TEACHING
STATEMENT

Over the past 14 years, I have been fortunate enough to be a teaching assistant and lead course instructor in several courses when I was an undergraduate at the Technical University of Munich, a Ph.D. student at the University of Göttingen and the University of Heidelberg, a postdoctoral research fellow at the National Institutes of Health and University of Massachusetts Medical School in the United States, and now as a research specialist at HHMI's Janelia Research Campus.

As a teaching assistant for the physics undergraduate courses at the Technical University of Munich (courses: Theoretical Physics II: Electrodynamics; Theoretical Physics I: Theoretical Mechanics), the University of Göttingen (courses: Experimental Physics IV: Quantum, atomic and molecular physics; Experimental Physics III: Optics), and the University of Heidelberg (course: Advanced physics laboratory course for physics students), I was responsible for seminar groups of between 15 and 45 students. During these seminars, I usually started by summarizing the previous lecture or asking the students to summarize the lecture for me. Then, I encouraged the students to ask clarifying questions and asked a few probing questions before working on the respective worksheets. In general, I tried to involve as many students as possible in such seminar sessions and encouraged discussions that I moderated or mediated. In addition to holding seminars as a teaching assistant, I also wrote exams and graded papers for more than 200 students for the associated lectures.

I seek to implement as many levels of Bloom's Taxonomy as possible when I am structuring classes, courses, and workshops. Bloom's Taxonomy is a framework that divides cognitive learning into six levels: remembering, understanding, applying, analyzing, evaluating, and creating. The framework's philosophy emphasizes the importance of implementing higher-level cognitive learning levels (e.g., applying, analyzing, evaluating, and creating) compared to just lower-level cognitive learning levels (e.g., remembering, understanding) for the best possible learning outcome. Therefore, I employ a more interactive teaching style with hands-on components, discussion sessions, and class challenges over a more traditional lecture style.

Since my relocation to the United States in 2016, my teaching activities gained new momentum since I could design and structure entire seminars and courses from scratch on my own at the National Institutes of Health (NIH) and HHMI's Janelia Research Campus. At the NIH, I designed two seminars for summer interns (mainly colleagues' students). During these seminars called "Optical Microscopy & Imaging in the Biomedical Sciences" and "Advanced Imaging Techniques in Biomedical Sciences," I introduced students to the latest microscopy techniques by reading and critically evaluating the most recent scientific papers. At HHMI's Janelia Research Campus, I designed an entire image analysis boot camp based on Fiji/ImageJ for graduate students and postdocs with several hands-on components to consolidate the gained knowledge. Furthermore, I created a new module called "Superresolution Data Handling" for the standard image analysis course offered by Janelia's Advanced Imaging Center, covering reconstruction, processing, and analysis of SIM, STED, and SMLM data sets.

The 9-week online pedagogy course "Scientists Teaching Science" by Barabara Houtz further helped me to hone my teaching skills while I was a postdoctoral research fellow at the NIH.

With the pandemic, my teaching activities moved from an in-person setting to the virtual space, which came with its own challenges and new opportunities. I discovered a large number of virtual teaching tools (e.g., MURAL (a tool for visual collaborations) or Mentimeter (a tool for live polls, quizzes, and word clouds)) to keep students engaged and started to record seminars and lectures on Zoom, which are now not only accessible to the course participants but to those eager to learn all over the world.

TEACHING PORTFOLIO	**NIH FAES Imaging - From IF and FISH to Automated and Confocal Microscopy** (virtual workshop), Instructor of the Image Analysis Bootcamp, National Institutes of Health, Bethesda, United States of America	2021
	Fiji Image Processing and Analysis Workshop (virtual workshop) Instructor of the Superresolution Data Handling Module, Turku Bioscience Centre, Turku, Finland	2021
	NIH FAES Super Resolution Workshop (virtual workshop) Instructor, Foundation for Advanced Education in the Sciences (FAES) Bethesda, United States of America	2021
	Fiji Macros Programming (virtual workshop) Instructor, Janelia Research Campus, Ashburn, United States of America	2020
	DECODE for Single Molecule Localization Microscopy (virtual workshop) at the *From Image to Knowledge with ImageJ & Friends* conference Instructor, Janelia Research Campus, Ashburn, United States of America	2020
	NIH FAES Image Processing and Analysis workshop (virtual workshop) Instructor, National Institutes of Health, Bethesda, United States of America	2019-2021
	Open Science in Imaging and Microscopy (breakout session during a workshop) Instructor, Janelia Research Campus, Ashburn, United States of America	2019
	Advanced Imaging Techniques in Biomedical Sciences (summer intern journal club) Instructor, National Institutes of Health, Bethesda, United States of America	2018
	Introduction to microscopy (graduate course) Teaching assistant, University of Massachusetts Medical School, Worcester, United States of America	2017
	Optical Microscopy & Imaging in the Biomedical Sciences (summer intern journal club) Lead instructor, National Institutes of Health, Bethesda, United States of America	2017
	Advanced physics laboratory course for physics students (undergraduate course) Teaching assistant, Heidelberg University, Germany	2011
	Experimental Physics III: Optics (undergraduate course) Teaching assistant, University of Göttingen, Germany	2011
	Experimental Physics IV: Quantum, atomic and molecular physics (undergraduate course), Teaching assistant, University of Göttingen, Germany	2010
	Theoretical Physics I: Theoretical Mechanics (undergraduate course) Teaching assistant, Technical University of Munich, Germany	2009
	Theoretical Physics II: Electrodynamics (undergraduate course) Teaching assistant, Technical University of Munich, Germany	2008

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