

Ward rounds, responsibility and vision: Professor Dr. Martina Müller-Schilling talks about sustainable teaching in medicine

(Dr. Birgit Hawelka in conversation with Prof Dr. med. Dr. h.c. Martina Müller-Schilling)

Birgit Hawelka:

Hello and a very warm welcome to today's podcast episode from lehrblick.de. As always, we are joined by a guest who has made an exceptional contribution to teaching. And I am particularly delighted about today's guest. We are pleased to welcome Professor Müller-Schilling. She is Director of Internal Medicine I at Regensburg University Hospital and is regarded as one of Germany's most outstanding physicians and scientists. What sets her apart in a special way is her rare ability to balance excellent clinical practice, innovative research, and inspiring teaching. This extraordinary achievement was recognized in autumn 2025 by the UNICUM Foundation with the award "Professor of the Year." For us, this is a wonderful occasion to take a closer look at how she succeeds in achieving this balance and how she manages to support and inspire students over the long term.

Professor Müller-Schilling, a very warm welcome. We are delighted that you are taking the time for this conversation.

Martina Müller-Schilling:

Thank you so very much for having me today, and I would like to sincerely thank you for the exceptionally kind introduction and your generous words. And while we are speaking of thanks, let me begin by expressing my gratitude to everyone who voted for me. To receive the title of "Professor of the Year," one must first be nominated and put forward—so that happened. Many thanks to whoever nominated me, and many, many thanks to all those who then voted for me.

And since we will be talking about teaching today—and we certainly will—my thanks also go to my team. Because truly good teaching is always a team effort.

Birgit Hawelka:

We are sure that this award was both carefully considered and well deserved. And we hope to explore a bit more in our conversation what lies behind it. Before we delve in more detail into where you personally set priorities in teaching, we would like to ask: What, in your view, defines good teaching?

Martina Müller-Schilling:

I believe that good teaching succeeds when you first create a learning environment that is open to mistakes—an environment in which everyone involved feels comfortable. And that immediately raises the question: who exactly are the people involved? We are talking about medical education and a university hospital, so of course this includes the students and the teachers, but also the nursing staff. We will later talk about our interprofessional training ward. All the professions involved—and, of course, the patients as well.

So I asked myself: when is teaching actually good from the perspective of those involved? For students, I would say it works well when they have clarity about intended learning outcomes and assessment requirements, and when they are able to participate in shaping the curriculum. For example—and we will come back to this later—Planetary Health is an initiative that was proposed by our students. Or prevention as well: the students told us that it is wonderful to learn so much about how to save lives—but that they would also like to learn more about prevention.

Then, from the perspective of the teachers—and my team and I were truly overjoyed by this award—teaching feels particularly successful when it is visibly valued. It also serves as a strong incentive for those involved in teaching when high-quality teaching is relevant to career development, just like excellent patient care or strong research.

And from the patients' point of view, I believe it is a real benefit when they have contact with well-prepared students. Taken together, this is what, for me, defines good teaching from the perspective of everyone involved.

Birgit Hawelka:

That is a very comprehensive approach. I think one aspect in particular is often overlooked: the recognition of good teaching. It is sometimes taken for granted—or, conversely, more readily criticized when things do not go as well. What is less often acknowledged is the level of commitment at all levels that underpins teaching, and just how much work and effort it can require.

The second point you mentioned is interdisciplinarity—this idea that everyone is involved in good teaching. One project that was especially recognized by UNICUM, and that you initiated here in Regensburg, is A-STAR. What exactly is A-STAR? What does A-STAR look like in concrete terms?

Martina Müller-Schilling:

So A-STAR—chosen, of course, with great care—is an acronym. We often say “Be a star,” and later also “I am a star,” but it actually stands for Ausbildungsstation Regensburg, or Regensburg Training Ward.

What exactly is this training ward? It is a ward located right here in the heart of our university hospital, within the Department and Outpatient Clinic of Internal Medicine I. On this training ward, my team and I have indeed succeeded in establishing a truly innovative teaching format.

What happens there in practice? We have medical students in their final year—that is, in their Practical Year, just before entering professional life—as well as nursing trainees in their final

year, also just before starting their careers. Our goal is to prepare them as well as possible for their professions, so that on day one they are not suddenly standing on a ward feeling overwhelmed.

That was my own experience: on my very first day, I suddenly realized who was working there—the physiotherapists, the nursing staff—and they all came to me at once. And, as I said, it was day one. I remember thinking: can this really be right? Everyone needed a decision from me. That is when we realized that this transition could—and should—be prepared much better. At the beginning, you are still very much finding your bearings. You have to look up many things simply because you lack experience, yet at the same time you are already expected to communicate perfectly with all the different professional groups, with patients, and with their relatives—and so on. That is why we felt this should be properly prepared in a protected setting. And that is exactly what our training ward is.

This means that medical students in their Practical Year and nursing students are allowed to treat patients here under supervision. And for anyone who may have paused in alarm for a moment, let me add: this is also a research project. It is accompanied by rigorous scientific evaluation. We discussed it thoroughly with our ethics committee, and patients are fully informed that they are on a training ward and give their written consent.

If I may say a word about the accompanying research: of course, we were interested in whether this concept is truly the right one—specifically, whether it actually imparts the competencies needed in professional practice, for both nurses and physicians. Are the trainees more satisfied? Do they experience the concept as an added value?

We then asked the patients how they perceived the concept, and we also surveyed their relatives. At present, we are additionally collecting feedback from the referring physicians and from general practitioners who continue to care for the patients afterward.

What is truly remarkable is that everyone says the same thing: they would recommend this ward. When we ask whether they would recommend it—for themselves or for their family members—the answer is consistently yes. The same applies to the trainees. The recommendation rate ranges between 99 and 100 percent. It is almost hard to believe, but it is in fact true and has been evaluated and scientifically confirmed over many years. And, of course, that is immensely gratifying for us.

Birgit Hawelka:

Let's say I'm a medical student in my Practical Year. How long would I be on the ward—would it be for the entire year, or in blocks? And how would I be assigned to the ward if I'm studying in Regensburg?

Martina Müller-Schilling:

If you are studying in Regensburg—or anywhere else in Germany—in your final year you complete rotations in internal medicine and surgery, as well as a third elective. We cover part of the internal medicine rotation, and students apply to join us. They submit a letter of motivation and a CV explaining why they would like to work on this training ward. They can choose to stay for a placement of eight weeks, or for up to sixteen weeks.

As the concept has become so popular that demand now clearly exceeds the number of available places, we introduced an application process that includes a letter of motivation. In addition, we have established a second training ward, called **I'M A-STAR**, which stands for our **Intensivmedizinische Ausbildungsstation** (Intensive Care Training Ward) **Regensburg**. This is designed as a stepwise concept: students first join A-STAR, where they become familiar with the relevant clinical conditions on a monitored general ward, and can then deepen this experience during a placement in intensive care. If both options are chosen, it is possible to spend up to sixteen weeks with us.

Birgit Hawelka:

So far, there are only these two wards in Regensburg. Do you know whether this concept is also being implemented at other hospitals across Germany?

Martina Müller-Schilling:

That is absolutely correct. There are now other hospitals offering training wards as well, and we have come together to form a network. It is not a large group yet—nationwide, there are perhaps around 15 such training wards—but we have joined forces because, based on the accompanying research and the feedback we have received, we believe this is a strong and effective concept. We are also keen to share structures that have proven to be well established and successful. So anyone who is considering setting up a training ward themselves is very welcome to get in touch with us—we would be more than happy to share the concepts we have developed.

Birgit Hawelka:

So this really is a forward-looking concept for medical education.

Martina Müller-Schilling:

And we have even—because word has spread—developed an excellent collaboration with our pharmacy. Today, for example, we had ward rounds. Every week, we hold ward rounds together with final-year pharmacy students. The chief pharmacist or his deputy attends, and I really must single out Mr. Kratzer and his team, as well as Mr. Fleischmann, for special praise, because they enrich our work enormously by conducting these pharmacy ward rounds and explaining everything one needs to know about medications and their side effects.

The patients consistently tell us how much they benefit from these rounds, where everything is explained to them in detail—about the medications they are taking or those newly prescribed. So pharmacy has now become an integral part of the program. Our occupational health physician also supports us and gives lectures on resilience, and physiotherapy has now joined as well, so that the initiative has truly evolved into a comprehensive, all-encompassing concept.

Birgit Hawelka:

or do you select them deliberately to ensure that as representative a spectrum of internal medicine as possible is covered?

Martina Müller-Schilling:

That is a very important question, Ms. Hawelka, because of course we asked ourselves: Can we even do something like this? Or can we set up an intensive care training ward, where there are, after all, critically ill patients? And we were encouraged to do so. We founded this training ward in 2019, before COVID. You remember? During COVID, there were no in-person lectures, only online lectures. And the medical students supported us immensely on our wards in COVID care. That's when we saw how responsibly students—and also nursing trainees—can handle severely ill patients. This reinforced our decision not to select patients, but rather to care for patients exactly as they are admitted and as they are assigned to us. Of course under supervision. But we don't have the idea of assigning easier cases to the students; rather, we simply want to say: this is everyday practice. This is an environment where there is always support, and it works very, very well.

Birgit Hawelka:

Congratulations on this concept — it really sounds very forward-looking. And alongside the practical training during the Practical Year, you have also done a great deal to address topics that are sometimes somewhat neglected in medicine, but which play a major role in public debate, such as prevention, nutrition, wellbeing, and mental health. Now I imagine that it's not easy to simply expand the medical curriculum, since it is already very tightly structured and packed in terms of time. How did you manage to nevertheless incorporate these topics into medical studies?

Martina Müller-Schilling:

The key was involving everyone here. Suggestions for topics — as I already mentioned with regard to prevention — actually came from our students. Then, as a team, we considered what we could realistically implement. And that is exactly what you are saying: the medical curriculum is extremely dense. But then — and I consider this particularly important — together with the students we reflected on what really matters to us. We do not want medicine to be a course of study that is exclusively about learning facts. We know that medicine is more than that. And the World Health Organization once said: "Physicians are community leaders."

"And if we understand ourselves in this way, then we also have to look to the future and think about the future. And as I like to say, we need to think beyond boundaries and also go beyond our own limits. But for that, we need mechanisms for how to do it. So we simply decided: it's worth it to us. We provide factual knowledge. We also have a lot of simulation training, because in the medical profession it's about being able to do things hands-on and feeling confident in doing so.

But then we also said that we deliberately take time for very important issues — namely, the impact of climate change on our health, which is highly relevant. Nutrition. Prevention. And

we have found a very nice way to do this. We offer a shared breakfast with the students — a healthy breakfast — and we convey the content practically while having breakfast together. We always find this to be a real asset. So teaching and learning can truly engage all the senses.”

Birgit Hawelka:

That means that two hours are not simply carved out of a lecture, as is often the case, to somehow squeeze in more theory. Instead, the content is really developed through conversation when people sit together over breakfast — discussing what healthy nutrition looks like, the role it plays, and how it can be integrated into everyday medical practice.

Martina Müller-Schilling:

We also want to teach how to be efficient. And everyone has to have breakfast. So that's when we talk about the topic.

Birgit Hawelka:

And how often does that happen? Is it more on special occasions, or is it spread out over the semester? After all, it must also be time-consuming.

Martina Müller-Schilling:

The group that does internal medicine with us first attends the lectures and then spends two weeks with us in the clinic. During those two weeks, there is one breakfast session. That gives us a solid foundation for being informed about nutritional medicine.

Birgit Hawelka:

If I may ask a follow-up question: there are topics such as wellbeing or mental health that are increasingly coming into the discussion, also with the background that we are seeing a growing number of sick days. At the same time, however, the medical profession does not exactly seem predestined for work-life balance, at least not in everyday clinical practice. Is that a kind of contradiction? You seem very relaxed now, but I assume you're not going to be at home at 4:00 p.m. today, or at the gym, or somewhere like that. There is this very high level of expectation placed on physicians in the hospital, alongside the message that 'everyone should take care of their mental health and create balance.' How do you manage to strike that balance?

Martina Müller-Schilling:

I think it's extremely important that we talk about this. And I also like to speak about *work-life integration*, because the term *balance* often implies that there is an imbalance — which, in fact, is not necessarily the case. We have given a great deal of thought to this challenging profession, which is very important.

In my generation, we didn't talk about work-life balance or work-life integration at all. I come from a generation in which there was not yet a working time law, and that's precisely why I find it all the more important that such situations are not repeated. Because, as you

said, the medical profession — being a physician — is a demanding one. We do this work willingly, but we also need the necessary tools to do it well.

I've given a lot of thought to how we should frame this topic. And the first — and always the most important — step is to know the facts. That is why, just this year, in my role on the board of the European gastroenterologists, we conducted an analysis of the literature to see whether reduced wellbeing is an issue for physicians.

In our profession, we deal with diseases of the stomach, intestines, and liver. We have a high density of on-call duties because we perform emergency endoscopies. We have an intensive care unit, so we provide around-the-clock services.

It turned out that, across Europe — we initially conducted the analysis Europe-wide and then globally — almost 50% of all gastroenterologists studied show signs of reduced wellbeing. And the most severe form of this is what is known as burnout. And that leads us to ask: what is driving this?

We examined scientifically which groups are particularly affected. And it probably won't surprise you when I say that women are affected even more than men — and this is evidence-based — because they naturally tend to have more responsibilities in what is referred to as *care work*, such as obligations toward children or elderly relatives.

Younger residents are also more at risk, because they lack experience and, importantly, the ability to develop effective coping mechanisms. And I consider it extremely important that we know these data and facts, because I want the best people to stay with us rather than leave for other professions. Of course, as a physician, one can move entirely into research or into industry. But I would like them to remain with patient care.

So the evidence is very clear. It's also important to understand that this has nothing to do with a lack of resilience. Scientific studies have examined resilience in physicians compared with the general population, and they show that doctors have an above-average capacity to cope with stress. That resilience is already there. That may well be one reason why people choose this profession — because they are willing to take on responsibility.

Nevertheless, we need to understand this phenomenon. And we now have to create an environment in which work-life integration can truly succeed. This is clearly a task for institutions. It cannot be done by individuals alone — That goes without saying. It is a responsibility of leadership and of institutions. I think it is simply important that we talk about this and that we initiate institutional changes as a result.

Birgit Hawelka:

So, changes are needed not only in medical training, but across the entire medical profession.

Martina Müller-Schilling:

Yes, it would be desirable to take that away as well—to be able to say: I have thought about it, I am aware of the stresses. But I also know which mechanisms exist that enable me to manage my tasks well.

Birgit Hawelka:

You already mentioned that there is quite a high level of resilience among medical professionals compared to the general population. As an outsider, my thesis would be: otherwise, you might not even make it through the degree program in the first place. When I observe how high the demands are—both in terms of time and the required level of self-discipline—I would assume that without a certain degree of resilience, I wouldn't even meet the GPA cutoff and wouldn't be admitted. Or I would throw in the towel by the third semester.

So what could a medical degree program of the future look like? What would an ideal medical program be like—one that perhaps better integrates the topics you have all mentioned: interdisciplinarity, future-oriented themes, but also the resilience of individual students? Let's set aside, for the moment, the fact that we all operate within organizational and financial constraints. How would you like to see the program designed if it were reinvented from scratch?

Martina Müller-Schilling:

As you say—if one could reinvent it and think backwards—I would indeed confirm what you said: you have to learn a great deal. And that is true. But we should design this extensive learning in such a way that there is early, intensive, and well-structured patient contact. That means not first learning facts for two years, but having early and very intensive—yet well-supported—patient contact from the start. And that we move from pure fact-based learning toward competence and resilience. That means conveying the medical mindset right from the beginning: clinical reasoning, communication, teamwork, as well as topics such as digital competence.

If you consider how great the influence of artificial intelligence will be in the future—and already is today—then it is also important that we think about scientific work from the very beginning. Not by “clearing out” just one semester to do a doctoral thesis, but by naturally integrating and teaching it as part of the program.

And that we also integrate the topics we have discussed—prevention, gender-sensitive medicine, and health economics, for example—because we also need to know that what we do should benefit everyone, that we are managing public funds, and that we are also responsible for public health. I believe we should think about this from the very beginning, because it allows for much better development in a step-by-step, cumulative way—for example, if we were to offer the whole program in a modular structure. And I am convinced that this would succeed—and that it would also make learning factual knowledge much, much easier.

And what I would also find ideal would be having a large simulation hospital where we can work in a learning-friendly environment. We have now set this up in one room here thanks to a donation, and I'll mention this by name: I am extremely grateful to the company Vector for their donation, which made it possible for us to do something concrete for teaching. This allowed us to build simulation models—for everyone involved: nursing students, medical students—where we can say, for example, someone is having difficulty performing a certain puncture. Then we practice it again on the model. Drawing blood isn't working? We practice it on the model. And I consider this extremely important: to do this alongside regular training, to really get accustomed to procedures and to practice interventions repeatedly on simulation devices. This can also be supported by artificial intelligence. That would be my ideal vision.

Birgit Hawelka:

So integrating these elements from the very beginning—this holistic approach that you have implemented so well at A-STAR—so that it is essentially prepared right from day one.

Martina Müller-Schilling:

That would be my vision for the future.

Birgit Hawelka:

A wonderful vision. I'm keeping my fingers crossed that you'll be able to take many more steps in this direction and that a great deal will continue to evolve over the coming years. Thank you very much for the insights. I think it has become clear that you truly deserve this award—not only because of how much you have achieved at the university hospital in terms of future-oriented medical education. Thank you very much for the conversation and for your time.

Martina Müller-Schilling:

Thank you very much for having me. Thank you.