Collaboration in Public Health Interviewer: Paul Verschure (Convergent Science Network)

Welcome to the Ernst Strüngmann Forum podcasts—a series of discussions designed to explore how people collaborate under real-life settings. Joining us in the series are high-profile experts from diverse areas in society, whose experiences will lend insight to what collaboration is, what it requires, and why it might break down. This series is produced in collaboration with the Convergent Science Network.

P. Verschure Hi, I am Paul Verschure and today I am speaking with Clifford Martin McKee, professor of European public health at the London School of Hygiene and Tropical Medicine about the role of collaboration in public health. Welcome, Martin. Could you begin by giving us a sense of your background and the different experiences that have contributed to your understanding of collaboration?

M. McKee When I was at school, I wanted to study politics, philosophy, and economics. However, since I came from a medical family, my parents persuaded me correctly that there was more job security in medicine, so I trained in internal medicine. I worked in laboratory medicine. I'm afraid I got a bit disillusioned because it wasn't clear how relevant the work I was doing, peptide biochemistry, was to the patients that I was seeing in the outpatient clinics and in the wards, so I moved into public health. I'd always had an interest in the broader policy arena and in politics, not from a party or political point of view, but from looking at politics as the subject of research. In November 1989 I was appointed senior lecturer at the London School of Hygiene and Tropical Medicine to a new post tasked with developing links with Europe. Just as the Wall came down in Berlin, I had the task of building connections across the continent. I worked for a number of years building up collaborative links and then, in 1997, I was invited to work with the World Health Organization at the Ljubljana Conference on Health System Strengthening. Out of that, I and three other colleagues developed something that we called the European Observatory on Health Systems and Policies. This was a partnership of universities: the London School of Hygiene, The London School of Economics, and a number of European governments—initially the Norwegians, the Swedes, the Finns, and then subsequently many more—and the World Health Organization, later joined by the World Bank and the European Commission. I continued my research, which is broadly based in public health, population health, but this was a mechanism by which we could take our work and the work of colleagues and translate it into policy by working with policymakers. Over the more than 20 years that we've been working, we've provided the background material for most of the rotating presidencies of the European Union. We fed into work by the G20, and we've done a lot of work with national governments helping to evaluate their reforms, making proposals about what they might do.

P. Verschure Setting up such an advisory body is a very complex, multi-scale process. Given that broad experience, how would you define collaboration? What is it exactly?

M. McKee Well, it's a two-way process, and we have thought a great deal about this. There is a real problem in academia in that we are often providing information that is not needed by politicians or policymakers. And we're providing it too late. One of the American presidents said he needed more one-handed economists because they were always saying, "on the one hand this, on the other hand that." Often the advice is not contextualized; it doesn't relate to the situation in which policymakers finds themselves. On the other hand, as a scientist, we get very frustrated with policymakers who ask us for simple answers to complex problems and don't realize that things do take time to change. Often trying to change your policy is like steering an oil tanker. I think the key point here is that we see ourselves in the Observatory as sitting between the researchers. Within the Observatory, of course, we have our partners who are the policymakers. They're often senior officials in their governments or in the international agencies. I and others are primarily researchers, but we occupy that middle space of trying to bridge the gap and communicate one to the other. As a researcher, this is a benefit to me because then I get ideas for research; hopefully it's a benefit to our policymaker colleagues, because we do the research that they want rather than things that we might otherwise do that will not be relevant.

P. Verschure You are emphasizing a communication function, a translation function between two worlds, but both worlds are complex collaborative systems. If we first look at the world of medicine that you would present to policymakers, how would you define collaboration in that world? What are its key features? Why does it work?

M. McKee Like for collaboration elsewhere, a systematic review by Envera about 20 years ago highlighted the importance of trusted relationships. It's essential that you and your colleagues, whether other researchers or policymakers, are communicating, that you have each other's mobile phone numbers or WhatsApp nowadays. I might be called by a minister on a Sunday evening asking for an answer to a question, because they have my mobile phone number; this access is very important. Also, it's important that you always spell out the limitations to your work, the limits to generalizability, and that you don't make grandiose claims. Listening is incredibly important. Also, perhaps a dose of what's called impostor syndrome is probably quite helpful, because in science there are some giant egos. Sadly, during the COVID pandemic, we have seen a number of people with giant egos, some of whom have gotten Nobel Prizes, who have got things terribly, terribly wrong because they never seem to doubt themselves. I think it helps if you're constantly doubting yourself. That may be a bit easier for someone like me who is working across a wide range of fields and is drawing on a range of disciplines and therefore is dependent on other people and is constantly checking. But I think not having a giant ego, having a lot of self-doubt but also having that confidence, which is crucial to be able to say something and engage with others, because often you do find that there are researchers—I'm talking more about the collaboration with the policymakers here, I guess—where they go to a meeting and say, "Well, I can't comment on that because I don't have the precise answer." This may be true, but they may be able to draw on analogies, or they may be able to explain mechanisms, or they may be able to point to theories that would help, but they may feel that they are unable to do so. There's a gendered element to this as well that has to be said: men tend to be more confident than women, unfortunately, for lots of reasons that we're familiar with.

P. Verschure This is now circling around the issue of trust. Your point would be to establish and maintain trust, and to find the right balance between confidence and self-doubt.

M. McKee I think you do. You need to be constantly questioning yourself because things change. Lots of things that I thought were true at the beginning of the pandemic are not. I was with those people who said face masks are probably not going to be very effective. I was clearly wrong and realized this relatively early. Other people still haven't fully accepted that. Maynard Keynes said, "When the facts change, I change my mind. What do you do, sir?" You need to have that. Listening is also terribly important and understanding. Listening not just to learn from other people but to recognize when they don't understand something. There is a clue, verbal or nonverbal, that shows that they have got "the wrong end of the stick." I'm doing what I shouldn't be doing, because one shouldn't use in idioms, particularly when working across languages. Make sure that you both understand it in the same way, even if you both speak English (which is often not the case), because the framing of the problem can be different and that influences how the words are meant.

P. Verschure Say you detect that someone has "the wrong end of the stick." In a way, that is a conclusion you get from updating your model about the other and understanding that many of their premises are ill-founded. If they are a peer from the medical community or a policymaker, how do you respond to the conflict between world models?

M. McKee It depends very much on it being a partnership; everybody involved has to be willing to change their views. I've written elsewhere about denialism, and we do a lot of work in the Observatory on cognitive biases because we are aware that the things we say can easily be misinterpreted. We want to understand how we can use language in a way that reduces the possibility of it being misinterpreted. The difficulty is that we do know that when people have strongly held views about something, correcting them will reinforce that strongly held view. There is good experimental evidence in studies looking at weapons of mass destruction and gun control where subjects are asked their views at the beginning and then given an authoritative correction. We also know that people's political framing may influence how they

interpret evidence. A classic example is a randomized trial that took place in the U.S. People were given different explanations for the etiology of diabetes, but beforehand were asked if they were a registered Democrat or Republican. Among the registered Democrats, those who were given the explanation of the social determinants of health (the built environment, the obesogenic environment) were more likely to support population-level community interventions than the ones who were told we don't know what it is, whereas the registered Republicans were less likely. Everybody needs to be willing to reflect on their own biases to make sure they understand the role of biases.

P. Verschure Let's look at the COVID situation in the U.K. There has been an intense debate about when to open up again: early or late. From an economic perspective, people are pushing for opening up early, while the medical expert would say that's a road to disaster, we should postpone. Two opposing worldviews based on different premises. How do you bridge that gap in terms of communication as well as bias issues?

M. McKee That is extremely difficult. At the very beginning of the pandemic, we wrote a paper in *Nature Medicine* which made the case that it is not health versus the economy. We looked at what had happened in 1918. We showed that in a study of 43 American cities, those that closed down first and remained closed longer bounced back more rapidly by 1925. And we have made the case repeatedly. But there is a problem here: many people are persuaded by the arguments, but there are those for whom politics really does play a role. In the U.K. there's a clear overlap between people who supported Brexit and those who reject COVID restrictions. This is in part because both come from a libertarian perspective. But you have to accept that there are people who you will never convince, and then focus on the people in the middle. In *The Observer*, I've been making the case that we should be reopening on Monday [May 17] with considerable caution given the emergence of a new variant. This is also echoed by what I just heard on the radio: A man who owns a pub also expressed caution and said that, yes, he wants to open, but he will be taking lots of precautions and so on. People are recognizing the argument that it's very well to open up, but can see the economic arguments if lockdowns happen again because of a third wave. People in big business are reading the very good work in *The Financial Times* which makes the clear point that the countries that have had the least amount of COVID public health damage have also done best in terms of the economy. Sweden, for example, decided that it would not impose restrictions and it has had a far higher death toll than Finland or Norway, and sustained a larger, negative impact on its economy.

P. Verschure Framed within the question of how we collaborate, you're saying that collaboration is possible among like-minded people, but if there is too much divergence in the premises people make about the world (e.g., about COVID-19), there is no way to close that gap.

M. McKee I think you're right there. I don't think there is. You see this with AIDS denial, Holocaust denial, climate change denial, and so on. You've got to understand why people are holding those firm views. If I were a psychiatrist, I would say this is a delusion: it's a firmly held view, unshakable by reason. But there are many reasons why people do it. An American author famously said that it's very difficult to get a man to change his mind. It's very difficult to get a man to know something if his income depends on him not knowing it. We see this very much with disinformation and fake news because there are different motivations. Some people are just stubborn. Some people have a particular worldview based on individualism and libertarianism and so on. Like driving across the border between Vermont and New Hampshire: Vermont has a socialist senator, and in New Hampshire, the bumper plates all say "live free or die." You can see the culture that influences that. In science you also have to be aware that there are powerful vested interests. We know most about this from how the tobacco industry sought to cast doubt on second-hand smoke. Many years ago we published a paper in *The Lancet* showing how it had a secret testing plant that was doing experiments but not publishing them until it worked out the conditions that would give the results it wanted and then commissioned independent researchers to do that experiment, having tried all the other ones, and explicitly said: we are about creating doubt. There is a book called *Merchants of Doubt* about that. Science is also currently being undermined by state actors as a means of undermining trust in democratic institutions. We're seeing the anti-vaccine movement and

pro-vaccine movement coming from the same country, in the same way that this particular country is supporting both Black Lives Matter and the Ku Klux Klan in the United States. It is about undermining trust. Some areas of science, like vaccines, in particular, know that certain messages will be communicated very rapidly by the online anti-vaccine community and will get much greater spread than if they were creating disinformation about something that nobody cared about.

P. Verschure You put your finger on the issue of incentives and incentives pertain to goals. Often the idea is we can overcome many of our conflicts and disagreements because we share common goals. Do you think that's still the case in the COVID crisis, where human life should be our largest common goal? We could doubt that, given the divergence in the approaches that people propose.

M. McKee We see that much more in the U.S. than we do in Europe. The anti-lockdown movement in Europe is still relatively small. Of course, some of it is being funded from the U.S. With the Great Barrington Declaration, we've already seen the links to some of the people who fund climate change denial. But I think you see that much more there than you do here. There is a view in science where some people say that you should look at each paper in its own rights. You should look purely at the methodology and ignore who funds it; you should ignore any of these influences because you should be able to judge a paper in and of itself. I think we now have a lot of evidence that that is not the case. Take the work on smoking bans and second-hand smoke: there was nothing wrong with the studies that were being done. It was just that there were lots of other studies that had been done that were not being published, or because the early work on second-hand smoke had been looking at the cause of lung cancer or heart disease in the wives of men who either smoked or didn't smoke. The exposure to second-hand smoke was that their husbands smoked, and the control was women who lived with a husband who didn't smoke. Then, a wealth of research was undertaken to try to demonstrate that those women or those families were in some way different in other ways by trawling through the data on, e.g., their consumption of a certain fruit or a certain vegetable or having pet birds in the house. Completely ludicrous ideas. There was nothing wrong with the study. It was just that there were all sorts of other studies that had not been done. That is why in public health we pay more attention than elsewhere to who funds studies and where they came from, because we know that this can influence the research. For example, take studies that show economic analysis of the impact of smoking bans on bar and restaurant takings, and a systematic review done by Stanton Glantz at the University of California, San Francisco; the only factor that was related to whether the study would find an adverse effect or not was who funded it.

P. Verschure Let's examine goal setting as a structuring element in collaboration in the domain of public health. We often assume that by sharing common goals, we can work together. How strong is the role of common goals in the processes that you are involved in?

M. McKee You do need to understand what the goals are. In general, I tend to be involved in collaborations where we may not share the same goals. I will work with politicians of a very wide range of political complexions within the broad democratic process, from center-right to center-left. (I'm very careful not to say what my own personal political views are. People may make assumptions, but often I think they might be wrong.) And what you try to do is a bit like a Venn diagram: you try to find that bit of overlap where your values and their values coincide, recognizing that particularly for policymakers, there will always be two sets of goals. One is making the world a better place; the other is progressing their own careers. As the British prime minister, Benjamin Disraeli, once said, "Now I have ascended the greasy pole." That's always the case. I think that's why those of us who are involved in this arena need to spend time reading political biographies and diaries. I've just finished reading one by a junior foreign office minister in the U.K., Alan Duncan. It is a very irreverent and disparaging commentary on his colleagues. On each page you're quite shocked at the language he uses. He asks about one, very clearly not a very bright MP who had gone to a book festival: "Why did he go there? Can he even read a book?" Many of us would have doubted that, but in his own party? I think it helps a lot to understand these influences, but it also sheds light on their

values. So, for example, in health systems research, we look at Charles de Gaulle, a right-wing politician. When de Gaulle came back after the Second World War and wanted to expand health insurance, there was a lot of pressure from the captains of big French industry saying it was unaffordable. Even though de Gaulle was a right-wing politician, he said: "Don't tell me what we cannot do. When I was in London organizing the free French, you were here collaborating with the Nazis." He talked about *La France profonde* and engagement with the people. You get an understanding of people's values by reading and understanding. People have many complex motivations.

P. Verschure At the time of the World War II, there were implicit objectives and values in society that were shared almost automatically. Perhaps we now live in a society that is much more fragmented with respect to its objectives and values. This is perhaps why you bring up issues like ego, where short-term gains may trump long-term objectives. Do you see this in your environment, a fragmentation of objective?

M. McKee I think you do, but I think there are a couple of problems here. One is that in some countries you're seeing a massive polarization. In the U.S. we've just seen Liz Cheney ejected from the Republican leadership. The Republican Party in the U.S. has almost nothing in common with the party of Lincoln. That was the case a number of years ago when the Tea Party movement emerged and looked at the values of Republican Party in Congress, splitting it between Tea Party or not, and the Democrats. The non-Tea Party Republicans and the Democrats overlapped a lot. The Tea Party was out in the extreme. You've seen this particularly in the rise of identity politics. We're now seeing in the U.K. a complete realignment of politics in the Conservative Party, which was once seen as the party of the landowners and capital. It's now shifting to identity politics and social conservatism and is increasing support in traditional labor or socialist areas, while the Socialist Party, the Labor Party, is making gains in traditionally conservative areas. Things are turning around, and identity politics is changing things and going back to, in many ways, pre-enlightenment values. Where I was born in Northern Ireland, the leading Unionist party has just elected a leader who believes that the earth was created 6000 years ago and rejects evolution. I have no idea how he explains the emergence of new variants of COVID. We have a geological feature there, the Giant's Causeway, and his party insisted on having a plaque at the visitors' center saying that there is also a view that this was created by God so many years ago. This takes us back to the days before Galileo, and that makes it challenging. The other aspect is the constant quest to be visible on a 24-hour news cycle. There is what a former lord chief justice in the U.K. called "binge lawmaking": putting out initiatives, making announcements, never following up. That becomes problematic because it puts this drive to advance the ego of the politicians on speed, and it erodes trust in politics. I think it was Metternich who said, after getting news of Talleyrand having died: "I wonder what he meant by that." This is where you're constantly trying to interpret what a politician says. There's a famous quotation in the U.K. on September 11, 2001, where a minister sent out a memo saying, "Today is a good day to bury bad news." And you're often left asking: "Why are they making this announcement on this day? What are they diverting from?" Here in the U.K., whenever they need to bury something, they announce that they will have a new royal yacht, for example, or somebody has been in touch through the spiritual world with Princess Diana. Stories come out and you think this is the dead-cat-bounce.

P. Verschure In the domain of medicine, where you have your professional track record, you could argue that there's always a shared underlying value, which is to protect human life. But is that value systematically adhered to by all members of that profession? How is it balanced against people's short-term interests? Are you optimistic about that?

M. McKee It is sometimes problematic when people remain very tightly within their own discipline or within their own area because group think can easily take hold. I remember this from my work years ago in peptide biochemistry, when colleagues had bizarre ideas about what a particular peptide would do, talked about them for a while, and then they became the new position, and they would leap on from that. It was a bit like the knight's-move thinking (two forward, one to the left), but it was sequential so that after a few moves, you were off in a complete

fantasy world, never having done the empirical work to develop it. I think there is a case for moving outside one's disciplinary silo. We have seen this with face coverings, where the aerosol scientists and the epidemiologists were not talking together. Different paradigms can be a problem. We see it in medicine very much with the rise of evidence-based medicine. We all absolutely agree that where possible we should be doing randomized controlled trials. Recently we did a very complex cluster, randomized controlled trial of an intervention for hypertension management in deprived areas of Colombia and Malaysia that was published in *The Lancet*. I have fully bought into randomized controlled trials, but there are many things that they cannot evaluate. There are people who will say that without a randomized controlled trial and a meta-analysis, we have no evidence, and therefore we should do nothing. That was the problem with face coverings. Whereas there are other designs, like natural experiments, and those designs may give you insights into situations where you cannot do randomized controlled trials. That also takes us back to the very early work on causality by Bradford Hill. People often forget that within the nine criteria of causality, some were purely empiricist. They were about the sequencing of events and whether or not there was a clear cause and effect: if I keep dropping this pen to the desk, will it always fall? Yes, it always will. But there were also some ideas that were taken from Immanuel Kant, which were looking at the rationale, the mechanisms, the biological plausibility that Bradford Hill talked about. Sometimes in science we are trapped within our paradigms. Unless somebody has done an experiment of a type that we do, we reject it. This is the long-standing dichotomy between science and the arts that we have often seen.

P. Verschure What worries me is whether enough people in medicine know what they mean when they speak about "evidence-based." Often the understanding of what evidence means seems restricted to a more dogmatic belief in a simple algorithm that things have to go through, which is then used to obstruct any change in the existing paradigm.

M. McKee I totally agree. The example I use is that in reality we are looking at a very complex causal relationship: complex from the mathematics of complexity. The relationship is determined by the starting conditions, associations are often nonlinear, and there are positive and negative feedback loops, which means that you can explain why something happened but it's very difficult to predict it. There are methods that can be used, comparative qualitative analysis, which is basically a Boolean algebraic approach. What are the conditions that are necessary? What are the conditions that are sufficient using case studies? So, these can help you a little bit. The example I often use is what explains the suffering of people living in the eastern part of the Democratic Republic of the Congo, and the answer is: the growth of mobile phones. Because of the growth of mobile phones, which use chips that contain tantalum, these people live over mines where coltan ore is mined. Nobody—no warlord, none of the greater powers—would have any interest whatsoever in the bit of forest that they live in was it not for the tantalum below their feet. So, they're suffering. The villages being burned are ultimately linked to the growth of mobile phones. That is a complex causal link. The civil war in the Democratic Republic of the Congo, the breakaway of Katanga, was largely driven by the fact that they were sitting on top of deposits of uranium. In the 1960s, the West and Russia needed uranium. The death of Patrice Lumumba and others was ultimately related to the work being done in the Manhattan Project. These are very tenuous, very tortuous, very complex causal pathways. But if we're looking at a global policy level and the G20, there are things that we need to understand. Blood diamonds would be another example. These are not amenable to clinical trials.

P. Verschure What I understand from the way you talk about collaboration is that it is not necessarily something we fully understand. Returning to the Observatory and your current activity with policymaking in the U.K., has the Observatory had success in managing very specific interventions to raise awareness and make important things change?

M. McKee Probably at the European level. We fed very much into the directive on cross-border care, looking at what the issues were there. We did a lot of case studies. We looked at existing cross-border collaborations, e.g., in that triangle between Aachen-Liege-Maastricht, across the French-Spanish border in the Pyrenees, across the Northern Irish border. That was

important. We've done a lot of work looking at the contribution of health to the economy, demonstrating how better health feeds into economic growth through people being more productive and participating more in the labor force; that is, healthy people work more hours per week and they don't retire early. Their investment in their own education, if they have an expectation of the future, takes us into issues of time preference and discounting. How healthy people will invest in small and medium enterprises, into their own business. We have shaped the health policies agenda feeding into the 2006 Finnish presidency, which then became mainstreamed in European health policy. We did a lot of work in individual countries on, e.g., the role and strengthening of primary care. We've been involved in individual-level analysis. I was on a review of the recent Finnish reforms that looked at the challenges of integrated chronic disease management.

P. Verschure Is the route always to transform the argument into an economic one?

M. McKee No, it's not. It is often about finding a solution for a minister who is faced with the problem.

P. Verschure But that problem is usually also a problem of cost and controllability.

M. McKee Sometimes. But many of these things are cheaper: High-quality primary care saves money. Not doing things that are ineffective saves money.

P. Verschure Is that the way to the politician's heart: to make an economic argument?

M. McKee It often is, because the health minister often has to make the argument to the finance minister. And that's the key. You're often not trying to convince the health minister; you're helping the health minister to convince the minister of the treasury or the finance minister. Some of the things maybe you just want. In the Eastern European countries, there was a clear case for arguing for better health simply because these were contributors to economic growth in their own right, like education, physical infrastructure, the internet and so on. Looking at that symbiotic relationship between health, health systems, and economic growth, which include looking at the contribution of health to the medical-industrial complex, to regional development, to hospitals and universities working with small and medium enterprises (e.g., as they do in some of the Italian regions), you're making a lot of arguments, but fundamentally you're listening to their concerns. Some of the concerns may not be economical; they may be simply that there is a political agenda behind this because they're getting attacked because there are failures in the health system. In Hungary, many years ago, there was a fire that burned out of control, and the family was killed. That stimulated doing something about emergency services because of the politics of it. When I chaired a mid-term review for the state council in China of their health systems, part of it was because there was widespread popular discontent with the health system, and they wanted to find ways of reducing that. There are a number of motivations, but they fundamentally come back to a politician who has a problem.

P. Verschure So, on one hand, we have a politician with a problem within their own complex collaborative system. They solicit advice from experts on that problem, and this could have two possible effects. First, the politician might say "OK, I asked for advice and we're going to do X," although X might be unrelated to the advice. Second, the politician could follow the advice, which might disrupt the system they're in. Is there a common pattern?

M. McKee It varies. It's hugely important if you are giving advice to understand the system. There are far too many consultants, which we are absolutely not. We're not a big consultancy company. We work with people where we know the countries. In the Observatory, we publish very detailed health-system-in-transition profiles (up to 300-page analyses of each health system) working with our colleagues in the country. You have to understand the country. You cannot go to Hungary without understanding the history of the early twentieth century. You cannot go to Austria without understanding the federalized system, or Germany, the decentralized system, to Finland without understanding the nature of the municipalities. You need to understand how the country works; you need to understand the politics because often in coalition governments, the health minister is frequently a member of the minority party. There are things beyond the relative power of the minister. The minister of health may not just be junior in terms of the hierarchy but may be coming from a different political perspective. You need to understand that as well.

P. Verschure But that means you might, from a medical perspective, have the same message that you present but in different forms, dependent on the recipient.

M. McKee Yes, absolutely. You're working with them to try to find a solution. You can't just say "go and read my paper." Much of the work that we do involves many simple questions, so we also do rapid reviews. We have a network, we have a COVID response monitor on the internet. We have a financial crisis monitor which we ran during the financial crisis. There's a load of information. Someone will ask, "How do they do this in Sweden?" and we say, "go look at our web page because our Swedish colleagues have written it down." Or they'll say, "What do you do about such and such?" We'll give them a paper, which may have been written by us or somebody. Probably 80% of our work with our partners is just saying, "look, it's all been written here, just go and read it." But the more difficult ones are those where you're working carefully with them. You're trying to understand what the nature of the problem really is, and the nature of the problem may not be the one that they say it is. There may be something else that's there, and what they're trying to fix is not the issue. That requires quite a lot of work.

P. Verschure So, the Observatory is proactive because people have questions that you have already answered. That work has already been done. If you have this proactive perspective, then you are predicting the future in these different health-care systems.

M. McKee Yes, sort of. I think it was A. Bevan (who developed, invented, and created the National Health Service in England) who famously said, "Why do I need a crystal ball when I can read the book?" He was referring to New Zealand doing the same ten years earlier. From that point of view, the problems that we face are generally ones that somebody else has faced already. I've got this thing about hospitals, having spent a lot of my time working in them, hospital design, what the hospital of the future will be like. The Netherlands does this particularly well, but not many other countries do. So, we know the issues that are likely to come up. With COVID, obviously it was different in many ways. I'm the rapporteur for a Pan-European Commission on Health and Sustainable Development. I'm one of a handful of medics on it. I've got two former prime ministers and three former presidents and a lot of people from central banks and so on. There we're getting into new areas, more challenging areas, and particularly our involvement with the G20. That's taking us into a slightly new area: to give the public global financial instruments and so on.

P. Verschure The Observatory, as an organization, has its own internal goals to try to realize. What is that goal? Is that goal quality of life or life expectancy?

M. McKee No, it's not. It is partnership, and not like a research grant where we go to the governments and the European Commission and the WHO and say we want money. The universities put my time into the pot, other people put time in, or the Belgian government provides the offices, for example. WHO puts staff as well into it. A lot of money is put into this partnership. It is governed by our board and the board has representatives from all the parties and they decide what the priorities are, which have shifted over time.

P. Verschure How have they shifted?

M. McKee We've moved away from an initially more descriptive approach to a more analytic approach, more rapid responses. This is more about the detail than anything else.

P. Verschure The objective must be defined. Is your objective to provide proper advice to whatever any government asks, or is your objective internally defined (e.g., we want to improve factor X for society)?

M. McKee No. We want to improve the quality of evidence used in policy and health in Europe. That's fundamentally it. That involves working on both sides of the equation. It involves running a summer school, e.g., in Venice every year, virtually in 2020 and 2021. The school is normally supported by the Veneto region, which is a partner, and brings senior policymakers together with academics and practitioners. We do the same at the European Health Forum at Gastein. We have a session for permanent secretaries, and people like that, convening people to support them to understand what questions they can ask and what are answerable, and then to make sure that our staff is listening and understands what the questions are. It is about improving and working on the quality of the evidence as well as policymaking.

P. Verschure But that could lead to ambiguity, when evidence is not complete. The person or government asking for the advice might use the evidence in a global policy intervention, whicht might go against some basic values of the Observatory. How do you balance that?

M. McKee Well, I don't think we've ever had that problem, to be honest. I can see your point. There could be theoretical ways in which this would be done. We have endless examples of how Alfred Nobel's discovery of dynamite was incredibly useful for mining and construction, but one of the reasons that he returned his prizes was out of a feeling of guilt about its use in wartime. Nuclear power is the same. I think we're less worried about that in health policy. I think there is a shared value about inclusive societies in our work. More recently we've been talking about how in health we need to include investing and innovating. We also would not be comfortable with a health policy that only provided health care for a particular racial group; clearly, we would not have anything to do with that. But if you look at our partners, I can't imagine that they would do that either.

P. Verschure It also means that you will not proactively pursue a controversial policy issue. Take neurorehabilitation, for instance. Chronic stroke patients are often told that they have to cope because nothing can more be done, even though this is factually not true. But it has become a policy guideline that saves a lot of money. We have to act here, right?

M. McKee Yes. We recently did a policy brief on long COVID, for example, a condition that is relatively neglected. We led that and published a policy brief jointly with WHO, but it was an initiative that came from us, and it came from us because I'm working with colleagues who are concerned about that particular patient group. We're bringing the work we're doing in academia into the Observatory's work where these issues have emerged. Wearing my university hat (not my Observatory hat), we showed in an early paper how COVID was a complex multisystem disease that required teamwork. We tried very hard to bring clinicians of different experts (e.g., neurologists, cardiologists, respiratory physicians) from across Europe together. We failed. This is one area where we have had real problems and have not succeeded in everything we have done. I recently edited a book on the future of the hospital. As a physician, I've been very anxious for many years that we should get clinicians to engage more with policymakers because clinicians often complain, quite rightly, but into a vacuum, into the ether. I've been working hard to try to bring the representatives of medicine to come and say, well, what is it? Let's have a positive vision going forward. This book on the hospital did that a bit. For example, we had some good material on frailty and older people. We've talked about integrated stroke services, integrated management of respiratory disease, and things like that by some very engaged clinical champions. But it's been very hard work. That's a challenge which we haven't solved yet.

P. Verschure This is the big challenge because we also know that the current health-care system is not sustainable unless we think about how we fundamentally approach it and also bring in more technology. Can we accomplish this transition through a collaborative continuous process, or will it be resolved once a new generation of physicians takes over?

M. McKee I wish I knew, but we've certainly been making that point, and this is our "include and invest" benefit: to include everybody and advocate very clearly for policies that minimize the burden of disease, because a lot of the problems we see with COVID stem from so many people living a precarious existence. Their life is precarious in terms of their income, their employment, their food security. With the rise of food banks, and given housing conditions, they can't isolate; they find it difficult to go for a test because of the consequences; they're vulnerable to all sorts of other illnesses as well. We need to look at making sure people have access to early care when needed, before complications arise. Simple ambulatory care-sensitive conditions. We need to invest because investment saves lives. My colleagues on the banking side in the Pan-European Commission are arguing that we need to look at health care after the pandemic, separate out the running costs and the revenue investment. They argue that the International Monetary Fund should favor investment, even as it may want to question how much you spend on running costs: investment in change and the technical innovations that are needed. We've been looking at organizational innovations, like task shifting, but not task shifting as traditionally thought of. A recent paper we published under a report for the

European Commission examined the shifting of responsibilities and roles among different types of health-care workers: between health-care workers and patients and carers, and between both of them and machines. We are reconceptualizing the nature of these relationships in a way that is trying to lead to a paradigm shift, because when we talk about task shifting, we're often saying: "Can we just give a job to somebody who's cheaper?" It's more complicated.

P. Verschure The transition is questioning fundamentals of the medical-industrial complex, which is very hierarchical and controlled by big egos that have been made into big egos by the culture and their own education. This is not conducive to the change that you're now describing. What are the key factors for building this new collaborative medical system where distant stakeholders are more tightly integrated?

M. McKee I would look to the work of Mariana Mazzucato and at the relationship between capital markets and industry. We have a situation now in medical technology and pharmaceuticals where governments are paying twice: (a) They're paying much of the early, risky costs of discovering and developing the drugs. (b) They're also paying high prices for the drugs. There's a lack of transparency. In the *Journal of the American Medical Association*, We published a paper recently where we tried to work out how much it really does cost to produce a new drug by going to Security and Exchange Commission filings. It was very difficult to work out, and we estimate that it's a lot less money than the government and the companies are claiming. The experience of the Drugs for Neglected Diseases Initiative would support that. Mariana's point is that if governments are investing, then they're entitled to a return on their investment. We already have lots of mechanisms: advanced purchase agreements, procurement for innovation, pre-competitive procurement, etc. We need to look at those and be very clear about who is winning. Where is the power? To quote the Latin *cui bono*: Who benefits? Knowing this is absolutely crucial.

P. Verschure That brings us to incentives. How do you move from a hierarchically structured system that's short-term oriented to a more egalitarian stakeholder relationship that you just described, where relations between patients and the health-care system and health-care providers need to shift? How can this be achieved? Is it a question of communication? Is it a question of deploying a new generation of core players? How do we make that transition?

M. McKee That is the sixty-four-thousand-dollar question: How do we make the world a better place? Fundamentally, this involves institutions and politics. It's not going to be something that we will accomplish by bridging the gaps between research, policy, and health. What you're talking about is stakeholder capitalism. You're talking about reforming the capital markets, in particular private equity and accountability. You're looking at transnational relationships with financial flows in a world where there is free movement of goods, services, and capital, but not of people. There are lots of issues which are going to have to be addressed there, and that is fundamentally about reengaging with society. Maybe Biden will change that. Some of the people in the G20 are saying that we need to do things differently. We can learn. Here in the U.K., Will Hutton has been writing for two or three decades about the benefits of the Rhineland capitalism model with union representatives on the boards of companies, of the role of regional banks and long-term investment. More recently we've seen some of the problems that have arisen when you move to a more Anglo-Saxon model of capitalism, like with the payment company. The book "*Value(s)"* by Mark Carney, the former governor of the Bank of Canada and the Bank of England, makes many of these arguments. There are people in senior positions who are also making these arguments, but that doesn't mean that they're going to happen, and particularly in some countries, to return to the issue of the rise of identity politics.

P. Verschure What is the ray of hope in that transition? What's the best example you could give of the rethinking of hospital and health systems?

M. McKee That's a really difficult question. I need to think a little bit more because there are lots of good things around in different places. But I'm not sure. I couldn't say that there's one country that's absolutely got it right.

P. Verschure Maybe a road map is needed? If we don't sketch out future scenarios, interested stakeholders have nothing to sink their teeth into. There is a need to develop it and include in that a rethinking of how the different moving parts work together and are organized. The way the system works today is not necessarily effective for a long list of reasons, as we have discussed. What would you see as the biggest risks to the health-care system?

M. McKee I think the biggest risk is populism because populism thrives by creating divisions in society, by othering people. We saw this in the 1930s. A number of us are very worried that the twentieth century is a dress rehearsal for the twenty-first because we now have a situation that was unimaginable 20 years ago in the U.S., where 75% of the supporters of one of the major parties (the party of Lincoln) believe that the last presidential election was stolen, and which support an armed insurrection on the center of government. For any European who knows the history of the twentieth century, this is incredibly worrying.

P. Verschure At what point do you believe we have to bring issues of disinformation into the domain of public mental health? Disinformation and the effects of disinformation can also be seen as a public mental health risk.

M. McKee Absolutely. The Pan-European Commission has a model of the determinants of health, which at its heart is the relationship between humans, animals, and the natural environment: one health. Then it has a series of things which are the typical prerequisites for health, which improve health, going back to the charter (peace, water, shelter, and so on) as well as working conditions (e.g., digital inclusion, access to justice). We argue why all of these are important. Going the other way, damaging health, we obviously have conflict, organized crime, corruption, populism, racism, disinformation, cybercrime, cyberattacks, etc. That is now recognized as within the realm of public health. In my own writing I have argued that organized crime and corruption are central to understanding public health, as well as digital exclusion in all sorts of ways.

Paul Verschure It is an interesting challenge to concretize that. For instance, I'm active in the European Digital Media Observatory, which combats disinformation. There I'm trying to link disinformation to mental health because I think this opens up new approaches that respond to it, which right now are not being considered. Disinformation is very much considered in the realm of media journalism, but much less in the domain of health and medical response. This is a bridge that also needs to be built.

M. McKee I agree.

P. Verschure Do you believe humans will ever manage to collaborate effectively?

M. McKee There is a book (forgive me, I've forgotten the author) that talks about human kindness. It starts with the well-known story in English literature *Lord of the Flies.* It's a sort of Hobbesian analysis. Hobbes talked about how, in the absence of a strong power, to keep people in order, life is nasty, brutish, and short. And in *Lord of the Flies*, you have young boys who are shipwrecked and marooned on an island and they all fight among themselves and kill each other, and it descends into primeval emotions. There was a contrary example where some young boys were shipwrecked on an island in Tonga for over a year and then were rescued. And in fact, it was the opposite. They all collaborated. There is a book called *The Evolution of Cooperation* by Robert Axelrod), which is based on the idea of the iterative prisoner's dilemma. It is intrinsically better for people to collaborate and cooperate, unless you're in a situation where you only have a single interaction. Should you give a tip to a taxi driver in a city you'll never visit again? From purely from self-interest, no. But in any other situation, there is an argument for collaboration, and people would argue that collaboration has many benefits, even from an evolutionary perspective. I think maybe I would be a bit optimistic. But the problem is there are powerful vested interests—political, economic, and others—and those who are using racism and xenophobia to undermine the European model of the welfare state by telling people (the petite bourgeoisie), as happened in the 1930s: "You've got a dreadful situation. You've suffered from austerity but it's not our fault. It's the fault of them, the others, the people who are identifiably different." The people who are promoting that message just don't want to pay taxes. They don't want to pay for the white working class or

whoever, and what they're doing is dividing them among themselves. I think that is terribly worrying, fueled by a media that is dominated by a very small number of people.

P. Verschure This could be an irreversible trend because so much power is amassed in that very tiny slice of society. There might not be a way back. I don't know how optimistic you are about that.

M. McKee If we look back to the beginning of the twentieth century, Theodore Roosevelt, who was a Republican unlike his namesake, was the one who broke up the monopolies of Standard Oil and others. He used what he called the bully pulpit. The Bell Corporation was broken up under the Reagan administration. So, you can never tell in this world.

P. Verschure My last question is: If you had a magic wand to change humans in any way necessary, what would you change so that we could collaborate effectively on these challenging topics?

M. McKee I'm not sure I would like you to give me such power. I've already complained about other people having too much power. The art of listening, I think. A British judge, Lord Denning, said, "No matter how high you be, the law is always above you." Humility and the ability to listen, I think, are always incredibly important.

P. Verschure Thank you very much, Martin, for this conversation.