

# **USE** CASE

Bonn University teaches anatomy in digital space



INSIGHTS

## "Digital microscopy is great, Macroscopy is ... simply even better"

Viewing histological sections on their cell phone had excited medical students at the University of Bonn since 2014 when the Institute of Anatomy began offering digital microscopy on the SmartZoom® ClassRoom eLearning platform. The initiator was Stefanie Schliwa, M. D., who still manages the project today. It allows medical students to access histological sections, macroscopic images as well as other teaching material online anytime and anywhere.

The success story of digital teaching in the anatomy department at the University of Bonn began when Stefanie Schliwa met her colleagues Martin Weihrauch, M. D., and Alberto Pérez-Bouza, M. D., the founders of Smart in Media. Together, the three developed the "Digital Microscopy" for the Bonn Anatomical Institute. Since the beginning, personal contact with the provider has been and continues to be very important to Stefanie Schliwa. She especially appreciates the trustful handling of her teaching materials at Smart In Media: "It's always a collegial exchange at eye level."

### Solution for logistical challenges

Initially, digital microscopy was primarily concerned with histological slides. SmartZoom® ClassRoom made it possible to substitute the practical training sessions on the microscope with digital learning. This allowed all medical students to get independent microscopy experience despite growing student numbers and limited logistical capacity.



Thanks to this experience, the Anatomical Institute at the University of Bonn was one of the few teaching institutions that was able to move its teaching completely into the digital space during the Covid pandemic without quality losses: The digital infrastructure was already in place. The anatomists were even able to help out colleagues from biochemistry and physiology: They invited them to deposit their material on the "Digital Microscopy." Currently, the teaching platform hosts all courses offered by the anatomy department.

#### Aesthetics and speed are key

Of course, there would have been a university-owned alternative for instructors. "But it would have been less attractive than SmartZoom® ClassRoom's solution, slower and more cumbersome," reports the project manager. She is aware that digital teaching services need to be designed in a user-friendly way if students are to use them voluntarily. Aesthetics and speed are cardinal points that must not be neglected.

#### "This is what I would have liked in my days"

Stefanie Schliwa is motivated by the desire to provide her students with the instruction she would have liked herself. In doing so, it is very important to her that the digital courses can be accessed from any device, anywhere, at any time. She also appreciates the image quality and customer service of SmartZoom® ClassRoom: There is always someone available at Smart In Media to answer questions, and there have not been any long downtimes due to maintenance work.

### Students are perfectly prepared

The anatomical lecturer's passion isn't microscopic but macroscopic anatomy. Therefore, she is particularly pleased that in times of the Covid pandemic, the teaching of macroscopy has taken up a large part of the SmartZoom® platform, which continues to be called "Digital Microscopy." Stefanie Schliwa thinks: "Digital microscopy is great, macroscopy is ... even better."





With her fine sense of aesthetics, she produces high-quality photos of anatomical preparations, which she annotates and uploads to the platform. To help students prepare even better for anatomy exams, Stefanie Schliwa and her team create videos in which she explains more complex structures such as the lower throat or the pelvic conduction pathways on cadavers.

#### Focus on the essentials

For the sake of the students, the project manager takes care not to overload the teaching platform, as otherwise, the students would memorize everything and not be able to focus on the essential topics. All the most important knowledge is collected in "Digital Microscopy," and Stefanie Schliwa is convinced that there has never been a more efficient and effective exam preparation.

#### Classroom-Teaching for direct exchange

Despite all the enthusiasm for digital teaching, Stefanie Schliwa is aware of the limitations of online learning in medicine. Thus, face-to-face teaching in Bonn remains an important part of studying because it enables better communication among junior physicians as well as interaction between lecturers and students. And the lecturer knows: "The dissection course on the cadaver and the resulting understanding of anatomy cannot be substituted. Just as every patient is a unique case, so is every body donor."

Thus, digitization with the help of SmartZoom® ClassRoom is "a crucial addition to classroom teaching that I wouldn't want to do without," Stefanie Schliwa sums up. The University of Bonn is using public funding to finance the project. Particularly in view of the growing importance of digitization in the academical world, the lecturer hopes that digital teaching will be the standard everywhere at universities in the future.





#### INTERVIEW-PARTNERIN

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