different takes on how Harvard operates. And even how a department operates, relationship with the chair of the department and what have you. And what's interesting is that in terms of things like mentoring, there's no real one fixed way that you can expect to be mentored, I think. In both of my departments, mentoring has been really active at particular moments. And you can tell that senior colleagues had a discussion about, this is what we're going to do about mentoring, and they've implemented something. But at other moments, it's not been on the radar in the same way. And it's oscillated between both departments.

So I would say that what's presented to you now might not be how it is in the long run. So it's important to take advantage of the opportunities that you have, particularly around mentorship, because they might not always be there. One faculty member might be really into mentorship, and that might be her thing or his thing. And they might be driving the other faculty members towards that direction. But they might be on leave the next year or something like that. So you don't know how it's going to pan out.

I think in light of that, one of the best ways to approach a mentorship, I think, is around your research, and around your area of expertise. And soliciting feedback on what you do. And I think this goes back to what Jay says about knowing your strengths and knowing who you are as a scholar, and branding yourself, for lack of a better word, as the type of scholar that you want to be. I think that particularly around if you're writing a paper, if you're writing a book chapter-- my field is a book field.

But also, when you're applying to grants or things like that, when you can have concrete things to share with people and solicit their feedback, it can be a way both to get help on what you're writing, but also a way for them to know what you do so when they see articles, they might send it to you. Or when something comes across in the news, you might have those happenstance conversations about that particular area or that particular research topic.

And I think that it's especially critical coming from another university, or if this is your first job coming from graduate school where you have a built in network of your cohort, or you have a built in network of your dissertation committee or something like that, this is like-- I would think of it as reconstituting another network of scholars that can help you in the next phase of your career.

And there's particular-- at least in the Faculty of Arts and Sciences, there's particular centers that can help you with that. One is the FAS Research Administration Services. And I would assume that other schools have similar things, where if you have a grant, they can not only give you an idea of what kind of things that you can apply for based on your topic, but also what faculty members are doing similar research. So they'll put you in touch with different faculty members, even in different schools, actually. You can get a letter of collaboration that can help your grant and things like that.

Another thing is the various centers around Harvard could be a way to present your research and develop organic relationships in that way with faculty that are doing similar things. And I would say that developing this kind of network can be a way of thinking about Harvard as a home base for your research agenda, right? What I mean is that it can be quite daunting to think about yourself as a researcher that has to have a public presence, that has to have a website, that has to have Twitter, Facebook, and all of these things that-- not only are you doing research, but there's more and more obligation to present your research to the wider world. Make it accessible to the wider world in ways that we're often not trained to do. In ways in which we are not necessarily comfortable doing. But I think one way is to think about it as, what are the various ways that you can just promote your research around the university, right? And that's less daunting, right? Can you develop a relationship with the Harvard Magazine, or the Crimson or something like that that can also promote your research in a different way that's not at the same scale, in a way that allows students and colleagues around the university to know about your research, know about your research agenda, and have these organic conversations.

And just a quick story on that note is that the last research grant that I received, it was different in the sense that your department had to nominate you for the grant. Then it went up the ladder and the provost had to select different applications out of the nominations from each department. And then it went to the granting agency. But in my case, the reason why my department chair knew that this grant would be great for me, that was a great fit for my research was because I had just shared with him a NSF application, right? And so he had read the NSF application. He had wrote a letter of support for the NSF application.

And that application wasn't successful. But this other grant was that was particularly for my research topic, right? And he wouldn't have known that and had that on the forefront of his mind if I hadn't been active about sharing my research, and sharing my research interest with him at that particular moment in time. So I think that it's never a lost cause when you try to build a network. It might take time and it might take energy and things that are kind of difficult that you don't always have. But I think that in the end, it will pay off for your ultimate research goals.

ELIZABETH ANCARANA: Thank you. OK, lots of great, great advise. And just to follow up on what you were saying, Lawrence. There's also a resource available. It's open access. It was created in our office a few years ago. Faculty finder. So you could just even Google Harvard faculty finder and it'll come up. Or the office website is faculty.Harvard.edu. And there are lots of resources available to you there as well. But Harvard faculty finder on faculty finder, you can find other faculty at Harvard that are working on similar research topics as yours. And that's a way to develop your network around your scholarship as well. Do we have questions for any one of our panelists? And we have a [INAUDIBLE] mic that's coming around.

SPEAKER 1: I have a question. This is for Jay or any of the other panelists if they want to give a stab at it. So I want to follow up on the comment you made about being an assistant professor or running a new lab essentially as being a small entrepreneur and running a startup, which is something that I've read about. And one thing I wanted to ask is, how does this analogy carry over to getting funding? So from the perspective of this analogy, what does it mean about how proactive one must be, or what kind of strategies, essentially, one could use to get your venture funded.

JAMES MITCHELL: Right, so the rules used to be that you can rely on the NIH for biomedical research. And now you have to diversify. So I think we try to train our post-docs, and even our students these days-- I wasn't trained in this way. But to always think about a strategy to take those data and turn them into more money. And that can be in the form of NIH grants, of course. It can be in the form of foundational support for some disease. It can even be from corporate sponsorship. And Harvard is fantastic at bringing in corporations who are interested in funding research at Harvard. And I've recently been able to take advantage of one of those types of grants.

So the idea is about diversification of funding. And I made the comment about the department chair is the one who, if you can't make payroll, they're the one who'll bail you out, because that's how it is. You can see things-- NIH grants at least last typically around four years. So you can see it coming. But it's not something that you can turn around rapidly. So it could take you a year or two to get one renewed. But I think the people prepare a certain way these days. You just take this into account. You're going to have to diversify beyond the traditional sources, and be creative. I've heard on the radio about crowdsourcing of certain things. It hasn't come to that for us, but I think we all have open minds now.

And I have to say, I don't think it compromises our research at all. It's the same data, the same interest. A lot of what I do is obviously translational. If somebody wants to pay for that, that's great. And I don't see that as compromising our mission at all.

KATIA BERTOLDI: Can I add something? So on a very practical side, [INAUDIBLE] very different strategies. So I've seen young colleagues basically say, OK, I'm going to write one grant per month. Even two grants per month. And I've seen them sticking to this plan. And some of them have been very successful. Some of them, not so successful. I've seen colleagues instead be more strategic and say, let's first collect-- let's put together a very good idea. Let's refine this idea. Let's maybe have some preliminary contact also with managers, with NSF Manager, NIH manager, and make sure that what I'm going to write is likely to be funded. Again, also in this case, you're never sure, right?

But also in this case, I've seen 50% of this class of colleague being successful, and 50% not. So I believe there is not really a single path to go around it. And also, something I found very useful, anyway, in my case, is money from industry. So don't forget to talk to also people outside academia, outside funding agency, because if you are able to start the right relations and meet the right people, that might be very, very useful.

ELIZABETH ANCARANA: We had another question.

SPEAKER 2: Question for anyone. How close to the vest or not close to the vest do you keep your ideas, or intellectual property. I hate that term for what we do. But intellectual property-- I've seen senior faculty, and not even senior faculty be very secretive with things they're working on, and that makes me kind of sad as someone in academia. At the same time, I had lunch with a friend of mine. She's a post-doc and she applied for a faculty job at another institution. And a couple months later, the chair of that search committee didn't talk about the job but said, oh, can you look at this grant that I'm writing. It's basically an idea that came from her application.

And then I thought back a couple months ago, where Professor x from Institution y said, oh, what are you working on these days? And I kind of said, well, I'm thinking about this new space. And they're like, well send me what you have. I'd love to just look at it. And I didn't send anything, but I was like, oh no. What did-- that makes me kind of sad. So how did you think about that at all.

LAURENCE RALPH: Yeah, I can say a few words on that. I think the fields are a little bit different, but I think on things like this, it can be kind of counter-intuitive in the sense that if more people know about your work, I think it's less likely that somebody takes your idea. But if you keep it close to the vest, it could be more likely because the person that you shared it with could then take it. So I think that speaks towards getting your ideas out there, having them in circulation, presenting your ideas.

And I also think that you're here for a reason. You're here because they believed in what you do. And so I think that they ultimately want you to develop that core sense of your research agenda. So I think that you have to have conversations with your colleagues about these kind of things. And getting your ideas out there. I think can help.

JAMES MITCHELL: Just a quick note from my perspective. We've all heard these stories, and they're real. These things do happen. And I think it's a risk assessment. You have more to gain, or more to lose. And I like to say that, for the most part, I think I have more to gain by sharing. That being said, people are creatures of habit and do develop reputations for doing these things. So to some degree, that can be part of your risk assessment. You can find out-- if somebody's specifically asking about an idea of yours, that it's in an idea state, check it out.

SPEAKER 2: Thoughts, Katia?

KATIA BERTOLDI: No, I totally agree with what Laurence and Jay say. Typically I tend to be open. I know there is some risk associated with that, but I really think that the advantages in being open are much larger and much more than the disadvantages, because what you want to make sure is that people know about what you're doing. And if you are very secretive, and you keep everything as a secret, people don't get to know. And maybe then you really run the risk of somebody get the same idea without knowing what you're doing, and they get it.

JAMES MITCHELL: Last thought. People love collaborating with Harvard. So if they're from without, it can definitely be used to your advantage.

SPEAKER 3: I just had a question. I was reflecting on all the various things you said, and in some sense, it's, no offense, a bit of a downer. I was curious if you could speak to-- the point of this exercise is to have fun on some level, and to live an interesting life. And I was wondering what things you've done over the years to preserve the actual point of the exercise in the face of worrying about money, and worrying about promotion, and all of that. How do you keep the joy?

KATIA BERTOLDI: Well, I'm still proud when I meet people outside Harvard in the evening. And after a while, they ask me, what's your job. And I tell them what I'm doing. They're very surprised. And what I always tell my husband, the day they assume I'm a faculty, I'm going to quit. So I think it's possible to keep a level of joy inside, and to combine it with an academic career and with your job. And also, within the job, I think it's a lot of fun. I really enjoy interacting with the students.

And I'm probably more fun now than when I was a post-doc and I was doing the research. I was in the lab by myself. Now I'm in the lab only over summer a few times. Most of my time, I'm in my office writing or a meeting with people. But it's still a lot of-- it's even more fun because now I have the ability to work on multiple projects and develop more ideas, and to work with these extremely smart people, it's just amazing.

LAURENCE RALPH: Yeah, I would echo some of those comments. I think that the people in both of my departments are leading figures of the kind of research I do in different ways. And so the ability to have just conversations with them, the ability to pick their brain, the ability to get concrete feedback from them is actually enjoyable, and it's actually helped me personally and professionally as well. And so I think that things loom large in the background. But I think that being here and having the platform that we have and having the kind of interactions that we have is a humbling experience. It's a fun experience.

And also, just the amount of people that circulate through Harvard at any given semester, let alone a year, is a really, really fun experience. And you really have the resources to just imagine what you want to happen. There's no person that I can think of that I couldn't imagine inviting to Harvard, period. That includes, I don't know, entertainers. It includes scholars. It includes athletes. It includes anybody who I would want to meet. And I think it's not out of the realm of possibility that they would accept an invitation. And so I think being able to have that kind of imagination is fun. It's part of the reason why I wanted to be a professor in the first place.

ELIZABETH ANCARANA: Jay, do you want to add anything?

JAMES MITCHELL: I'd just echo these sentiments. Doing research is what drives me, and this is the best place in the world to do it. And that makes me very happy. And I feel very lucky to be able to do that.

STEPHEN GRAY: I have a question. Stephen Gray. I have a question to sort of follow up on that one that relates to balance and time management and joy. Being someone-- I just recently came from private practice and I had a half time appointment at MIT. But primarily, my contribution was through my practice. So now I'm moving fully into the academic realm, which is a little bit different for me. But I also have a young child, and I have a partner. My wife, who would love to make sure that she sees me at the same hour all the time in some sort of predictable way. So what do people do for balance with their partners and their children, and carving out time strategically to do the things that we need to do in order to push thinking in our respective disciplines?

JAMES MITCHELL: I'll take a stab at that. I have three kids who are in the middle school to high school range. And I think one of the biggest advantages of being in academia is you can set your own schedule, largely. I don't travel that much by choice. So I can do all the little things that many of my colleagues in other fields can't do. I can go to breakfast shares. I can go to plays in the middle of the day. I can do all those little things that cumulatively, I think, really enrich my life.

KATIA BERTOLDI: I think one of the big advantages of academia is flexibility. But then we need also to be very careful about that because my husband has an industrial job. So it's 7:00 to 5:00. At 5:00, they get out and it's over, right? And then you start the day after. When you have a flexible job, you have the tendency to run over, right? And there's so much to do. But I think at a certain point, it's important to recognize that even if you spend eight days a week and 48 hours a day, it's not enough to do what you should do. [INAUDIBLE].

There are limits. And you need to accept your limits. And apparently, it's not possible to do everything you would like to do. And just accept that, and try to find a good compromise. And it's also true that the tenure process is quite long. In Engineering School, it's seven years. It might be longer, but probably I don't think it might be much shorter. So maybe you want to spend-- if it's one month time period, you're willing to spend all the period just doing one thing. But for seven years, it's 1/10 of your life. So it's really important to make sure you find a good balance.

ELIZABETH ANCARANA: Question here?

SPEAKER 4: Thank you. My question is directed to all the panelists, but I think it's gets a little bit to the point around networking. And it's about how much time you try to dedicate-- if there's a specific amount of time-- to engagement in non-research or non-academic activities within your departments or schools. And I'm specifically thinking about committee engagement.

I have two extremes. I have a secondary appointment in the Department of Biostatistics where literally in any given week, I'll get three requests for committee membership of academics or curriculum that would take five hours a week for months. On the other extreme, in my primary appointment in the Department of Global Health and Social Medicine, I know these committees exist, but there's no open invitation to join them. And I'm just wondering, one, how much do you value these memberships in committees both in terms of your professional enjoyment, but also your professional advancement.

Two, do you have a set idea of how much time you would want to try to commit to those activities? How do you balance that when you, like you said, have so many things that you're trying to balance. And then three, are there any committees that you've just really learned a lot from, or that you would recommend that junior faculty get involved in because they can learn a lot about the underbelly of the school, or how things work, or how promotion committees work.

LAURENCE RALPH: Yeah, I'll take a stab at that. For me, it's been trial and error, actually. Just figuring it out. I think my approach has been committees that-- particularly when it's outside of the department or the departments that I'm in, just wider FAS committees, it's been things that I enjoy, and that I know that will nourish me in a different way. So I'm on the committee for public service. And I think thinking through those ideas around public service and meeting students who are interested in public service in particular, I think that is fun for me. Or women and gender studies, or ethnic studies.

So basically, I'm on committees that enhance my research interests outside of what I specifically do. But as far as committees for the department, I think setting limits is a good idea, especially for me in two departments. I think that it's fine to say that I'm on this number of committees in this department, and this on this, so I really can't take anything on. Or there's committees that are only particular to specific times of the year that you can plan to manage, or manage your time in different ways.

Prize committees are like that. So if you're on a prize committee, it's really at the end of the year that you would have to read a lot. But it's only sustained for a couple of weeks, and then it's over. So you could do that. Like the Hoopes Prize is one of those things where it's actually enjoyable. You actually get to read a lot of different theses from students doing amazing work. And it's a lot of work, but it's a lot of work for a particular amount of time, and then it's over. And this same thing with selection committees for graduate school when you're admitting graduate students. That's a particular time of the year, at the end of the first semester. But once you're done that, it's kind of done.

And that way, you can be a good citizen to your department, but you're not in committees where you have to meet on a regular basis for the whole year. And so I would think strategically about the kinds of committees that you like personally. The ones-- what kind of time commitment they take up. When in the year they take up those time commitments. But at the end of the day, I think it's trial and error, because you'll figure out which ones that you enjoy, and which ones that you don't want to do. And it's really a personal thing on many levels, whether you enjoy curriculum or you enjoy hands on student committees, or you enjoy things like that.

JAMES MITCHELL: No is a full sentence. For me, it's very difficult to say, and I think the advice from Laurence is really good. But even some committees-- the one I least like to serve on is the IACUC committee, the animal ethical committee. It's a huge time commitment. But I'd have to say, I've learned a tremendous amount from that one. Not just about the business itself, but also because it's on a Harvard Medical area, the Longwood Medical area level. So it's closer to a university level committee. And that's been really interesting starting as a young assistant professor who naively accepts an offer from his department chairman who said, oh, it's just a few times a year. Really not a big deal.

So it was a hidden opportunity, I would say, to learn a lot.

SPEAKER 5: So actually, following up on that exact point. I'm curious to know what your strategies have been around the art of saying no, whether it's committee meetings or service, maybe guest lecturing, or doing review articles or chapters. How have you all navigated saying no, particularly to senior level people within your departments?

KATIA BERTOLDI: It's not easy. It's not easy. So at the beginning, I was afraid to say no. And so I said a lot of yes. But then I ran into trouble. Big trouble, because I was over-committed, and then I was not able to deliver what I promised. So quickly realized that that was much worse than saying no at the very beginning, because if you say yes, then the person expects something from you. And then, you need to deliver. So I quickly realized that. Fortunately, at the beginning, you have the excuse, you're young. So you can use the excuse, sorry, I over-committed. I didn't realize that. And come out with this sort of apologies.

So if you say too many yes, you will learn at a certain point you need to say no. But I think it's better to say no from the very beginning, so yeah.

LAURENCE RALPH: So some strategies that are complicated that I've had trouble with. One is the deferral strategy, because people do remember and they do ask you later. So that one doesn't always work. I think setting limits actually is a good one in terms of-- this is what I've committed to for the year, and I can't do anything above that in order to do what I have to do. I think people understand that. And that goes for, I think, travel as well, like when people are inviting you to things. You'll get suddenly a lot of invitations, and setting limits.

Really thinking intentionally of how many times this semester am I going to leave or go out of town, or something like that, because that will affect your ability to deliver what you promised here as well. And I think one of the biggest strategies, though, is asking people how to say no, too. I think this office is good at giving advice about that. Like you can ask somebody, or even ask a mentor, what kinds of things can I say no to, and what kinds of things are really good for me to do, or expected of me to do? Or if you can't actually do something. A lot of times, you can't actually do things because you can't be in two places at one time, things like that. But just the minutia of knowing how to frame a response to somebody, you can seek out help for that. And it can be very useful.

ELIZABETH ANCARANA: We probably have time for one more question, if anyone has any. OK, well this was really informative. Really wonderful. Thank you to all three of our panelists, Katia, Jay, and Laurence. We have time for about a 15 minute break, but we're going to start again right promptly at 3:45 with our tenured faculty panel.