



Sebastian Schönherr

Curriculum vitae

About me

Name	Sebastian Schönherr
Title	Univ.-Prof. Dr.techn.
Date of birth	March 10, 1982
Current Position	Professor of Digital and Computational Genomics at the Institute of Genetic Epidemiology, Medical University of Innsbruck, Austria
Contact	sebastian.schoenherr@i-med.ac.at

Scientific Impact

Publications	86 articles in journals and proceedings (9 as first or corresponding, 24 as collaborator); 2 book chapters
Impact-Factor	1,105 (118.6 as first or corresponding author) [based on Pubmon, 22.6.23]
H-Index	33 [based on Google Scholar, 08.11.23]
Citations	13,678 [based on Google Scholar, 08.11.23]
Research Focus	Computational Genomics, mitochondrial DNA, Genotype Imputation, Complex Gene Regions, Cloud Computing

Education

- 2010 – 2014 **PhD in Computer Science (Databases and Information Systems)**, *University of Innsbruck*, in cooperation with the Medical University Innsbruck (Division of Genetic Epidemiology).
- 2006 – 2008 **MSc in Computer Science (Databases and Information Systems)**, *University of Innsbruck & University of Copenhagen*.

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2001 – 2006 **BSc in Computer Science**, *University of Innsbruck, Austria.*

Professional experience

- Since 2023 **Professor of Digital and Computational Genomics**, *Institute of Genetic Epidemiology, Medical University of Innsbruck.*
- 2018 – 2023 **Senior Scientist (Permanent Position)**, *Institute of Genetic Epidemiology, Medical University of Innsbruck.*
- 2014 – 2018 **Research Assistant (Postdoc)**, *Division of Genetic Epidemiology, Medical University of Innsbruck.*
- 2010 – 2014 **Project Member**, *Division of Genetic Epidemiology, Medical University of Innsbruck.*
2012 **Research Assistant (Predoc)**, *Computer Science Institute, University of Innsbruck.*
- 2008 – 2010 **Research Assistant**, *Computer Science Institute, University of Innsbruck.*

Awards

- 2017 **Science Prize from the Austrian Society of Human Genetics (OEGH).**

Grants

- 2019 – 2022 **Michigan Imputation Server**, NIH Sub-Grant (107,276 USD), PI.
- 2018 – 2024 **Askimed Project**, Software to develop Electronic Questionnaires (560,000 EUR), Co-PI together with Lukas Forer.
- 2013 **Amazon Web Services (AWS) in Education Research Grant**, *Cloud Computing Grant.*
- Mai 2012 **Bioinformatics Open Source Conference (BOSC)**, *Student Travel Award, Boston, USA.*
- 2012 - 2014 **Aktion D. Swarovski**, *Research Funding.*
- 2010 – 2012 **PhD Scholarship**, *University of Innsbruck.*
- 2010 **Amazon Web Services (AWS) in Education Research Grant**, *Cloud Computing Grant.*

Teaching

- 2023 **Life Science Praktikum 2 - Next Generation Sequencing: Labor und Bioinformatik**, *Practical Medical University of Innsbruck.*
- 2023 **Open Lab Days**, *Live Sequencing with Oxford Nanopore.*
- 2023 **LifeScience - Next Generation Sequencing (Wahlfach)**, *Lecture + Tutorial (VU) - Medical University of Innsbruck.*
- 2023 **Regulationen der Körperfunktionen in Gesundheit und Krankheit: Biochemie II**, *Lecture + Tutorial (VU) - Medical University of Innsbruck.*
- 2018 – 2023 **Next generation sequencing and nanopore sequencing: From data processing to interpretation**, *Lecture + Tutorial (VU) - Medical University of Innsbruck.*
- 2020 – 2023 **Biostatistics I**, *Masters Studies Public Health, UMIT.*

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- 2017 – 2023 **Statistics Molecular Medicine**, Lecture + Tutorial (VU) - Medical University of Innsbruck.
- 2016 – 2023 **Statistics for Medical Students**, Tutorial - Medical University of Innsbruck.
- 2016 – 2022 **Bausteine des Lebens**, Tutorial - Medical University of Innsbruck.
- WS 2015 **Information Mining I; CRM und Data/Cotent/Web/Social Mining I**, Lecture + Tutorial - University of Applied Sciences FH Kufstein.
- WS 2014/15 **CRM and Information Mining II; CRM und Data/Cotent/Web/Social Mining II**, Lecture + Tutorial - University of Applied Sciences FH Kufstein.
- SS 2014 **CRM and Information Mining I; CRM und Data/Cotent/Web/Social Mining I, NoSQL Database models**, Lecture + Tutorial - University of Applied Sciences FH Kufstein.
- WS 2013/14 **Introduction to Modelling**, Tutorial Business Informatics - University of Innsbruck.
- SS 2012 **Architecture and Implementation of a Database System, Implementation of a relational database**, Lecture and Tutorial - University of Innsbruck.
- SS 2012 **New Database Models, NoSQL Database models**, Lecture - University of Innsbruck

Past and current collaborations (excludes consortia work)

Eurac Research Bozen/Bolzano (Dr. Christian Fuchsberger)
 University of Michigan (Prof. Michael Boehnke, Prof. Goncalo Abecasis)
 Johns Hopkins University (Dr. Enis Afgan)
 University of Basel (Prof. Nicole Probst)
 CharitÄ Berlin (Prof. Kai-Uwe Eckardt)
 University of Freiburg (Prof. Anna Koettgen)
 University of Innsbruck (Prof. Guenther Specht)
 University of Zagreb (Dr. Davor Davidovic)

Consortia activities

German Chronic Kidney Diseases Study (GCKD)
 Non-coding RNAs for personalised pain medicine (ncRNAPain)
 nonHFE-Registry Consortium
 ApoA-IV-GWAS Consortium
 Afamin-GWAS-Consortium
 Lp(a)-GWAS-Consortium
 Shieldvacc-2 Study Group
 Hevacc Study Group
 The Haplotype Reference Consortium (HRC)
 NHLBI Trans-Omics for Precision Medicine (TOPMed)
 Genome Aggregation Database Consortium (gnomAD)
 The Genome Asia 100K project

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Software Engineering Projects

Askimed - Askimed is the next-generation eCRF system designed for medical studies in the cloud. <https://www.askimed.com>

Michigan Imputation Server - Free genotype phasing and imputation service. <https://imputationserver.sph.umich.edu>

nf-gwas - A Nextflow pipeline for GWAS analysis. <https://github.com/genepi/nf-gwas>

mtDNA Server - Free service for the analysis of human mitochondrial DNA data. <https://mtdna-server.uibk.ac.at>

Haplogrep - Free service for mtDNA haplogroup classification for NGS data. <https://github.com/genepi/haplogrep3>

Haplocheck - Free service for contamination detection for NGS data. <https://github.com/genepi/haplocheck>

Cloudgene - Open source framework to improve the usability of MapReduce programs and the reproducibility of workflows. <https://github.com/genepi/cloudgene>