

CONTACT INFORMATION	Carl Zeiss AG Carl-Zeiss-Strasse 22 73447 Oberkochen, Germany	Phone: +49 (0)151 213-67757 E-mail: ulrike.boehm@zeiss.com Home: ulrikeboehm.org
SUMMARY	Physicist, optical scientist & data scientist with a passion for community building/engagement, outreach, and teaching: I have over ten years of experience designing, building, and running advanced optical systems, analyzing (microscopy) data, and developing (image) acquisition & analysis workflows. Furthermore, I have been highly engaged in community building/engagement, outreach, and teaching activities focusing on community service, women/diversity in science, open science, and optics/microscopy for more than 15 years.	
RESEARCH INTERESTS	<ul style="list-style-type: none"> <li>• Optics and photonics, particularly involving imaging, microscopy, and optical metrology</li> <li>• Instrument design, development, and application across a wide range of applications (from the life sciences to the physical sciences)</li> <li>• Development of image and data processing and analysis tools</li> <li>• Machine learning and its application in (microscopic) image and data analysis</li> <li>• Statistical methods for large datasets</li> <li>• Open software and hardware tools for imaging, microscopy, and optical metrology</li> </ul>	
POSITIONS	<p><b>Optical Scientist &amp; Project Team Lead</b> <span style="float: right;">2022 - present</span> Corporate Research &amp; Technology, Carl Zeiss AG, Oberkochen, Germany</p> <ul style="list-style-type: none"> <li>• Project team lead of a development team within the Corporate Research &amp; Technology (CRT) section at Carl Zeiss AG, working on new tools for imaging, microscopy, &amp; optical metrology</li> <li>• Review and unlock the latest optical trends in imaging, microscopy, &amp; optical metrology</li> <li>• Strong collaboration with internal and external partners</li> <li>• Design and construction of early optical demonstrators/prototypes and their respective control and analysis schemes</li> </ul> <p><b>Research Specialist</b> <span style="float: right;">2019 - 2021</span> Janelia Research Campus, Ashburn, VA, USA</p> <ul style="list-style-type: none"> <li>• Design, construction, modification, and troubleshooting of advanced optical systems (iPALM, Lattice Light Sheet Microscope, SiMView Light Sheet Microscope, Aberration Corrected Multifocal Microscope, MOSAIC, FIB-SEM, cryo-SIM, etc.)</li> <li>• Support of (inter)national scientists with their imaging experiments via technical consultations and during their data acquisition at the instruments of Janelia's Advanced Imaging Center (AIC) and Janelia's Light Microscopy Core, and at various other imaging modalities on campus</li> <li>• Troubleshooting of sample preparation</li> <li>• Development and implementation of new image and data analysis strategies for Janelians and users from around the world</li> <li>• Review of proposal drafts and proposals submitted to the Advanced Imaging Center</li> <li>• Design and realization of microscopy and data analysis workshops, symposia, and conferences</li> </ul> <p><b>Postdoctoral Research Fellow</b> <span style="float: right;">2017 - 2018</span> National Institutes of Health, National Cancer Institute, Bethesda, MD, USA</p> <ul style="list-style-type: none"> <li>• Design and construction of a microscope for live-cell 5-color single-molecule transcription imaging in eukaryotic cells at high resolution in time and space to capture promoter-enhancer interactions</li> <li>• Development of advanced fluorescence labeling strategies for the genome based on dCas9 (CAS-FISH)</li> <li>• Computational modeling and data analysis of 4D genome data</li> </ul>	

	<b>Ph.D. Student</b>	2010 - 2016
	Max Planck Institute for Biophysical Chemistry, Göttingen, Germany Department of NanoBiophotonics (Prof. Dr. Stefan W. Hell) <i>Dissertation title:</i> "4Pi-RESOLFT nanoscopy" <i>Advisor:</i> Prof. Dr. Stefan W. Hell	
	<ul style="list-style-type: none"> <li>• Running of various imaging experiments (samples: block copolymers, synaptic vesicles) on an isoSTED microscope</li> <li>• Design and construction of a two-color STED microscope</li> <li>• Design and construction of a 4Pi-RESOLFT nanoscope, including optical and acquisition system.</li> <li>• Development of acquisition software</li> <li>• System/sample testing and optimization</li> </ul>	
	<b>Master Student</b>	2009
	Max Planck Institute of Biochemistry, Martinsried/Munich, Germany Department of Molecular Structural Biology (Prof. Dr. Wolfgang Baumeister) <i>Dissertation title:</i> "Correlative microscopy at liquid nitrogen temperature" <i>Advisors:</i> Dr. Jürgen M. Plitzko, Prof. Dr. Wolfgang Baumeister	
	<ul style="list-style-type: none"> <li>• Development and testing of a cryo transfer shuttle (CryoStage<sup>2</sup>) for the transfer of amorphous frozen-hydrated samples from a fluorescence to an electron microscope for correlative microscopy</li> <li>• Further development and testing of the software based on scale-invariant feature transform (SIFT) for the correlative microscopy approach</li> </ul>	
	<b>Undergraduate Researcher</b> - various research assistant positions	2005 - 2008
	<ul style="list-style-type: none"> <li>• Evaluation of the mechanical properties of actin filaments in combination with different actin-binding proteins at the Physics Department of the Technical University of Munich, Germany - Prof Andreas Bausch (2008)</li> <li>• Study of HEK cells with FLIC-microscopy at the Max Planck Institute of Biochemistry, Martinsried, Germany - Prof Peter Fromherz (2008)</li> <li>• Analysis of Multi-SANS data (with MIRA) and data of Cytochrome C (with the Neutron Spin Echo RESEDA) at the Research Neutron Source Heinz Maier-Leibnitz (FRM II), Munich, Germany - Dr. Robert Georgii and Prof Peter Böni (2007)</li> <li>• Study of surfaces and DNA with an AFM at the Physics Department of the Technical University of Munich, Germany - Prof Thorsten Hugel (2006)</li> <li>• Performance evaluation of an animal PET scanner at the university hospital "Rechts der Isar", Munich, Germany - Prof Sibylle Ziegler (2006)</li> <li>• Data analysis of water levels of the Baltic Sea at the Leibnitz Institute for Baltic Sea Research, Warnemünde, Germany - Dr. Torsten Seifert (2005)</li> </ul>	
EDUCATION	<b>MicroMasters in Statistics and Data Science</b>	2020 - 2021
	Massachusetts Institute of Technology / MITx, Cambridge, MA, USA	
	<b>Ph.D. in Physics</b>	2010 - 2015
	Heidelberg University, Heidelberg, Germany	
	<b>Diploma in Physics</b>	2004 - 2009
	Technical University of Munich, Munich, Germany	
HONORS & AWARDS	<b>Helmsley Fellowship</b> , Helmsley Charitable Trust	2017
	<b>66th Lindau Nobel Laureate Meeting</b> , Participant	2016
	<b>Excellence Award</b> , Max Planck Society	2010
	<b>Oskar Karl Forster Scholarship</b> , Technical University of Munich	2009
	<b>Study Career Scholarship</b> , Technical University of Munich	2008

24. Nogueira, A.T., Herron J.C., O'Shaughnessy E.C., **Boehm U.** et al., *Resolving protein conformation in iPALM*. Journal of Cell Science (2022). submitted
23. Reiche, M.A., Aaron J., **Boehm U.** et al., *When light meets biology - how the specimen affects quantitative microscopy*. J. Cell Sci. (2022). DOI:10.1242/jcs.259656
22. Gaudreault N., . . . , **Boehm U.** et al., *Illumination Power and Illumination Stability*. protocol.io (2022). DOI:10.17504/protocols.io.bzp8p5rw
21. **Boehm U.** *Janelia+EMBL BioImaging Seminar Series: How We Started a Successful Seminar Series during the Pandemic*. FocalPlane, p1 (2022). DOI:https:10.1242/focalplane.6011
20. Rigano A., . . . , **Boehm U.** et al., *Micro-Meta App: an interactive tool for collecting microscopy metadata based on community specifications*. Nature Methods 18, p1489–1495 (2021). DOI:10.1038/s41592-021-01315-z
19. Hammer M., Huisman M., Rigano A., **Boehm U.** et al., *Towards community-driven metadata standards for light microscopy: tiered specifications extending the OME model*. Nature Methods 18, p1427–1440 (2021). DOI:10.1038/s41592-021-01327-9
18. **Boehm U.\***, Nelson G.\* et al., *QUAREP-LiMi: A community-driven initiative to establish guidelines for quality assessment and reproducibility for instruments and images in light microscopy*. Journal of Microscopy, p1-18 (2021). DOI:10.1111/jmi.13041
17. **Boehm U.**, Galbraith C. *Extending the performance capabilities of isoSTED*. Biophysical Journal, p3237-3239 (2021). doi:https://doi.org/10.1016/j.bpj.2021.07.005
16. Rigano A., . . . , **Boehm U.** et al., *Micro-Meta App: an interactive software tool to facilitate the collection of microscopy metadata based on community-driven specifications*. bioRxiv, p1-23 (2021). DOI:10.1101/2021.05.31.446382
15. **Boehm U.\***, Nelson G.\* et al., *QUAREP-LiMi: a community endeavor to advance quality assessment and reproducibility in light microscopy*. Nature Methods, p1-4 (2021). DOI:10.1038/s41592-021-01162-y
14. Huisman M., Hammer M., Rigano A., **Boehm U.** et al., *A perspective on Microscopy Metadata: data provenance and quality control*. arXiv, p1-15 (2021). DOI:https://arxiv.org/abs/1910.11370
13. Hammer M., Huisman M., Rigano A., **Boehm U.** et al., *Towards community-driven metadata standards for light microscopy: tiered specifications extending the OME model*. bioRxiv, p1-27 (2021). DOI:110.1101/2021.04.25.441198
12. Rigano A., **Boehm U.** et al., *WU-BIMAC/NBOMicroscopyMetadataSpecs: 4DN-BINA-OME (NBO) Microscopy Metadata Specifications*. zenodo, (2021). DOI:10.5281/zenodo.4710731
11. **Boehm U.\***, Nelson G.\* et al., *QUAREP-LiMi: A community-driven initiative to establish guidelines for quality assessment and reproducibility for instruments and images in light microscopy*. arXiv, p1-17 (2021). DOI:https://arxiv.org/abs/2101.09153
10. Galbraith J., Aaron J., **Boehm U.**, Chew T.-L. and Galbraith C., *Resolving the 3D Nano-architecture of the Actin Cytoskeleton*. Microscopy and Microanalysis, p1 (2020). DOI:10.1017/S1431927620016736
9. Brown-Harding H., Cordelieres F., Poujol C., **Boehm U.**, Collinson L., *A 'lockdown post' from facility managers across the world*. FocalPlane, p1 (2020). DOI:10.1242/focalplane.1244
8. **Boehm U.**, Hell S.W., Schmidt, R., *4Pi-RESOLFT nanoscopy*. Nature Comm. 7 (10504), p1-8 (2016). DOI:10.1038/ncomms10504
7. **Boehm U.**, *4Pi-RESOLFT nanoscopy*. PhD Thesis, Heidelberg University (2016) DOI: 10.11588/HEIDOK.00020200
6. **Boehm U.**, Schmidt R., Hell S.W., *Live-cell 4pi nanoscopy*. European Biophysics Journal with Biophysics Letters 2015 Jul 1 (Vol. 44, pp. S75-S75). 233 SPRING ST, NEW YORK, NY 10013 USA: SPRINGER.

5. Ullal C.K., Primpke S., Schmidt R., **Boehm, U.**, Egner A., Vana P, Hell S.W., *Flexible Microdomain Specific Staining of Block Copolymers for 3D Optical Nanoscopy*. *Macromolecules*, 44, p7508–7510 (2011). DOI: 10.1021/ma201504f
4. Ullal C., Schmidt R., **Boehm U.**, Primpke S., Vana P, Hell W.S., *STED Microscopy as a Characterization Tool for Three Dimensionally Nanostructured Block Copolymer Thin Films*. *APS*. 2011 Mar;2011:A43-002.
3. Rigort A., Bäuerlein F.J., Leis A., Gruska M., Hoffmann C., Laugks T., **Boehm U.**, Eibauer M., Gnaegi H., Baumeister W. and Plitzko J.M., *Micromachining tools and correlative approaches for cellular cryo-electron tomography*. *J. Struct. Biol.* 172, p169–179 (2010). DOI:10.1016/j.jsb.2010.02.011
2. Rigort A., Mathisen C., **Boehm U.**, Leis A., Lich B., Hayles M., Laugks T., Baumeister W. and Plitzko J.M., *Integrative Cryo-Correlative Microscopy Approaches*. *Microscopy and Microanalysis*. Vol 16(S2), p186–187 (2010). DOI:10.1017/S1431927610058216
1. **Boehm U.**, *Korrelative Mikroskopie bei Flüssigstickstoff-Temperatur*. Diploma Thesis, Technical University of Munich (2010)

\* These authors contributed equally to this work

PEER REVIEW

**Angewandte Chemie (International ed.)**

**Biophysical Journal**

**Biophysical Reports**

**Frontiers in Bioinformatics**

**Journal of Cell Science**

**Journal of Microscopy**

**Nature Methods**

**Review Commons**

**STAR Protocols**

PRESENTATIONS

**7th Max Planck Symposium for Alumni and Early Career Researchers** (*invited*) 2022  
Harnack House, Berlin, Germany

**5th Annual Postdoc Symposium** (*invited*) 2022  
Yale University, New Haven, CN, United States of America

**Chan Zuckerberg Initiative (CZI) Imaging 2022 Annual Meeting** (*invited*) 2022  
San Francisco, CA, United States of America

**Second Joint Meeting of the Irish Microscopy Society and the Scottish Microscopy Society** (*invited*) 2022  
National University of Ireland Galway, Galway, Ireland

**Advanced Imaging Methods Workshop 2022** (*invited*) 2022  
UC Berkeley, Berkeley, CA, United States of America

**Chromatin Imaging/Nuclear Architecture SubGroup** (*invited*) 2021  
Harvard & MIT, Boston, MA, United States of America

**Janelia Advisory Committee Meeting** 2021

**Better Science through Open Science and Collaborative Teams** (*invited*)  
Janelia Research Campus, Ashburn, VA, United States of America

<b>Junior Scientist Workshop on Biological Optical Microscopy</b> <i>(invited)</i> Janelia Research Campus, Ashburn, VA, United States of America	2019
<b>Transcription Seminar</b> <i>(invited)</i> Albert Einstein College of Medicine, New York, NY, United States of America	2019
<b>Microscopy Seminar</b> <i>(invited)</i> Harvard Medical School, Boston, MA, United States of America	2019
<b>Microscopy Lunch Seminar</b> <i>(invited)</i> UMass Medical School, Worcester, MA, United States of America	2019
<b>Single Biomolecules Meeting</b> Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, United States of America	2018
<b>NIH Light Microscopy Interest Group Seminar</b> <i>(invited)</i> NIH, Bethesda, MD, United States of America	2018
<b>Chan Zuckerberg Initiative (CZI) Imaging Workshop</b> <i>(invited)</i> CZ Biohub, San Francisco, CA, United States of America	2017
<b>Chesapeake Bay Area Single Molecule Biology Meeting</b> Johns Hopkins University, Baltimore, MD, United States of America	2017
<b>Frontiers in Imaging Science Conference</b> Janelia Research Campus, Ashburn, VA, United States of America	2017
<b>Single Molecule Biophysics Conference</b> Aspen Center for Physics, Aspen, CO, United States of America	2017
<b>Labeling and Nanoscopy Conference</b> DKFZ, Heidelberg, Germany	2016
<b>MPIbpc Campus Seminar</b> <i>(invited)</i> Max Planck Institute for Biophysical Chemistry, Göttingen, Germany	2016
<b>NCI Departmental Seminar</b> <i>(invited)</i> NIH, Bethesda, MD, United States of America	2016
<b>Departmental Seminar</b> <i>(invited)</i> Wyss Institute at Harvard University, Boston, MA, United States of America	2016
<b>Lunch Talk</b> <i>(invited)</i> Harvard University, Cambridge, MA, United States of America	2016
<b>Biophysical Society Annual Meeting</b> Los Angeles, CA, United States of America	2016
<b>Seeing Is Believing Symposium</b> EMBL, Heidelberg, Germany	2015
<b>Deutsche Physikerinnen Tagung</b> <i>(invited)</i> University of Göttingen, Göttingen, Germany	2015
<b>Annual meeting of the European Light Microscopy Initiative (ELMI)</b> Sitges, Spain	2015
<b>Focus on Microscopy (FOM)</b> Göttingen, Germany	2015
<b>PROSPECTS. First Plenary Meeting</b> Punta Negra, Majorca/Spain	2010

## TEACHING

<b>7th Max Planck Symposium for Alumni and Early Career Researchers</b>	2022
Lecturer, Max Planck Society Berlin, Germany	
<b>"Women in Imaging" Bootcamp</b> (virtual workshop)	2022
Lecturer, University of California, Berkeley Berkeley, CA, United States of America	
<b>"Widening the Lens" Microscopy Education Program</b> (virtual workshop)	2022
Lecturer, Vanderbilt University School of Engineering Nashville, TN, United States of America	
<b>NIH FAES Imaging - From IF and FISH to Automated and Confocal Microscopy</b> (virtual workshop), Instructor of the Image Analysis Bootcamp, National Institutes of Health, Bethesda, United States of America	2021
<b>Fiji Image Processing and Analysis Workshop</b> (virtual workshop)	2021
Instructor of the Superresolution Data Handling Module, Turku Bioscience Centre, Turku, Finland	
<b>NIH FAES Super Resolution Workshop</b> (virtual workshop)	2021 - 2022
Instructor, Foundation for Advanced Education in the Sciences (FAES) Bethesda, United States of America	
<b>Fiji Macros Programming</b> (virtual workshop)	2020
Instructor, Janelia Research Campus, Ashburn, United States of America	
<b>DECODE for Single Molecule Localization Microscopy</b> (virtual workshop)	2020
at the <i>From Image to Knowledge with ImageJ &amp; Friends</i> conference Instructor, Janelia Research Campus, Ashburn, United States of America	
<b>NIH FAES Image Processing and Analysis workshop</b> (virtual workshop)	2019 - 2021
Instructor, National Institutes of Health, Bethesda, United States of America	
<b>Open Science in Imaging and Microscopy</b> (breakout session during a workshop)	2019
Instructor, Janelia Research Campus, Ashburn, United States of America	
<b>Advanced Imaging Techniques in Biomedical Sciences</b> (summer intern journal club)	2018
Instructor, National Institutes of Health, Bethesda, United States of America	
<b>Introduction to microscopy</b> (graduate course)	2017
Teaching assistant, University of Massachusetts Medical School, Worcester, United States of America	
<b>Optical Microscopy &amp; Imaging in the Biomedical Sciences</b>	2017
(summer intern journal club) Instructor, National Institutes of Health, Bethesda, United States of America	
<b>Advanced physics laboratory course for physics students</b> (undergraduate course)	2011
Teaching assistant, Heidelberg University, Germany	
<b>Experimental Physics III: Optics</b> (undergraduate course)	2011
Teaching assistant, University of Göttingen, Germany	
<b>Experimental Physics IV: Quantum, atomic and molecular physics</b>	2010
(undergraduate course), Teaching assistant, University of Göttingen, Germany	
<b>Theoretical Physics I: Theoretical Mechanics</b> (undergraduate course)	2009
Teaching assistant, Technical University of Munich, Germany	
<b>Theoretical Physics II: Electrodynamics</b> (undergraduate course)	2008
Teaching assistant, Technical University of Munich, Germany	

## MENTORING

<b>Mentoring of Ph.D. and master's students</b>	2022 - present
Focus: Navigating an industry career, how to work in an optics laboratory & in-depth support of individual research projects	

	Carl Zeiss AG, Oberkochen, Germany	
	<b>Janelia Buddy Program for international scientists</b> Focus: Facilitating the transition of international scientists to Janelia in partnership with Janelia's Human Resource Department Janelia Research Campus, Ashburn, United States of America	2020 - 2021
	<b>Mentoring of postbac students</b> Focus: Navigating a scientific career Janelia Research Campus, Ashburn, United States of America	2020 - 2021
	<b>Mentoring of Ph.D., college, and high school students</b> Focus: Navigating a scientific career, how to work in an optics laboratory & in-depth support with individual research projects National Institutes of Health, Bethesda, United States of America	2017 - 2018
	<b>Mentoring of Ph.D. and Master's students</b> Focus: Navigating a scientific career, how to work in an optics laboratory & in-depth support of individual research projects Max Planck Institute for Biophysical Chemistry, Göttingen, Germany	2010 - 2016
CONFERENCE ORGANIZATION	<b>iCademy</b> (onboarding event for corporate research and technology (CRT)), Organizer Carl Zeiss AG, Oberkochen, Germany	2022
	<b>Advanced Imaging Methods Workshop 2022</b> , Organizer UC Berkeley, Berkeley, CA, United States of America	2022
	<b>OIG-ABG Educational Lectures</b> , Organizer Ashburn, VA, United States of America	2021 - 2022
	<b>Janelia+EMBL BioImaging Seminar Series</b> , Organizer & advisor Ashburn, VA, United States of America	2020 - present
	<b>Optical Interest Group (OIG)</b> , Organizer Ashburn, VA, United States of America	2020 - 2022
	<b>Imaging Africa Microscopy Club</b> , Organizer Ashburn, VA, United States of America	2020
	<b>Frontiers in Imaging Science Conference</b> , Organizer Ashburn, VA, United States of America	2019
	<b>Labeling and Nanoscopy Conference 2018</b> , Website and social media support Heidelberg, Germany	2018
	<b>International Opportunities EXPO</b> , Organizer National Institutes of Health, Bethesda, MD, United States of America	2018
	<b>Division of International Services Immigration Symposium</b> , Organizer National Institutes of Health, Bethesda, MD, United States of America	2017 - 2018
	<b>I, Scientist Conference</b> , Organizer Berlin, Germany	2017
	<b>Labeling and Nanoscopy Conference 2016</b> , Organizer Heidelberg, Germany	2016
	<b>Focus on Microscopy (FOM)</b> , Social media support	2015 - 2019
	<b>PhDnet General Meeting</b> , Organizer Bonn, Germany	2011
PROFESSIONAL SERVICES	<b>BioImaging North America (BINA)</b> , Committee member of the "Diversity, Equity & Inclusion" working group	2022 - present

Madison, Wisconsin, United States of America	
<b>Global BioImaging</b> , Committee member of the "Training Core Facility Imaging Scientists" working group Heidelberg, Germany	2021 - present
<b>Wiley Analytical Science Magazine</b> , Editorial board member Weinheim, Germany	2021 - present
<b>CZI Expanding Global Access to Bioimaging</b> , Grant reviewer San Francisco, United States of America	2021
<b>QUAREP-LiMi</b> , Chair of the "White Paper" working group Freiburg, Germany	2020 - present
<b>Frontiers in Bioinformatics</b> , Review Editor for Computational BioImaging Lausanne, Switzerland	2020 - present
<b>CZI Imaging Scientists Round 2</b> , Grant reviewer San Francisco, United States of America	2020
<b>QUAREP-LiMi</b> , Vice-chair of the "Image Quality" working group Freiburg, Germany	2020 - present
<b>German BioImaging</b> , Committee member of the working groups for (1) Training and Knowledge Transfer and (2) Image Data Analysis & Management Konstanz, Germany	2020 - present
<b>BioImaging North America (BINA)</b> , Committee member of the "Quality Control and Data Management" working group Madison, Wisconsin, United States of America	2020 - present
<b>Janelia's Optical Interest Group</b> , Coordinator & advisor Ashburn, Virginia, United States of America	2020 - present
<b>GSO German Scholars Organization e.V.</b> , Coordinator for Local Chapter of German Scientists, Ashburn	2020 - 2021
<b>Accelerating Science and Publication in Biology (ASAPbio)</b> , Ambassador	2018 - 2019
<b>eLife Early-Career Advisory Group</b> , Ambassador	2017 - 2019
<b>NIH Laser Safety Advisory Committee</b> , Committee member for the NCI National Institutes of Health, Bethesda, United States of America	2018
<b>NIH Visiting Fellows Committee</b> , Chair National Institutes of Health, Bethesda, United States of America	2017 - 2018
<b>NIH Light Microscopy Interest Group</b> , Coordinator & advisor National Institutes of Health, Bethesda, United States of America	2016 - 2021
<b>DPG Arbeitskreis für Challengleichheit</b> , Board member & deputy spokesperson, Bad Honnef, Germany	2016 - present
<b>Lindau Nobel Laureate Meeting</b> , Freelance writer Lindau, Germany	2016 - present
<b>66th Lindau Nobel Laureate Meeting</b> , "Women in Science"-correspondent Lindau, Germany	2016
<b>Lise Meitner Gesellschaft e.V.</b> , Co-founder and board member Berlin, Germany	2011
<b>Max Planck PhDnet</b> , Steering group 2011 member & deputy spokesperson Max Planck Society, Munich, Germany	2011
<b>PhD/Postdoc Community</b> , PhD/Postdoc representative Max Planck Institute for Biophysical Chemistry, Göttingen, Germany	2011 - 2014



CERTIFICATES &  
TRAINING

<b>Fundamentals of Statistics</b> An 18-week in-depth introduction course by MITx to develop and understand fundamental statistical principles on firm mathematical grounds starting from the construction of estimators and tests, as well as an analysis of their asymptotic performance.	2021
<b>Leadership Principles for Scientists, Engineers, and Researchers</b> A four-month and four-course online program from MIT that empowers engineers, scientists, and researchers with the leadership insight needed to solve problems, innovate, and drive change.	2021
<b>Machine Learning with Python: from Linear Models to Deep Learning</b> A 15-week in-depth introduction course by MITx to the field of machine learning, from linear models to deep learning and reinforcement learning, through hands-on Python projects.	2021
<b>Data Analysis for Social Scientists</b> An 11-week course by MITx to learn methods for harnessing and analyzing data to answer questions of cultural, social, economic, and policy interest.	2020
<b>Probability - The Science of Uncertainty and Data</b> A 16-week course by MITx to build foundational knowledge of data science with an introduction to probabilistic models, including random processes and the essential elements of statistical inference.	2020
<b>Fierce Conversations program</b> A 6-week course offered by Howard Hughes Medical Institute about Feedback, Confrontation, Team, Delegation, Coaching, and Accountability.	2020
<b>LabVIEW Core 2</b> A certificate course offered by National Instruments about the LabVIEW basics.	2020
<b>LabVIEW Core 1</b> A certificate course offered by National Instruments about the LabVIEW basics.	2020
<b>HBS Entrepreneurship Essentials</b> Entrepreneurship Essentials is a 4-week, 30-hour online certificate program from Harvard Business School. Entrepreneurship Essentials introduces participants to the entrepreneurial journey from finding an idea to gaining traction in the marketplace to raising capital for a venture. Participants learn an overarching framework - People, Opportunity, Context, Deal - to evaluate opportunities to manage start-ups and finance ventures.	2020
<b>HBS Management Essentials</b> Management Essentials is an 8-week, 35-hour online certificate program from Harvard Business School. Management Essentials takes a distinctive, hands-on approach to management. Participants in this course learn to identify, understand, design, and shape critical organizational and managerial processes to get the work done.	2019
<b>HBS CORE (Credential of Readiness)</b> CORE (Credential of Readiness) is a 150-hour certificate program on business fundamentals from Harvard Business School. The CORE is comprised of three courses - Business Analytics, Economics for Managers, and Financial Accounting - developed by leading Harvard Business School faculty and delivered in an active learning environment based on the HBS signature case-based learning model.	2019
<b>Scientists Teaching Science</b> at the Office of Intramural Training and Education (OITE) at the National Institutes of Health, Bethesda, United States of America (9-week online pedagogy course)	2018
<b>Research Mentor Training</b> at the Office of Intramural Training and Education (OITE) at the National Institutes of Health, Bethesda, United States of America	2018

	<b>Business of Science for Scientists</b>	2018
	by SciPhD at the National Cancer Institute in Shady Grove, United States of America	
	<b>Chromatin, Epigenetics and Gene Expression Course</b>	2018
	at the Cold Spring Harbor Laboratory (CSHL) in Cold Spring Harbor, NY, United States of America, Course instructors: Prof Karen Adelman, Dr Luciano Di Croce, Prof Geeta Narlikar, Prof Ali Shilatifard	
	<b>BioTech2: Recombinant DNA Methodology</b>	2017
	at the Foundation for Advanced Education in the Sciences at the NIH (FAES), Bethesda, United States of America	
	<b>Management Bootcamp for Postdocs</b>	2017
	at the Office of Intramural Training and Education (OITE) at the National Institutes of Health, Bethesda, United States of America	
	<b>Ethics in Research Training for Postdocs</b>	2017
	at the Office of Intramural Training and Education (OITE) at the National Institutes of Health, Bethesda, United States of America	
	<b>Workplace Dynamic Series</b>	2016
	about Self-Awareness, Conflict & Feedback, Team Skills, Diversity In A Multicultural Society at the Office of Intramural Training and Education (OITE) at the National Institutes of Health, Bethesda, United States of America	
COMPUTER SKILLS	<p>Languages: Python, MATLAB, LabVIEW, R</p> <p>Software: Inventor (CAD), Zemax, Imaris, Fiji, ImageJ</p>	
PROFESSIONAL AFFILIATION	American Physical Society, German Physical Society, BioImaging North America (BINA), German BioImaging Society (GerBI), Network of European BioImage Analyst (NEUBIAS), Quantitative BioImaging Society, Deutsche Gesellschaft für angewandte Optik (DGaO)	
LANGUAGES	<p>German - native language</p> <p>English - fluent, spoken and written</p> <p>French - basic knowledge</p> <p>Swedish - basic knowledge</p>	
REFERENCES	Available upon request	

*Last updated October 22, 2022.*