

ETH Science Task Force FIN.mp3

[00:00:06] Thank you for joining the ETH podcast, I'm your host, Jennifer Khakshouri. In today's episode, we're talking about the presidency of the Swiss National Covid-19 Science Task Force. Martin Ackerman was the head, and now Tanja Stadler has taken over the presidency of the Science Task Force. Both of you are professors at the ETH. Please introduce yourself. Tanja, what do you do when you're not the president of the task force?

[00:00:33] I'm indeed a professor at ETH. The group are researchers around computational evolution. What we mean with that is we obtain data, mainly sequencing data from different biological organisms, and we aim at understanding evolutionary processes of those organisms. And for many, many years, we actually looked at the evolution of pathogens, infectious diseases in particular, also viruses. And so, then it became obvious that we got very involved once the pandemic was spreading.

[00:01:07] Martin Ackerman, what do you do otherwise when there's no Covid-19?

[00:01:12] I have two affiliations. I'm a professor at ETH Zurich and I'm also at the Aquatic Research Institute of the ETH domain EAWAG. And our group studies the biology of bacteria. We study how bacteria interact with each other and with their environment. And some of that research focuses on bacteria that can make people sick. So pathogens.

[00:01:36] Martin, in Switzerland, you're known much more than ever before through working for the science task force. How do you cope with being recognized in your everyday life?

[00:01:47] This has been a change, a massive change and unexpected change. So for many of these encounters are positive. My impression is that people who are more sceptical about my role or may be more hesitant to talk to me and people who are maybe more positive or more supportive or less reluctant to approach me and start a discussion. So most of the contacts that have, you know, on the on the street of people that haven't met before are positive and friendly.

[00:02:19] And Tanja, you took over from Martin Ackerman. You gave many interviews too in the past year and a half. Are you prepared to be even more exposed than before to being recognized wherever you go to every restaurant you go to, whenever you enter a tram or a bus?

[00:02:33] So I'm not sure if one can ever be fully prepared for doing this job, but I realize that there will be even more exposure. And I also saw where problems can arise and obviously also had some difficulties in the past. So I feel I'm prepared. And if it comes down to very critical encounters or interactions or people being very critical, we have then also professional support to deal with such situations.

[00:03:02] Could you give us an example of a difficult encounter?

[00:03:06] So in the past, as one example, different members of the task force were threatened also with mail. To be honest, I knew that. And recently when being in the office, I got this parcel that there was no sender on it. In normal times, I would have probably just opened it and be curious what's in there. But I simply gave it to the security, which gave it to police, which actually went to the border. I work here in Basel, so and they screened it at the end they brought it back to me and it was actually a present from a colleague, a nice book. But also the police said in the next time I should do exactly the same because things can also be different.

[00:03:44] You became more cautious, I assume, through the whole situation, through what you heard about your colleagues. Martin, have you encountered things like that?

[00:03:52] Yes. I and those other task force members have received threats. That's when we ask for help from the police

[00:04:01] The past year in one word, what word would that be?

[00:04:05] Stress, Tanja, what word for you? Overwhelming in a way that things just happened very quickly and a lot of things were very important. We talked a lot about that, that we worked on many things which each by itself and a past I would have rated as super important and to spend a lot a lot of time on it. But in a pandemic things evolve so quickly. So sometimes it gets very overwhelming all the information and then

digesting it and aiming to both provide that to the authorities and the decision makers, but also update the public. And then obviously there are also other obligations we have besides the task force works. So there's a lot and obviously at all points, we tried to do the best we can and we knew some parts are very important. And then obviously you don't want to do a major mistake. And so that felt for me all very overwhelming, Martin

[00:05:03] you studied biology. You're a professor at the ETH, both of your professors at the ETH, you know how to teach and how to research. How have you learned your skills of communicating to the Swiss population?

[00:05:16] I benefited a lot from media training, from ETH Zurich communications team. And then it was learning by doing. I started going to these weekly press conferences of the government and then, you know, you do it for the first time and it's hugely challenging. You're not sure how to speak, how to answer. And then you watch the recordings and you try to see what went well and what didn't go well and learn. And then we have plenty of opportunities to do that this year.

[00:05:51] How is it different when you communicate to politicians rather than to the population?

[00:05:56] So politicians and other members of the population play very different roles. What I initially did not fully appreciate is that politicians work under strict boundary conditions. And, you know, often you'd ask, why don't you do to this and that? And then the answer is it's not possible to do this and that because of, you know, laws or legal boundaries or other boundaries. And it was, for me, extremely important to realize that politicians have to do decision making under strict constraints. And if you want to have a dialogue with politicians, you also have to understand these constraints, at least to some degree, and consider them in how we think about the problem.

[00:06:43] And that makes it probably makes it very stressful that you can't make decisions but have to give advice. And how do you deal with that? How do you deal with the ambivalence of what do you think is good and what is actually possible?

[00:06:56] This is a challenge, obviously, but the other side for politicians, I think it's also intensely stressful to be responsible for the decisions that you're taking. We have a role

where we don't take any decisions. We only make suggestions. We offer advice. And of course, sometimes you would wish that you could influence decisions more directly. But I think it's clear rules of the game and its rules to we accepted when we started this. And it makes a lot of sense to have these different roles of advisers that do not take decisions themselves.

[00:07:33] Tanja, what are your experiences and thoughts so far on what Martin said about the decision making and the advice giving?

[00:07:41] For me definitely also lessons learned or kind of how I also would like to proceed over the next couple of months is that very important, when dealing with the politicians is to listen, to also understand their concerns and their constraints and not to be like you should do x, y, z. But first, yes, to understand the general framework and then at the same time provide very clear the scientific expertise and the evidence we have as of today in parallel, also making clear that that could change both from just we have more data and certain insights can change. So there is some uncertainty associated with what we know about the virus. And at the same time, also the virus can change. So it could be things, you know, to tomorrow there are new properties, which we didn't have today. So I think it's those two ways to be very clear on the science and make it also digestible for them. They have tons of other things to do also and to decide important things that they get the main parts of the pandemic aspect, but then also understand them.

[00:08:51] Martin, how did working as the president of the Swiss National covid-19 Science Task Force change the way you think about politics? You answered the question in the sense. But like in a nutshell, do you see politics differently now than you did two years ago?

[00:09:07] I certainly feel that I understand much better what it means to be a politician and to take political decisions. There were very positive and also negative interactions, of course, or more critical interactions. But overall, I also gained a lot of respect. I met many people very it's clear that their goal is to contribute to get Switzerland through this crisis. And that's the only, you know, basically agenda that they have. And so I gained a lot of respect also for politicians, both for their efforts to engage and make a contribution and then also for the responsibility that they have to work.

[00:09:48] And do both of you think that science and politics will be a better match than they were before?

[00:09:54] I certainly think and hope that this crisis will be an opportunity to revisit the link and the dialogue between science and politics and to build on the experiences that have been made this year, if I just look at this one covid Science Task Force, it took us a lot of time or, you know, several months to build trust and develop a dialogue and mutual understanding. And now we are in a situation where this works really well. That's my impression that we have good interactions, trusting interactions. We understand each other's position much better than before. And what we can learn, I think, for future times is that it's essential to have these dialogues already existing at the time and problems arise so that one can rapidly build on these relationships and have a specific group of scientists to the interests of politicians on emerging problems.

[00:10:54] And what are your thoughts about science and politics, Tanja?

[00:10:58] When we first heard about sars-cov-2 from China, it still took quite a while until we had the task force established. So we started our work at the end of March. So we were well into lockdown already in Switzerland and for the future, I hope that those connections we established now on a dialogue we have that that can be on some form institutionalized, that there is some standing kind of channel how to feed on information. So for the next crisis and there will be crises to come, say even related to pandemic is kind of antibiotic resistance in bacteria. This was a big problem before the pandemic and didn't go away and will probably increase that. We have actually a close dialogue and a future set up institutionalized.

[00:11:46] And could you both imagine being politicians instead of professors? Do you, can you imagine changing your jobs?

[00:11:53] I have to say, I have a lot of respect for the politicians and learned a lot what they do. But for myself, I realized that I very much feel I can contribute a lot bringing science to the politicians and providing it. So I see myself more in the role being in the science, but being very eager to actually share science in different ways such that society can advance based on those insights.

[00:12:21] And what about you, Martin?

[00:12:23] Yeah, very similar to how Tanja described it be excited to vote in the future, contribute to a dialogue between science and society in science and politics, but then also, again, be able to pursue my biggest professional passion, which is to do research and to teach and to work together with young, excited and talented people.

[00:12:45] We talked about politics, but you had a lot to do with the administration. How was that, Martin?

[00:12:50] Our main interactions was indeed of the administration of the Swiss Office of Public Health. And it was, you know, incredible to see the pressure that this office is under and the challenges that this office was facing. And it was also very good and reassuring to see how many, I think, very talented and dedicated people we met in the office. And in the course of a few months, we could establish what they felt was a very productive and good dialogue and interaction where we really listened to each other. We discuss challenges together and bring in our different expertise and perspectives. So overall, this was probably the most important part of our work. And I think a part that is working really well.

[00:13:40] Indeed, a lot of the interactions were directly. And I think there it was also with the administrative staff, we all in the public, it was discussed a lot. What is the status of the digitalisation here in Switzerland? And obviously also for us, it was sometimes frustrating, which then is just the whole situation. I think this is something we also discussed earlier than we have to understand in that particular moment constraints and what we can work with. And I think this is another hopefully lesson learned for the future. We are not changing a system systems. We are in the crisis, but in the long run that we move forward in this path to digitalisation.

[00:14:20] Did the two of you discuss your experiences about Covid-19 and being in the task force with scientists in other countries?

[00:14:28] Yes, we have the scientific communities internationally well connected, obviously, and I think this was a good platform to develop links to scientific advisors in

other countries. The task force's regular calls with scientific advisory groups in European countries and also beyond Europe they often participate in these. And this has been extremely insightful, both in terms of content we can learn from other countries, but then also in terms of shared experiences, how scientists in different countries experience their roles as advisers.

[00:15:05] And Tanja, you've also communicated with people in other countries?

[00:15:09] Yeah, within that context of the task force. And then obviously, since we do a lot of work, in particular on the genomic characterization of sars-cov-2, the sequencing, we discuss on really the scientific research level with scientists across the world who also follow this endeavour and exchange. So, for example, one thing always well, in particular importance to every one of us, those variants of concerns that we really ahead and really have all the information which is just possibly available anywhere.

[00:15:40] How did you experience the attitude of the public towards science? I mean, things were changing on a daily basis in the beginning. It was like masks or no masks and whatever. But I still have a high belief in what you tell us or what scientists tell me. I trust in them, but I know that many people are sceptical. How did you experience that?

[00:16:03] I think it was also for the public, overwhelming as much as for, say, I felt at times so a lot that indeed it was a new virus. We knew it for a couple of weeks. We had very limited information. And then in a scientific discourse, that's very normal that a lot of things we just don't know. It was challenging on both fronts. So for the scientists, how to exchange actually what we know, if I, as in normal times, put something public that my research colleagues can read it, it will be picked up by the public. And maybe that was too early to share to, not to hide something, but also it creates some kind of, you know, uncertainty, how to interpret it. And one needs to then be very careful in the communication. How actually can it be interpreted? And so I think there was still a lesson learned for both sides. So for us that now we actually don't only share things with scientist colleagues, but with the public. So we need to be careful in the communication that it is not misinterpreted. And for the public, I think there was a lesson learned that in science, everything is, you know, we have hypotheses, we test them. Some hypotheses are not true, or with additional data, we actually reject them. And this is a normal part in science, the problem here is that the pandemic is already very stressful for the whole

society. And then we want some kind of certainty. But science cannot. Some things we now know are pretty much certain, but many things concerning us, we just cannot provide certainty there.

[00:17:37] And also, it's real, real time research. It's a whole different way of researching, I assume. And regarding the scepticism towards science, was it or is it still overemphasized in the media, Martin?

[00:17:54] My impression is that there's a large fraction of the population in any country, probably, but certainly also in Switzerland, that, you know, to a large degree aggressive to channel course in the scientific perspective or disagrees to some extent. But most people are not extreme by definition. But of course, from a media perspective, it's also interesting maybe to look at the extremes. And one possible consequence of that could be that extreme positions are overrepresented in the media. I think that's going on everywhere, including in Switzerland, and that can give the impression of a disagreement that seems larger than it actually is.

[00:18:40] Can you relate in any way to sceptical voices, though? Can you relate that some people have different thoughts on what science might suggest?

[00:18:50] Fundamentally, I can absolutely relate to that. I mean, this is essential for humanity, there'll be questions, established wisdom, there'll be questions to conventional perspectives and suggest alternative ways of thinking about the problem, that's key to human populations and human nature. Of course, there's then a trade-off. If that element becomes dominant, we could maybe overlook a large body of evidence that supports the current course and the current approach to a pandemic.

[00:19:24] And you, Tanja, can you relate to sceptical people? You just said before that it was important to listen to other people.

[00:19:32] Mm hmm. And I mean, there's a whole range. And so I think what I feel at some stage where I have more problems is if there's overwhelming amount of evidence for certain things, for example, the virus being very deadly and then it's being discussed at some, you know, myth, that's a bit like the earth, is it now a globe or is it flat? We don't have to have a discussion on that. We have enough data. Where I think public

discourse is very important is given what we know, what are we doing? There are trade-offs. Say some countries had schools closed while Switzerland achieved to keep schools open for most of the time. Obviously, there are trade-offs of where infections happen. But then - what about our mental and psychological impacts and I think that's what we really need the discourse. And we're also I am very much, you know, motivated to listen to different standpoints because we don't know the right or wrong per se otherwise every country would, you know, eventually do it. The virus is new. But like the basic scientific fundamental evidence, a discussion around that, I think people should look at the evidence.

[00:20:42] Both of you are professors at the ETH, is there some kind of pressure regarding the reputation of the university representing such a big, important thing, such as the task force?

[00:20:54] It is the university, but it's more than that it's clear that in our roles we also represent a part of the scientific community in Switzerland, and that comes with a certain responsibility. And we try to be aware of this responsibility and try to be careful in how we communicate. That's not easy. But we also, as I mentioned before, we're hugely grateful for the professional support, also from the ETH Zurich team.

[00:21:25] And you, Tanja?

[00:21:27] I mean, I feel in this crisis, obviously, we just want to do the best to help in the situation and provide scientific expertise. And so, I try that it's, yeah, to come back on this word overwhelming, that it doesn't get too overwhelming to focus on just that as a team in a task force and then exchange also with other scientists, we try to do the best possible and then be convinced of that. That also then results in a good outcome, which is, you know, adequate for representing the scientific community and our institutions. And there, I have to say, obviously, we were often under pressure in the media, etc., and our institutions were very supportive. And we always felt kind of, you know, people know we try our best and are supportive and helping us.

[00:22:15] Martin, what is left forgotten in such a job as an ETH professor?

[00:22:20] I worked more than I ever did before. And this had consequences for everything else in my life, for my family. And I'm excited to be back fully now, basically. And then, of course, it also meant that my role at ETH, and EAWAG and with my research group was much smaller than I wanted to be, and meaning that for compromises, for how I could support the people in our research group and how much I could contribute to the whole, you know, teaching and everything. I need or I want to do as ETH professor, and I'm excited to be back fully.

[00:23:00] And Tanja, how will you deal with working so much as much as never before? Probably like Martin said.

[00:23:07] I mean that already in the past, while being in the task force, it was a lot of work and already done more work than I ever did before. And as for Martin, certain things just needed to be reduced, just things. I quickly reduced were things where I felt I could be replaced, say some departmental activities which I enjoy contributing to. But where you know, if I'm not there, I think somebody else could do it maybe better, and teaching also I reduced. And where I tried to be there is as much as possible, but obviously with less time commitment than before is the PhD students and postdocs, we tried to establish also that people within the group have always people to directly ask and I reserve always time to be there for them. And the other part, I think, where a lot, you know, working more means you have less private time. So definitely the family life did change with this pandemic a lot.

[00:24:03] And what did you do, Martin, to keep your mental health going in these times?

[00:24:09] So what has helped my mental health and my well-being was that so many of the interactions in the task force with the partners outside of the task force were extremely positive and constructive. And I think there's some disconnect from the outside in the media. The differences and discrepancies were clearly visible. But I think what was less clear from the outside is how much constructive and positive interactions there are, both within the task force and then with the politicians and the administration and these positive interactions that sense that we're working towards a shared goal that has made it much easier and more joyful to work harder than I did before.

[00:24:55] Tanja, when do you think the task force won't be necessary anymore? When will it be obsolete?

[00:25:01] Our goal is that the task force will be obsolete as soon as possible. That having said the virus will not disappear, it'll stay around. And so when is then a time for the task force to become redundant? It's when there are no major effects of the virus on society and how we deal with our lives, And there important challenges right now are that we still have many, many people not immunized. So we have a potential large disease burden which could actually put a huge strain on hospitals. And at the same time, we have the kids who didn't have access to a vaccine but have a huge burden to carry in this pandemic. So we want to minimize their burden as well as look out for the people who cannot be vaccinated or where the vaccines don't work well.

[00:25:52] Well, Martin, what are your wishes for Tanja?

[00:25:58] What I wish Tanja is, of course, that it will be easier than expected. What this means is that I hope that many people in Switzerland who are not yet vaccinated will think about that again and take, you know, an active decision and that hopefully as many people as possible will decide to get vaccinated as quickly as possible because that would really reduce the potential disease burden and also reduce a risk. That situation in the health care system could get tight again.

[00:26:34] Thank you for talking to us, Martin Ackerman and Tanja Stadler on the presidency of the Swiss National Covid-19 Science Task Force. I'm Jennifer Khakshouri and I produced this podcast together with This Wachter's audio story lab and sound designer Luki Fretz.