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Federal President Frank-Walter Steinmeier on the presentation of the Knight Commander's Cross of the Order of Merit of the Federal Republic of Germany to Özlem Türeci and Uğur Şahin on 19 March 2021 in Schloss Bellevue

"The future belongs to those who can see the opportunities before they become obvious."

Even if he could not actually have known the recipients of today's honours, Oscar Wilde must have been thinking of them when he came up with this maxim.

Dr Türeci, Professor Şahin, it is now two and a half years since you attracted the attention of others in your field with a bold prediction. You said that it would be possible to use messenger RNA technology to rapidly develop a vaccine in the event of a global pandemic.

At that time, your research was focused primarily on cancer treatments. Your company, BioNTech, had not yet brought a product to market. And a pandemic was the last thing on most people's minds.

Then the coronavirus began to spread. Even before it had reached Europe, the two of you had launched Project Lightspeed, in order to develop a vaccine to contain the virus and save human lives. You and your colleagues were already working on it day and night in January 2020. And that at a time when most people in Germany were still shaking hands and hugging each other, and blithely going about their lives.

The two of you were not only quick to predict that the epidemic in Wuhan could become a pandemic. You also had relevant expertise and were trailblazers at heart – a combination that led you to realise that the experimental methods you had worked on for decades could be applied to develop a vaccine.

You "saw the opportunities before they became obvious". And you did indeed develop the urgently needed vaccine at the speed of light.

We are at present particularly aware of how keenly we are all awaiting our turn to be protected from infection. Your ground-breaking discovery is saving human lives, it is saving livelihoods. It is ensuring our social, economic and cultural survival. With every person who is vaccinated, we move one small step closer to normality, one step closer to the life we miss and the people we love.

I am sure that such an existentially significant scientific feat has seldom been honoured here in this palace.

Dr Türeci, Professor Şahin, you both felt it was your duty to do something. You were certain that you could do something, and that you therefore had to do it.

There are always reasons to doubt. But you took action. You acted passionately, with scientific ambition and dedication. You have done so much more than just something. You did something decisive!

It was your company, the small, innovative and quick-moving start-up BioNTech in Mainz, that did the ground-breaking work and developed the first effective COVID-19 vaccine. And so the BioNTech laboratories came to be for researchers what parents' garages were for the IT pioneers of the 1970s!

The result of your labours has been called a miracle vaccine by many people around the world. You yourselves are described as a formidable pair of entrepreneurs, top researchers, scientific heroes, and even as saviours of the world. Many people have tried to claim your achievements for their own, and to attach a nationality to your work. However, a vaccine has no nationality. It is not German or Turkish, nor is it American. If it proves anything, it proves that people are capable of great things – of the greatest of things – if they work together in freedom, with respect for one another, across political, social and cultural boundaries, if they venture to create something new, something good, thereby bringing progress to our society. And in that, the two of you serve as a role model for people everywhere. Your achievements prove that both of you are outstanding scientists. And this achievement, the vaccine you have developed, is of great benefit to humankind. And that's precisely why we're here today.

Dr Türeci, Professor Şahin, bestowing honours is a very personal affair. Honours are awarded to people who have done extraordinary things. People like you, whose entire being is consumed by the task they have set themselves, for whom life and work, as we can see in your case, are inseparable. I expect that for you, attending this award ceremony is just another short, but hopefully very pleasant break between experiments in the lab, and I hope that you can enjoy the time with us.

We are all aware that the discovery and development of the new vaccine, as with all scientific findings, is not the work of individuals alone - not even such outstanding scientists as yourselves. And you yourselves always emphasise that discovery and development is the result of work done by an international research community. It is particularly in the globally networked world of science that this word, community, is currently given its original marvellous meaning, where the spirit of community is lived and breathed by its members.

BioNTech alone currently has roughly 2000 highly-skilled employees worldwide, drawn from more than 60 nations.

Producing millions of doses of vaccine is likewise not the success of a few individual companies, but of a global manufacturing community. A cooperative endeavour between numerous companies that, under normal conditions, compete mercilessly with each other. Without this network, the vaccine would probably not have reached us in these times.

And the same, I am sure, applies to the global distribution of vaccines. For the pandemic draws no distinctions between continents, political systems, religions or income levels. It is a threat to us all, a threat that demands concerted action, a threat that will only be banished once people everywhere in the world are protected from the virus. The pandemic will not be over until it is over everywhere. Ensuring fair access to vaccines worldwide is thus not only a question of solidarity, it is also in our own clear-sighted interests.

Dr Türeci, Professor Şahin, successful couples, it is said, look in the same direction. You both share a passion for medicine. You love research. Together, you have dedicated your efforts to fighting cancer and other severe diseases. In the 1990s, you were already fascinated by how the body's own immune system is able to attack and destroy cancer cells.

Your idea was that instead of treating the disease with chemotherapy or radiation, the body should be harnessed to fight the cancer itself, using so-called messenger RNA. Your vision is the development of individualised cancer treatments. Who wouldn't want to successfully tackle this colossal task?! We believe that you two can actually do it.

In this way and through your scientific research, you give cancer patients hope, you give them a future. You demonstrate what research in Germany and around the world can accomplish: it can treat even the most severe illnesses; it can find cures for diseases that had been considered incurable.

Your academic careers began in the Universities of Cologne and Saarland, and you were distinguished members of the research and teaching communities even before you moved to Mainz. That move was a lucky choice for all concerned. You now have a long list of honours and academic publications to your names, and the Johannes Gutenberg University in Mainz has a firm place on the list of top league vaccine

research institutions. "What great things could possibly come from Mainz?" is a question people have contemptuously asked you over the years, as I read recently in a magazine article. I am sure that thanks to you, nobody will ever ask that question again, not in Harvard, not in Oxford, and not in Silicon Valley. And it is not just Mainz that has reason to be proud of this!

It was a long journey from research to entrepreneurship, and it is sadly still unusual in Germany for academic researchers to found new companies. You, Dr Türeci, recently said that taking such a step requires a healthy "dose of audacity and humility."

You founded your first biopharmaceutical company in 2001, long before establishing BioNTech. You decided to be researchers and entrepreneurs because, as you put it, you wanted your research to actually help patients. It was a matter of great importance to you not only to accelerate but first and foremost to shape knowledge transfer. Conducting clinical trials was not enough. You wanted to see what the research findings could do – how they could change patients' lives. It is in keeping with this that you said that the moment you actually saw and witnessed the first people receiving their vaccinations was one of the most moving moments of the past year for you personally, too.

With audacity and humility, and with a clear goal in mind, the two of you risked everything on a single bet – you did indeed take a bold gamble as entrepreneurs. Biotechnology is a high-risk business. One that you need money and patience for – and as much as possible of both. It is still not easy to take big financial risks in Germany. While there are public funding programmes, which your research also benefitted from, this is perhaps not what was decisive in your case.

What sets you apart is that you yourselves were prepared, over a long period of time, to do everything necessary to make your vision come true. I am deeply impressed by your courage, your drive, and your confidence in success, and I am sure that also goes for all those watching today. We need these qualities of courage and drive in quantity in our country! Especially when things get difficult, especially in times like those we are currently experiencing.

Of course, there will be set-backs in our efforts to beat the pandemic, as we have just seen again this week, and of course mistakes have been made. We haven't made as much progress as we had intended, and indeed should have made. And yes, indeed, it is true that we face uncertainties, that people in our country are frustrated for various reasons. I understand that all too well.

But this time now, at the start of a third wave, is not the time for resignation or self-pity. Of course we have to look into what has happened. Mistakes must be identified and shortcomings remedied. But I think we are expending so much energy looking for people to blame –

energy that at the moment we as a society urgently need to invest elsewhere. At the present time there is only one thing we can usefully do: vaccinate more people more quickly, using all the means at our disposal. That must be the order of the day! We must act with courage, with judiciousness, and with a whole lot more pragmatism. The biography of today's laureates can inspire hope and confidence at this most difficult juncture in the pandemic, it can be an example to us in the best possible way – to the general public, to politicians, to everyone who bears responsibility.

If there is one thing that this magnificent couple has shown us, it is that we can succeed. And Germany can succeed! That's why I remain convinced that we may face adversity, and it may take longer than we had hoped, but we will get the pandemic under control.

"Let what matters most be said, we may win yet and live."

I am no expert in contemporary poetry, but I think it's safe to say there can't be many immunologists who have poems written about them. You are one of the exceptions! "We may win yet and live." These words were written by the Indian poet and sociologist Surendra Munshi, in a poem dedicated to you.

We will probably never entirely eradicate COVID-19. But if we join forces, we will get the virus under control and learn to live with it.

Professor Şahin, you recently reminded us that you began with work on a personalised therapy for one individual cancer patient. And today we have a vaccine for all of humankind.

On behalf of our country, let me thank the two of you for your outstanding scientific achievements. For all our sakes, I wish you continued success – may your further research be equally ground-breaking. Not for the sake of winning, but for the sake of our lives!