MARTIN SCHULZ:
Patients need our medication expertise and full scope of pharmacy practice

Innovator in pharmaceutical care, Martin Schulz, is FIP's 2020 André Bédat awardee. Professor Schulz currently holds a number of senior positions in Germany, including director of the department of medicine at ABDA (Federal Union of German Associations of Pharmacists), director of pharmacy at the German Institute for Drug Use Evaluation, chairman of the Drug Commission of German Pharmacists, and adjunct professor at the Institute of Pharmacy at the Free University of Berlin.

What attracted you to a career in pharmacy?

With my special interest in both chemistry and biology during school, I was curious to learn how drugs work in the body — the pharmacology behind treating illnesses. As such, I applied to study pharmacy.

After a PhD in pharmacology at the University of Hamburg, you were appointed head of the Centre for Drug Information at ABDA before the age of 30. What qualities and skills helped you in this senior role?

After mandatory internships at a community pharmacy and at the department of pharmacology at the University Medical Centre Hamburg-Eppendorf (UKE), I became a licensed pharmacist. I had the privilege to do my 15-months of civil service in a hospital. Apart from the pharmacy department I spent time on the wards, in operating rooms and even in the emergency, intensive care and pathology departments. After that, I returned to the UKE as a PhD-student in pharmacology and began studying medicine. As my laboratory was located at the Institute of Legal Medicine, I further learned clinical and forensic toxicology and providing drug information. Actually, after obtaining my PhD in pharmacology in 1988, my plan was to spend at least one year as a post-doc at Prof. Hartmut Derendorf's laboratory at the University of Florida in Gainesville. My NATO scholarship application at the German Academic Exchange Service was successful, the lease for my flat in Hamburg terminated, and my visa for the USA was obtained. Then, one day I found a letter from ABDA on my desk advertising the post as head of the Drug Information Centre, at that time located in Frankfurt at Main and serving all pharmacies in Germany. I was interviewed for the position but continued to organise my PhD and farewell party (before leaving for Florida) but then came the contract of ABDA to sign . . . and I have now been at ABDA for 32 years!

In 1990, Hepler and Strand published their paper, defining pharmaceutical care. Why was this definition important and what was the significance of this paper for you?

Actually, I met Prof. Charles D. Hepler in Gainesville in 1989; before this paper was published. Seeing what I missed not spending my post-doc at the University of Florida, I was lucky to have a meeting with him at his office. This was one the most intense two-hour experiences I had ever had. It was not the paper, but the charismatic person who infected me with the pharmaceutical care philosophy. At that time, pharmacists were providing clinical services, at least in the late 80s in the hospital setting in the USA, but accepting responsibility for patient outcomes and, above all, responsibility for health-related quality of life, was something truly new.

In 1994, you co-founded the Pharmaceutical Care Network Europe (PCNE). Why was this needed?

A European group, which had been providing lectures and workshops for the continuing education programmes at FIP Tokyo 1993 and Lisbon 1994, gathered together to discuss how to best do research in pharmaceutical care at an international level. This included planning and carrying out trials supported by EU grants. There was no international society offering such a platform. So, we founded the PCNE and the first controlled studies in the community pharmacy setting were performed in many countries: therapeutic outcomes monitoring (TOM) asthma and pharmaceutical care for the elderly. Of note is that the PCNE never had a budget, there were no fees, and every member was obliged to serve at least once as the chair or secretary for two years, which included the organisation of a working conference during his or her term. Membership was further dependent on experience in pharmaceutical care research and the willingness to share tools, instruments, and results within the network. Apart from the working conferences (the next one is planned for Basel in February 2021 and is open to non-members), the most prominent output is the development of the classification of drug-related problems tool, now available in version 9.1, and in several languages.

Since then, we've seen the field of pharmaceutical care research expand. What, according to you, have been the landmark research findings?

Indeed, a number of patient care needs have been identified that can benefit from pharmacists' care and a large number of trials have provided evidence for the improvement of clinical, humanistic, and economic outcomes. The researchers and trialists who conducted randomised controlled trials have to be applauded for their efforts and achievements, in particular. ››

What do you see as the major trends affecting pharmacy and how can these be reflected in pharmacy practice research?

Very recently, FIP's Special Interest Group on Pharmacy Practice Research has identified current research gaps in the areas of needs assessment, intervention development, evaluation, implementation and sustainability. The latter are key for translation of study results into daily practice and public health benefit.

In addition to your expertise in drug use evaluation, your special field of interest, with many research papers published, is cardiovascular disease. What led you into this field?

As an intern at UKE's department of pharmacology, I learned cardiovascular pharmacology and I developed close friendships with many colleagues working in cardiology. Years later, we discussed the important challenges of medication non-adherence and started collaborating. A highlight was a recent press release of the German Cardiac Society recommending to include pharmacists in the care of heart failure patients and to provide appropriate remuneration for these cognitive services. I am confident this was the first time this happened.

You've published over 500 papers and most recently one on pharmacy-based interdisciplinary intervention for patients with chronic heart failure. What were those "pharmacy care" interventions and what is needed for more pharmacists to put them into practice?

PHARM-CHF was the first ever RCT in the German pharmacy setting. We investigated whether an interdisciplinary intervention consisting of regular contacts with the local pharmacy and weekly dosing aids improves medication adherence and quality of life in elderly patients with heart failure. The results were presented as "late-breaker" at the European heart failure congress 2019 in Athens, was published in the most important heart failure journal, and was eventually recognised in German National Guidelines for heart failure. Now, we have to negotiate appropriate remuneration for pharmacists to help patients managing their multiple medications safely and appropriately.

In your André Bédat Lecture, you spoke about pharmacists practising to their "full scope". What does this mean?

Allow me to cite my friend Prof. Ross Tsuyuki and colleagues from the University of Alberta in Canada: "Full-scope pharmacist services include all proactive and comprehensive interventions that prevent or manage illness and are within an individual's competency to perform independently." Pharmacist-led or interdisciplinary interventions including injections, prescribing and laboratory testing have been shown to improve patient outcomes and are, therefore, essential services and not just "nice to have". These are services that all patients should expect and be entitled to receive. We call this "full scope of pharmacy practice". Pharmacists, and our patients should not be satisfied with anything less than a full scope.

"Pharmacist-led or interdisciplinary interventions including injections, prescribing and laboratory testing have been shown to improve patient outcomes and are, therefore, essential services and not just nice to have."

You also mentioned pharmacist prescribing, citing examples from Canada. Currently pharmacists in Germany are not able to prescribe. Do you see this changing?

This is true, but pharmacists already have a high degree of responsibility in ensuring appropriate use of non-prescription medicines, many of which switched from prescription to over-the-counter status. In many systems, pharmacist prescribing may actually improve access to evidence-based pharmacotherapies. And apart from vaccinations or provision of morning-after pills, there are examples of effective and safe prescribing in other countries such as UK, Australia, and the USA, under specific terms. I'm confident that this will further develop in the near future. Patients need our medication expertise and can benefit from our high accessibility.

In your lecture, you said that community pharmacists can play a significant role in collaboration with physicians to improve the management of hypertension. What should that collaboration look like?

Together with cardiologists, we developed and tested a hypertension screening and referral guideline recently. We found that standardised blood pressure measurement in community pharmacies was both feasible and identified large numbers of patients with suboptimal blood pressure control. This provides vast opportunities to improve hypertension management which would lead to a significant impact on public health. The guideline worksheets now need to be implemented on a larger scale. Indeed, a widespread implementation could bring up to 52,000 community pharmacists in Germany alone to help manage the important public health issue of uncontrolled blood pressure. The worksheets might be a starting point in other countries to agree, among others, on the criteria for when pharmacists should refer.

"We found that standardised blood pressure measurement in community pharmacies was both feasible and identified large numbers of patients with suboptimal blood pressure control."

In March 2020, the Council of Europe announced that it will promote pharmaceutical care in Europe, under a new resolution. How do you think this could change things?

Frankly, I think this resolution is of limited impact nationally or locally, unfortunately. The reason is that the Council's resolutions are not linked to healthcare politics in the vast majority of the member countries. So, apart from these important international activities, we need stakeholders to act on the national and even local level, eventually.

You've been a member of FIP for nearly 30 years. How did you first get involved?

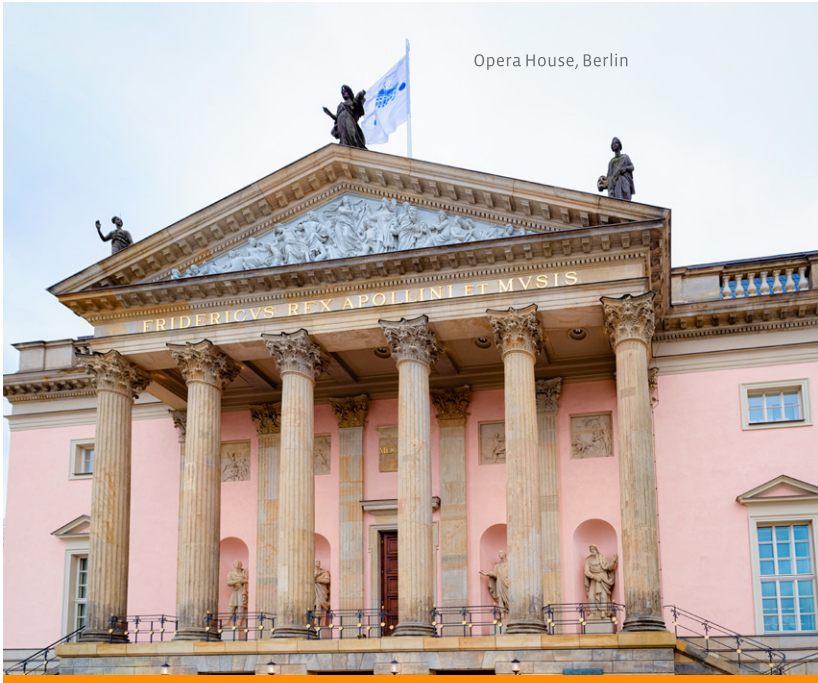
I attended my first FIP congress in Munich in 1989. Since then, I have never missed one. After presenting at the Council of Europe, I was invited to the FIP congress in Lyon in 1992 to become part of a continuing education programme in pharmaceutical care provided by the Community Pharmacy Section and led by Doug Hepler. Apart from lectures, we offered workshops in different languages — English, French, German and at the FIP congress in Tokyo in 1993, we also conducted workshops in Japanese. It was such a huge success with 300+ attendees who paid an extra fee for the 1.5-day event. Originally planned for three years, we were able to offer the programme for a total of 12 years, under different leadership, until FIP Cairo 2005.

You're also a member of many other professional organisations in Germany, Europe and the USA. Why is it important to be involved with professional organisations, and what makes FIP special?

Growing up in Hamburg, the "Door to the World", it seemed natural for me to branch out beyond the borders of Germany in my professional endeavours. I have always been inspired by attending international conferences in cardiology, diabetes, pharmacoepidemiology, medication safety and pharmacy practice. FIP is an excellent platform to share ideas with our colleagues from all over the world and working in all kinds of settings.

What advice do you have for pharmacists for a long and successful career?

Choose the most appropriate supervisor or laboratory and do a PhD, learn from colleagues, both within your country and internationally, and get and stay involved. We all have a responsibility towards the development of our profession, and, by extension, improving patient care.



Opera House, Berlin

QUICK FIRE ROUND

Significant milestones: Receiving the André Bédat Award from FIP has been one of my most significant milestones.

Inspiration/role models: Frankly, I had no formal role models, but was lucky to spend quality time with a significant number of colleagues both in pharmacy and medicine, who inspired me in many different ways.

Perfect weekend: Having a long sleep followed by a nice breakfast. Then walking the dogs at the Havel River, relaxing and inviting friends for a barbeque in our garden. The next day the same but with cycling and watching my football team Borussia Dortmund outdoing Bayern Munich.

Visiting Berlin? Don't miss: Taking the walking tour: Gendarmenmarkt, Opera House, Unter den Linden, Brandenburger Tor, Reichstag, Memorial to the Murdered Jews of Europe, Potsdam Square, Checkpoint Charlie (including the Wall Museum), Friedrichstrasse, Gendarmen Square. Finally, relax at one of the many fine restaurants followed by a concert at the Philharmonie.