

Curriculum vitae

Univ. Prof. Sebastian Preissl, Dr. rer. nat.

Pharmacology and Toxicology, Institute of Pharmaceutical Sciences, University of Graz, Humboldtstrasse 46, 8010 Graz, Austria, sebastian.preissl@uni-graz.at

Institute of Experimental and Clinical Pharmacology and Toxicology, Faculty of Medicine, University of Freiburg, Albertstrasse 25, 79104 Freiburg, Germany, phone: +497612035313, e-mail: sebastian.preissl@pharmakol.uni-freiburg.de

Date of birth: 11.11.1983
Citizenship: German
Acad. Degree: Dr. rer. nat.
Current Position: Univ. Professor
ORCID: 0000-0001-8971-5616

EDUCATION

2010-2015 PhD (supervisor: Prof. Dr. Lutz Hein, defense date: 12/2014), Institute of Experimental and Clinical Pharmacology and Toxicology, University of Freiburg, Germany
 2010 German licensure as pharmacist
 2009-2010 Diploma in Pharmacy, European ScreeningPort GmbH, Hamburg, Germany and Institute for Pharmaceutical Sciences, University of Freiburg, Germany
 2004-2009 Study of Pharmacy, University of Freiburg, Germany

ACADEMIC APPOINTMENTS

since 2024 Member, Field of Excellence BioHealth – University of Graz, Austria
 since 2024 Univ.-Professor, Head of Department Pharmacology and Toxicology
 Institute of Pharmaceutical Sciences, University of Graz, Austria
 Since 2021 Group Leader
 2021-2024 Deputy Professor
 Institute of Experimental and Clinical Pharmacology and Toxicology, University of Freiburg, Germany
 2017-2021 Associate Director, Single Cell Genomics, Center for Epigenomics, UCSD, La Jolla, CA, USA
 2015-2017 Postdoctoral Fellow, Ludwig Institute for Cancer Research, La Jolla, CA, USA
 2015-2015 Postdoctoral Fellow, Institute of Experimental and Clinical Pharmacology and Toxicology, University of Freiburg, Germany

DESCRIPTION OF PREVIOUS RESEARCH ACHIEVEMENTS

Academic [publications](#)

1. Stefanovska D, [...], **Preissl S[†]**, Hortells L[†]. Fibroblast growth factor signaling induces a chondrocyte-like state of peripheral nerve fibroblast during aging. *Nat Commun*. 2025 Nov 14;16(1):10020. doi: 10.1038/s41467-025-65297-8.
2. Wang G, [...], **Preissl S[†]**, Gaulton KJ[†], Sander M[†]. Integrating genetics with single-cell multiomic measurements across disease states identifies mechanisms of beta cell dysfunction in type 2 diabetes. *Nat Genet*. 2023 May 25. doi: 10.1038/s41588-023-01397-9.
3. **Preissl S[†]**, Gaulton KJ[†], Ren B[†]. Characterizing cis-regulatory elements using single-cell epigenomics. *Nat Rev Genet*. 2023 Jan;24(1):21-43. doi: 10.1038/s41576-022-00509-1.
4. Zhang K, [...], **Preissl S**, Ren B. A single-cell atlas of chromatin accessibility in the human genome. *Cell*. 2021 Nov 24;184(24):5985-6001.e19. doi: 10.1016/j.cell.2021.10.024
5. Li YE*, **Preissl S***, [...], Ren B. An Atlas of Gene Regulatory Elements in Adult Mouse Cerebrum. *Nature*. 2021 Oct;598(7879):129-136. doi: 10.1038/s41586-021-03604-1
6. Hocker JD, [...], Ren B[†], Chi NC[†], **Preissl S[†]** Cardiac Cell Type-Specific Gene Regulatory Programs and Disease Risk Association. *Sci. Adv*. 2021 May 14;7(20):eabf1444. doi: 10.1126/sciadv.abf1444
7. Zhang Y*, Li T*, **Preissl S***, [...], Ren B. Transcriptionally active HERV-H retrotransposons demarcate topologically associating domains in human pluripotent stem cells. *Nat Genet*. 2019 Sep;51(9):1380-1388 doi: 10.1038/s41588-019-0479-7
8. **Preissl S***, Fang R*, [...], Ren B. Single nucleus analysis of accessible chromatin in developing mouse fore-brain reveals cell type-specific transcriptional regulation. *Nat. Neurosci*. 2018 Mar;21(3):432-439. doi: 10.1038/s41593-018-0114-4
9. **Preissl S**, [...], Gilsbach R. Deciphering the Epigenetic Code of Cardiac Myocyte Transcription. *Circ. Res*. 2015 Aug 14;117(5):413-23. doi: 10.1161/CIRCRESAHA.115.306337
10. Gilsbach R*, **Preissl S***, [...], Hein L. Dynamic DNA methylation orchestrates cardiomyocyte development, maturation and disease. *Nat. Commun*. 2014 5:5288. doi: 10.1038/ncomms6288

(*contributed equally; † co-corresponding authors)

ADDITIONAL RESEARCH ACHIEVEMENTS (Top 10)

- 1 PI in the CRC1453 *NephGen* (2025 - 2028, DFG)
- 2 PI in the CRC1425 *ScarCare* (2024 - 2025, DFG)
- 3 PI in the TRR359 *PILOT* (2023 - 2026, DFG)
- 4 PI in the GRK2344 *MeinBio* (2023 - 2026, DFG)
- 5 Invited Speaker, e.g. Society of Human Genetics (ESHG) Annual Meeting, Berlin, Germany, 2024; Gordon Research Conference *Epigenetic Regulation of Cardiovascular Disease*, 2023.
- 6 Since 2022 grant reviewer, e.g. Swiss National Science Foundation (Switzerland), Alzheimer Research Foundation (Belgium), German Research Foundation (Germany), Wellcome Trust (United Kingdom)
- 7 Since 2019 journal reviewer, e.g. Nature, Nature Methods, Nature Biotechnology, Nature Communications, Circulation, Nucleic Acids Research
- 8 James Kerr Award for Research Excellence, Ludwig Institute for Cancer Research San Diego, 2018
- 9 Postdoctoral Research Fellowship (DFG), 2016-2017
- 10 External Thesis Reviewer, e.g. University of Oslo 2023; Hong Kong University of Science and Technology (HKUST) 2025