

Dr. Andreas Walter
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PROFESSIONAL EXPERIENCE

- since
10/2016 **Director of BioImaging Austria; Head of Correlated Multimodal Imaging Node Austria (CMI), Research consortium of 8 universities & research institutes, Vienna, Austria**
- Management and strategic development of CMI as an internationally visible imaging hub for flagship technologies and correlated multimodal imaging
 - Coordination of more than 35 research groups/facilities for preclinical & biological imaging
 - Supervision, development and evaluation of scientific projects & service projects
 - Method development in multimodal correlated imaging
 - Initiation and coordination of industrial collaborations
 - Representation of CMI on a national & international level at conferences & meetings
 - Scientific community involvement: Peer-reviewing, lectures & supervision of students
 - Grant applications & management
 - Close interaction with political stakeholders
 - Administration and budgeting
 - Marketing, public relations and dissemination
- since
10/2018 **Chair of EU-funded COST Action (European Cooperation in Science & Technology) COMULIS (Correlated Multimodal Imaging in Life Sciences), Research network of 34 European countries, Brussels, Belgium**
- Coordination of 34 member countries
 - Drafting the work & budget plan
 - Dissemination & representation of the network at international meetings
 - Coordination of the Action activities in accordance with COMULIS objectives
 - Establishing commonly-accepted protocols & quality standards for multimodal approaches; identifying & showcasing novel imaging pipelines; bridging the gap between preclinical & biological imaging; fostering standardized correlation software
- 10/2014 -
10/2016 **Postdoc & Fellow of the German Research Association (DFG fellowship), University of California San Francisco, Department of Anatomy · Affiliate, Lawrence Berkeley National Laboratory, National Center for X-ray Tomography, Berkeley, USA**
- Application & correlation of soft x-ray tomography & cryo-fluorescence tomography
 - Initiation, design, analysis and supervision of experiments in collaboration with users of the National Center for X-ray Tomography; technical support
 - Acquisition of external funding; successful application for a DFG grant for the correlation of soft x-ray tomography with super-resolution microscopy
- 03/2010 -
10/2014 **Research Scientist (PhD), Max Planck Institute of Biophysics, Department of Structural Biology, Frankfurt, Germany, collaboration with Carl Zeiss AG**
- Hard- and software development in electron microscopy; application of transmission & scanning electron microscopy
 - Initiation, coordination and supervision of the construction of several prototypes in collaboration with research groups, electrical workshops & companies
 - Mentoring and supervision of interns & (under)graduates
- 08/2009 -
03/2010 **Guest Scientist, European Molecular Biology Laboratory (EMBL), Department of Biophysics and Cell Biology, Heidelberg, Germany**
- Application of fluorescence microscopy-based techniques to study the spatiotemporal organization & dynamics of chromatin
 - Image processing, development of image routines & data analysis
- 09/2009 -
02/2010 **Mathematics and physics teacher, Helene Lange School, Mannheim, Germany**

EDUCATION

- 09/2015 - 04/2018 Certificate in Technology & Innovation Management I & II (lectures & examinations), University of Hagen, Germany
- 03/2010 - 09/2014 PhD studies in Physics, Max Planck Institute of Biophysics, Department of Structural Biology, Frankfurt, Germany (*summa cum laude*) · Supervisor: Prof. Dr. Kühlbrandt
- 07/2008 - 08/2009 Diploma thesis in Physics, EMBL, Department of Biophysics and Cell Biology, Heidelberg, Germany (1.0) · Supervisor: Dr. Ellenberg
- 09/2003 - 08/2009 Physics & Biophysics Diploma, Ruprecht Karls University of Heidelberg, Germany (1.3)
- 08/2006 - 04/2007 Research intern & studies of biophysics, Saint Petersburg State University, Russia
- 08/1993 - 03/2002 Abitur, Gymnasium zu St. Katharinen Oppenheim, Germany (1.2)

AWARDS, FELLOWSHIPS & GRANTS

- Chair of COST Action COMULIS, Horizon 2020 (2018-2022)
- Fellow of the German Scholars Organization (GSO), German Leadership Academy (2016/2017)
- Fellowship of the German Research Association (DFG) (2016)
- Microscopy & Microanalysis Award 2015 for outstanding work on physical phase plates in electron microscopy, Microscopy Society of America (2015)
- *Summa-cum-laude* recognition for PhD thesis (2014)
- Baden-Wuerttemberg Scholarship for studies in biophysics, Federal State of Baden-Wuerttemberg, Germany (2006/2007)

SELECTED PUBLICATIONS

- Roth, M., Cokus, J., Walter, A., Gallaher, S., Lopez, D., Erickson, E., Endelman, B., Westcott, D., Larabell, C., Merchant, S., Pellegrini, M., Niyogi, K., "Chromosome-level genome assembly and transcriptome of the green alga *Chromochloris zofingiensis* illuminates astaxanthin production." *Proc. Natl. Acad. Sci. USA* (2017)
- Walter, A., Steltenkamp, S., Schmitz, S., Holik, P., Sachser, R., Huth, M., Rhinow, D., Kühlbrandt, W., "Towards an optimum design for electrostatic phase plates." *Ultramicroscopy*, 153:22-31 (2015)
- Gold, V., Raffaele, I., Walter, A., Pfanner, N., van der Laan, M., Kühlbrandt, W., "Visualizing active membrane protein complexes by electron cryotomography." *Nature Communications*, 5:4129 (2014)
- Walter, A., Chapuis, C., Huet, S., Ellenberg, J., "Crowded chromatin is not sufficient for heterochromatin formation and not required for its maintenance." *Journal of Structural Biology*, 184:445-453 (2013)
- Daum, B., Walter, A., Horst, A., Osiewacz, H., Kühlbrandt, W., "Age-dependent dissociation of ATP synthase dimers and loss of inner-membrane cristae in mitochondria." *Proc. Natl. Acad. Sci. USA*, 110:15301-15306 (2013)
- Walter, A., Muzik, H., Vieker, H., Turchanin, A., Beyer, A., Götzhäuser, A., Lacher, M., Steltenkamp, S., Schmitz, S., Holik, P., Kühlbrandt, W., Rhinow, D., "Practical aspects of Boersch phase contrast electron microscopy of biological specimens." *Ultramicroscopy*, 116:62-72 (2012)
- Barton, B., Rhinow, D., Walter, A., Schröder, R., Benner, G., Majorovits, E., Niebel, H., Müller, H., Haider, M., Lacher, M., Schmitz, S., Holik, P., Kühlbrandt, W., "In-focus electron microscopy of frozen-hydrated biological samples with a Boersch phase plate." *Ultramicroscopy*, 111:1696-1705 (2011)