ANDREA RIEBLER: CURRICULUM VITAE

CONTACT INFORMATION

Norwegian University of Science and Technology (**NTNU**)
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PERSONAL DATA

Date of birth: October 23, 1981 Nationality: German

RESEARCH INTERESTS

Biostatistical applications, computational statistics and Bayesian inference.

ACADEMIC EXPERIENCE (FROM 2008)

NTNU, Department of Mathematical Sciences

06/2018–present *Professor in Statistics*
03/2013–05/2018 *Associate Professor in Statistics*

University of Washington, Department of Statistics

08/2017–12/2017 *Visiting Scholar*

University of Zurich, Institute of Molecular Life Sciences
Advisor: Professor Mark D. Robinson

10/2011–03/2013 *Research associate*

- Developed statistical methods for high-throughput sequencing data.
- Analysed genomic, epigenomic and transcriptomic data.

University of Zurich, Department of Biostatistics
Advisor: Professor Leonhard Held

01/2013-02/2013 *Postdoctoral fellow*

- Worked on the analysis of measurement error models with INLA.

08/2011–12/2012 *Postdoctoral "Forschungskredit" fellow* of the University of Zurich

- Project title: *"Incorporating dependence in Bayesian models for genome-scale count data"*

01/2009–09/2011 *Graduate assistant*

University of Zurich, Horten Centre for Patient-Oriented Research and Knowledge Transfer

05/2007–12/2008 *Graduate assistant*

- Assisted in consulting and development of statistical methods in medicine

EDUCATION

University of Zurich

04/2007–10/2010 *Doctor of Natural Science (Dr. sc. nat)*

- Thesis Topic: "Multivariate age-period-cohort models"
- Funding: Swiss National Science Foundation
- Advisor: Professor Leonhard Held

NTNU, Department of Mathematical Sciences

Visiting doctoral student

Advisor: Professor Håvard Rue (Department of Mathematical Sciences)

09/2009–10/2009
- Area of Study: Correlated GMRF priors, Bayesian age-period-cohort models
- Funding: Yggdrasil mobility grant of the Research Council of Norway

04/2008
- Area of Study: Integrated nested Laplace approximations

Ludwig-Maximilians-Universität &
Technische Universität München

09/2004–10/2006 *M.Sc. in Bioinformatics*

- Thesis Topic: *"Bayesian Methods for Detecting Selection in the Genome"*
- Advisors: Professor Wolfgang Stephan and Professor Leonhard Held
- Winner of the "Bernd-Streitberg-Preis" for an outstanding biometrical thesis
- Winner of the "EES Prize" for the best Master's thesis

Universidad Complutense de Madrid

09/2005–03/2006 *ERASMUS student* at the Department of Mathematics

Ludwig-Maximilians-Universität &
Technische Universität München

10/2001–08/2004 *B.Sc. in Bioinformatics*

- Thesis Topic: *"Empirical comparison of statistical methods for outbreak detection in surveillance data"* (in German)
- Advisor: Professor Leonhard Held

AWARDS

2010 **Best Student Paper at IWSM 2010**
25th International Workshop on Statistical Modelling, Glasgow, Scotland.

2008 **Best Student Oral Presentation at IBC 2008**
XXIVth International Biometric Conference, Dublin, Ireland.

2007 **EES Prize for the best Master's thesis** (see above)
"Munich Graduate School for Evolution, Ecology and Systematics".

2007 **Bernd-Streitberg-Preis for an outstanding biometrical thesis** (see above)
"The International Biometric Society - German Region".

GRANT FUNDING

"FRINATEK" project of The Research Council of Norway

(**Principal Investigator**). Funding of the project *"Penalised Complexity-priors: A new tool to define default priors and robustify Bayesian models"* from 08/2015–07/2021. NOK $9{,}6$ million.

"URPP Systems Biology/Functional Genomics" grant of the University of Zurich

(**Main applicant**). Funding of the project *"Integrative analyses of colorectal cancer epigenome and transcriptome"* from 01/2012–12/2012. $50\,000$ CHF.
(Principal investigator: M. D. Robinson, Co-applicants: M. Menigatti, K. Slankamenac.)

"URPP Systems Biology/Functional Genomics" grant of the University of Zurich

(**Main applicant**). Funding of the project *"Understanding the relative merits of recently proposed DNA methylation profiling platforms"* from 08/2011–12/2011. $30\,000$ CHF.
(Principal investigator: M. D. Robinson, Co-applicant: M. Menigatti.)

"Forschungskredit" of the University of Zurich to support promising young academics

Funding of the postdoctoral project: *"Incorporating dependence in Bayesian models for genome-scale count data"* from 08/2011–12/2012. $100\,000$ CHF.

"Yggdrasil mobility programme"

Grant of the Research Council of Norway for a one-month (20/09/2009–22/10/2009) research stay in the group of Håvard Rue at the NTNU in Trondheim, Norway. NOK $22\,000$.

"EES travel fund"

Grant of the "Munich Graduate School for Evolution, Ecology and Systematics" to participate in the "Conference 2007: Statistics under one Umbrella" Bielefeld, Germany. €270.

TEACHING AND SUPERVISION EXPERIENCE

NTNU

- **MA8702 - Advanced computer intensive statistical methods** (January-June 2021, 2022)
- **ST1201: Statistical methods** (August-December 2018, 2020,2021)
- **TMA4300: Computer intensive statistical methods** (January-June 2014, 2015, 2016)
- **TMA4265: Stochastic processes** (August - December 2013, 2014, 2015)

- PhD students:
  - Umut Altay (2020–, co-surpervisor)
  - Ingeborg Hem (2017–2021, joint supervision with Geir-Arne Fuglstad)
  - Alexander Knight (2015–2020 no graduation)
  - Jingyi Guo. Bayesian Meta-analysis (2013–2016).
- 4 Master students and 1 Bachelor student.

University of Zurich

- 02/2012–06/2012: **Bayesian inference** (for M.Sc. in Biostatistics)

Other

- 2014–now: Course instructor of five courses about Integrated nested Laplace approximations (INLA), see `www.r-inla.org`, ranging from 3 hours to 12 hours per course.
- 01/2009–08/2009: **Development of Java-applets to visualise statistical concepts**

Continuing Education and Workshops

08/2014–	05/2015	"PEDUP": NTNU's Educational Program for New Academic Staff, (100 hours workload).
		"Norwegian for Foreigners": NTNU language course
01/2015–	06/2015	Level 3 (B2/C1 in CEFR),
01/2014–	06/2014	Level 2 (B1/B2 in CEFR),
08/2013–	12/2013	Level 1 (A2 in CEFR).
30/01/2012–	31/01/2012	"Debut ": Workshop for assistants at the University of Zurich, who are starting giving lectures. (1.5 day course).

Administrative Work

- Four times external member of PhD evaluation committees (Universidad Publica de Navarra, Spain; Ludwig-Maximilians Universität München, Germany; University of Oslo, Norway; University of Bath, UK)
- Four times internal member of PhD evaluation committees at NTNU.

Organisational Work

- Scientific committee member for the "Fifth Workshop on Bayesian Inference for Latent Gaussian Models with Applications", Bath, United Kingdom, 2016.
- Organiser of the Autumn meeting on Latent Gaussian Models 2015, Trondheim, Norway.
- Organiser of the 6th and 7th Trondheim Symposium in Statistics, Selbu, 2013 and 2014.
- Local organiser of the workshop on "Bayesian Inference for Latent Gaussian Models with Applications" at the University of Zurich, Zurich, Switzerland, 2011.
- Local organiser of the workshop on "Recent Advances in the Statistical Analysis of Count and Survival Data" at the University of Zurich, Zurich, Switzerland, 2007.

Computer Skills

- Operating systems: Linux, Mac
- Statistical software: R (incl. building packages), Experience with: SAS and Minitab
- Programming languages: Experience with: C, Perl, HTML;
- Applications: LaTeX (incl. Sweave/Knitr, Beamer), Microsoft Office (Word, Excel, Powerpoint)

Languages

- German (native), English (fluent), Norwegian (very good), Spanish (very good).