Young Statisticians Panel Discussion

What to do after graduating (Bachelor/Master/PhD)? Your career options in Biostatistics

Academia, industry or public authorities? What kind of career options do Biostatisticians have and what are the respective advantages and disadvantages? Which steps might be helpful to get there? How to combine job and family and handle dual-career problems? Are there insiders' tips?

These are only some of the questions we would like to discuss with seven invited speakers, who are hand-picked to represent a broad spectrum of career paths in Biostatistics. We invite all early-career statisticians (Bachelor/Master/PhD students and Postdocs), but also more experienced statisticians to join the discussion and ask questions.

The panel discussion will take place on Tuesday, March 19th 2019, from 6:30 to 7:30 p.m. and is open to everyone who is interested (you do <u>not</u> have to be an attendee of the DAGStat meeting). It is organized by the Young Statisticians working group of the IBS-DR (AG Nachwuchs).

In the following we would like to introduce you to our seven speakers:

Dr. Ronja Foraita, group leader at Leibniz Institute for Prevention Research and Epidemiology – BIPS

Ronja Foraita, obtained a diploma in statistics from the LMU (Munich) in 2001. After three years of project work, she decided to start a doctorate in the field of genetic epidemiology. In 2005, she went to the University College London (UCL, UK) and the University of Leicester (UK) for a three-month research visit.

After Ronja Foraita received her doctorate in statistics at the University of Bremen in 2008, she went for another research stay to the International Agency for Research on Cancer (IARC, France). Between 2007 and 2013 she was speaker of the working group "Population Genetics and Genome Analysis" of the Biometrical Society (IBS-DR).

In 2010, she has taken the lead of the working group Genetic Epidemiology at the Bremen Institute for Prevention Research and Social Medicine (BIPS, Bremen) that was at that time a central research unit of the University Bremen. Since 2013, BIPS is a full member of the Leibniz Association and operates today under the new name Leibniz Institute for Prevention Research and Epidemiology - BIPS.

Nowadays, Ronja Foraita's unit is called Statistical Methods in Genetics and Life-Course Epidemiology and her team deals with the application, comparison, adaptation and development of statistical methods in genetics and life course epidemiology. Her job combines different aspects: research (includes programming, writing papers and proposals), supervising master students and PhD students, teaching (optionally), project management, supporting personal development of her unit members, reporting and administration.

Jun.-Prof. Dr. Andreas Groll, assistant professor at TU Dortmund

During his dissertation at LMU Munich, Andreas Groll worked on different regularization methods for generalized mixed models that allow variable selection. These methods are particularly useful in high-dimensional data set-ups, when many potentially influential variables are available and when standard approaches fail. Main focuses of his research were both likelihood-based component-wise boosting procedures and suitable L1-regularization techniques.

After his studies of business mathematics and his dissertation in statistics at LMU Munich, Andreas Groll worked as postdoctoral researcher both at LMU Munich (2012-2016) and at Georg-August-Universität Göttingen (2016-2017). During that period, he visited several times Prof. Trevor Hastie at the Statistics Department of Stanford University to work on regularization techniques for Cox Frailty models with time-varying coefficients. Furthermore, he worked as visiting Professor at the Technical University Clausthal (3 months, 2014) and at the Ludwig-Maximilians-University of Munich (6 months, 2016). Since November 2017, he works as an assistant professor at TU Dortmund and focuses on the development of methods for variable selection and regularization for different regression settings, but also on methods for Sports Statistics, in particular, the modeling and prediction of international soccer tournaments.

PD Dr. Benjamin Hofner, statistical assessor at the Paul-Ehrlich-Institut, the German Federal Institute for Vaccines and Biomedicines

Benjamin Hofner is statistical assessor in the Section Biostatistics at the Paul-Ehrlich-Institut, the German Federal Institute for Vaccines and Biomedicines. He is Additional Assessor at the EMA (European Medicines Agency) Biostatistics Working Party, where he is member of several task forces, e.g., on basket and umbrella trials. He provides input on clinical and statistical guidelines, provides scientific advice to researchers and pharmaceutical companies and assesses marketing authorization applications for biomedicines and vaccines. Besides his duties at the Paul-Ehrlich-Institut, he is adjunct lecturer for Biostatistics at the medical school of the University Erlangen-Nuremberg.

Benjamin Hofner graduated in statistics from the LMU Munich in 2008. Before joining the Paul-Ehrlich-Institut in 2016, he worked as researcher and statistical consultant with a special focus on biomedical applications at the University of Erlangen-Nuremberg in the Department of Medical Informatics, Biometry and Epidemiology for more than 7 years (3 years as PhD student, 4 years as PostDoc). His research mainly focused on statistical approaches to machine learning (model-based boosting) and reproducible research. In 2011 he obtained his PhD in statistics from the LMU Munich (as external student). In 2018 he received his *Venia Legendi* ("Privatdozent") in Biostatistics from the University Erlangen-Nuremberg. His current research interests mainly focus on innovative clinical trial designs and other statistical issues in the field of "regulatory biostatistics".

Prof. Dr. Antje Jahn, professor at the Darmstadt University of Applied Sciences

Since September 2017 Antje Jahn is professor for Statistics and Data Sciences at the Darmstadt University of Applied Sciences. After graduation from the University Münster with a degree in mathematics, Antje Jahn started her professional career in 1999 as a biostatistician in the pharmaceutical industry. In 2000 she received a position as a PhD student at the University Medical Center Mainz, first at the Interdisciplinary Center for Clinical Trials and thereafter at the Institute of Medical Biostatistics, Epidemiology and Informatics. During this period she spent a fellowship at GlaxoSmithKline Biologicals, Belgium and at the Oregon Health & Science University, USA.

In 2004 Antje Jahn received a doctoral degree (Dr. rer. physiol.) for her thesis on sample size readjustment and in 2016 the Venia legendi in Biometry for her research on recurrent event data. She was awarded with the Paul-Martini award of the GMDS in 2016. Since 2015 Antje Jahn is member of the advisory board and is heading a working group of the German Section of the International Biometric Society, she is a member of the GMDS and the Ethics Committee of Rhineland-Palatine.

Antje Jahn has four children and is living with her family in Mainz.

Dr. Tina Lang, senior biostatistician at Bayer AG

Tina Lang started her studies of statistics at TU Dortmund in 1999. She chose theoretical medicine as a minor subject. For one semester in 2002, she went abroad to study at the University of Auckland. Returning to Germany, she graduated in 2004 (Diploma). She continued her research as a PhD student at the TU Dortmund. During that time she also worked part time at the Leibniz-Institut für Arbeitsforschung at the TU Dortmund. She spent a research semester in London at Imperial College in 2006. Before she finalized her PhD thesis she was offered a job at Bayer Schering Pharma (now Bayer AG) in Berlin in 2009. During her first six months in the new job, she finished her PhD thesis and defended it in 2010. Since 2009 she has been working as a biostatistician (now senior biostatistician) in research and toxicology at Bayer AG (Department Research and Early Development Statistics). She is responsible for designing and analyzing lab experiments in close contact with biologists, physicians and toxicologists. Statistical consultancy and trainings for lab heads and lab technicians is also part of the job. Additionally, a Bayer initiative for innovative statistical concepts offers the opportunity for research on relevant statistical topics besides everyday project work. Supported by her management, she took the lead of the AG Nachwuchs of the Biometric Society in 2009 (now headed by Anke Hüls).

In 2015/2016 and in 2017, Tina Lang took parental leave from work (11 month and 10 month). Since then, she returned to her old job working part time. In 2018, she changed location to Bayer Wuppertal, still keeping the same position.

Rainer Probst, Teamlead Biostatistics, AMS Advanced Medical Services GmbH

Rainer Probst studied Statistics at Ludwig-Maximilian-University between 2008 and 2014. He earned his Bachelor of Science degree in 2012 followed by the Master of Science in 2014. Shortly after he started to work as a Biostatistician for the Medical Science department within AMS Advanced Medical Services GmbH, a CRO (Contract Research Organization) located in Mannheim (HQ), Munich and London.

The Medical Science department focuses mainly on the generation of benefit assessments of pharmaceuticals since the Act on the Reform of the Market for Medicinal Products (AMNOG) came into effect in Germany. In his first years at AMS Rainer Probst participated in and later led multiple benefit assessment projects. He also gained experience in the planning and execution of statistical analyses for clinical trials with focus to the programming using SAS©. In 2016 it was possible to incorporate those two working sectors, benefit assessments and SAS-programming, into one: Through further requirements from German authorities, extensive supplementary analyses have to be presented in the benefit assessments. AMS saw the potential of the market and started offering the programming of supplementary analyses with Rainer Probst as project leader. After successful deliveries of pilot projects, programming of supplementary analysis for German benefit assessments became a strong arm within the Medical Science department at AMS. Currently, Rainer Probst leads a team of 4 Biostatisticians and SAS-Programmers.

Prof. Dr. Antonia Zapf, professor at the University Medical Center Hamburg-Eppendorf

Antonia Zapf studied Statistics minoring in Medical Biometry at the Ludwig-Maximilians-University in Munich and obtained her PhD (Dr. rer. nat.) in 2009 in Medical Biometry at the Department of Medical Statistics at the Georg-August-University in Göttingen. Afterwards, she joined the Department of Biometry at the Medical School in Hanover as research assistant for three years. From 2012 Antonia Zapf worked at the Department of Medical Statistics at the Georg-August-University in Göttingen as post-doctoral research assistant and received her venia legendi in the field of Medical Biometry in 2016. Since April 2018 she is Professor for Medical Biometry at the University Medical Center Hamburg-Eppendorf, where she heads up the unit Medical Biometry at the Institute for Medical Biometry and Epidemiology. In 2012 Antonia Zapf awarded the certificate "Biometry in Medicine" by the German Society for Medical Informatics, Biometry and Epidemiology (GMDS) and the German Region of the International Biometric Society (IBS-DR). Since 2016 she is co-chair, since 2018 chair of the Medical Biometry section of the GMDS, and since 2015 she is member of the advisory board of the IBS-DR. Since 2016 she is alternate member of the Commission for Paediatric Medicinal Products at the Federal Institute for Drugs and Medical Devices. Furthermore, since 2018 she is member of the editorial board of the Deutsches Ärzteblatt and since 2015 she is associate editor of the European Respiratory Journal Open Research. Antonia Zapf's methodological research interests are in statistical methods for diagnostic studies, adaptive study designs, and meta-analyses.