

Prof. Dr. Kathrin Lang  
Professor for Chemical Biology  
Department of Chemistry and Applied Biosciences  
ETH Zurich  
Vladimir-Prelog-Weg 3  
8093 Zurich, Switzerland  
Email: [kathrin.lang@org.chem.ethz.ch](mailto:kathrin.lang@org.chem.ethz.ch)  
Tel.: +41 44 63 34384



Nationality: Italian, born 1979 in Bozen/Bolzano, South Tyrol, Italy  
Languages: German (Mother tongue), English (fluent), Italian (fluent)

### Short Biosketch

Kathrin Lang studied Chemistry at the University of Innsbruck, Austria where she obtained a PhD in 2008 working on chemically modified RNA to study ribosome catalysis and riboswitch folding. After postdoctoral research in the group of Venki Ramakrishnan on ribosome crystallography and in the lab of Jason Chin on synthetic biology at the MRC-LMB in Cambridge, UK, she was appointed in 2014 as a Rudolf Mössbauer Tenure Track Professor at the Technical University of Munich, Germany, where she was tenured and promoted to permanent W3 Professor for Synthetic Biochemistry in 2020. Since April 2021 she is Full Professor of Chemical Biology at the ETH Zürich, Switzerland.

Her general research interests lie in the interdisciplinary area between Chemistry and Biology, applying concepts from Organic Chemistry to develop new tools to study and control biological systems. Her group is especially active in enabling and advancing approaches to expand the genetic code and in developing new *in vivo* chemistries that are amenable to physiological conditions, a combination that is ideally suited to address unmet challenges in studying and manipulating biological processes with a new level of spatial, temporal and molecular precision.

### Research and Work Experience

- |                   |  |
|-------------------|--|
| Since 04/2021     | <b>Full Professor for Chemical Biology</b><br>ETH Zürich, Department of Chemistry and Applied Biosciences, Zurich, Switzerland   |
| 04/2020 – 03/2021 | <b>W3 Associate Professor for Synthetic Biochemistry</b><br>Technical University of Munich, Department of Chemistry  |
| 04/2014 – 03/2020 | <b>Rudolf Mössbauer W2 Tenure Track Assistant Professor for Synthetic Biochemistry</b><br>Technical University of Munich, Department of Chemistry, Institute for Advanced Study                      |
| 06/2013 – 03/2014 | <b>Investigator Scientist</b><br>permanent scientist position in the lab of Prof. Dr. Jason Chin<br>Medical Research Council Laboratory of Molecular Biology (MRC LMB),<br>Cambridge, United Kingdom |
| 04/2010 – 05/2013 | <b>Senior Postdoctoral Fellow</b><br>with Prof. Dr. Jason Chin<br>MRC Career Development Fellow<br>MRC LMB, Cambridge, United Kingdom  |

**CURRICULUM VITAE**

- 04/2009 – 03/2010     **Postdoctoral Fellow**  
with Dr. Venki Ramakrishnan, Nobel prize winner for Chemistry, 2009  
MRC Career Development Fellow  
MRC LMB, University of Cambridge, Cambridge, United Kingdom
- 11/2004 – 02/2009     **Research Assistant/Teaching Assistant**  
with Prof. Ronald Micura  
Institute of Organic Chemistry, University of Innsbruck, Innsbruck, Austria

**University Education**

- 11/2004 – 07/2008     **PhD in Chemistry**  
with Prof. Ronald Micura, University of Innsbruck, Institute of Organic Chemistry, Innsbruck, Austria  
Title of thesis: Chemically modified RNA – Investigations on riboswitch folding and ribosome catalysis
- Graduation (summa cum laude, with highest distinction) to 'Dr. rer. nat.' (equivalent to 'PhD in Chemistry') in July 2008
- 10/2003 – 10/2004     **Master Thesis in Chemistry**  
with Prof. Ronald Micura, University of Innsbruck, Institute of Organic Chemistry, Innsbruck, Austria  
Title of Master Thesis: 'Synthesis of a 3-deazaadenosine phosphoramidite building block and its incorporation into RNA oligonucleotides for mechanistic studies on peptide bond formation in *in vitro* reconstituted ribosomes (in German);
- Graduation (with highest distinction, final mark 1.0) to 'Mag. rer. nat.' (equivalent to 'Master of Science') in October 2004
- 03/1999 – 10/2004     **Bachelor and Master studies of Chemistry**  
University of Innsbruck, Innsbruck, Austria

**Selected Awards and Honors**

- 12/2020     ERC Consolidator grant
- 04/2020     Miklós Bodanszky Award of the European Peptide Society
- 12/2019     Arnold Sommerfeld Award of the Bavarian Academy of Sciences
- 07/2019     Otto Meyerhof Award of the German Society for Biochemistry and Molecular Biology (*Gesellschaft für Biochemie und Molekularbiologie*, GBM)
- 06/2019     Rising star lecture at 8<sup>th</sup> Chemical Protein Synthesis Meeting, Berlin, Germany
- 10/2018     Nominated member of the Max Bergmann Kreis
- 07/2018     FEBS Anniversary Award 2018 (Federation of European Biochemical Societies)
- 05/2016     JSP Fellowship – Bürgenstock Conference 2016
- 11/2015     Thieme Chemistry Award
- 11/2012     Anton Paar Science Award of the Austrian Chemical Society (GÖCH), Vienna, Austria
- 07/2012     MRC Centenary Early Career Award, MRC LMB, Cambridge, UK
- 04/2010     Young Investigator Award of the Zonta Club Bolzano/Bozen, Italy
- 04/2009 – 05/2013     MRC – Career Development Fellowship for Postdoctoral Studies, MRC LMB
- 10/2009     Karl Schlögl Award for outstanding PhD thesis, Austrian Academy of Sciences, Vienna, Austria
- 06/2009     Georg and Christine Sosnovsky award for outstanding PhD thesis, Innsbruck, Austria

06/2009                      DSM science and technology award (South), honourable mention for outstanding and innovative PhD research, Vitznau, Switzerland

**Main areas of research**

ORCID: <https://orcid.org/0000-0002-1318-6567>

Google Scholar: [https://scholar.google.co.uk/citations?user=\\_n5d zx0AAAAJ&hl=en](https://scholar.google.co.uk/citations?user=_n5d zx0AAAAJ&hl=en)

Protein and nucleic acid chemistry  
Bioorthogonal reactions and in vivo chemistries  
Chemical biology of proteins and protein modifications  
Genetic code expansion approaches  
Labelling and crosslinking strategies  
Protein evolution and protein engineering  
Protein and enzyme structure and function