

Student Supervision & Teaching

Kaspar Rufibach, PhD
Biostatistician

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THESIS AND INTERN SUPERVISION:

Chen, X. (2019). *Sample size for prediction models*. Three month full-time internship with Roche Biostatistics, Basel. Co-supervised with Markus Elze and Gian Thanei.

Li, K. (2018). *Optimism-corrected treatment effect estimates in subgroups displayed in forest plots for time-to-event outcomes*. Master thesis to obtain Master in Biostatistics, University of Zurich. Initiated within three month full-time internship with Roche Biostatistics, Basel. Co-supervised with Marcel Wolbers. Academic supervisor: Prof. Torsten Hothorn, University of Zurich.

Meller, M. (2016). *Joint Modelling of Overall Survival and Progression Free Survival*. Master thesis to obtain Master in Biostatistics, University of Ulm. Initiated within four month full-time internship with Roche Biostatistics, Basel. Academic supervisor: Prof. Jan Beyersmann, University of Ulm. Winner of the Bernd Streitberg Award 2018 of the German Region of the International Biometric Society.

Hebeisen, M. (2014). *Estimation from Interval-censored Time-to-event Data: Method Comparison by Simulation based on GALLIUM Study for Follicular Lymphoma*. Master thesis to obtain Master in Biostatistics, University of Zurich. Prepared within seven month full-time internship with Roche Biostatistics, Basel. Academic supervisor: Prof. Torsten Hothorn, University of Zurich. download thesis

Hubeaux, S. (2013). *Analysis of time-to-event data with interval- or left-censored covariates*. Six month full-time internship with Roche Biostatistics, Basel.

Boutellier, P. (2013). *What does a PSA bounce look like? A numerical and graphical description of the prostate-specific antigen (PSA) bounce phenomenon in patients treated for prostate cancer with brachytherapy only*. Master thesis to obtain Master in Medicine, University of Zurich.

Loiero, D. (2012). *Inter- and Intrareader variability of Ratingen score in the Swiss Clinical Quality Management database*. Master thesis to obtain Master in Medicine, University of Zurich.

Scherer, A. (2011). *Determinants of TNF α inhibitor prescription in the Swiss Clinical Quality Management cohort of axial Spondylarthropathy patients*. Semester thesis in Master of Biostatistics program, University of Zurich.

Achermann, R. (2008). *Netrin-1 und DCC Expression bei Hirntumoren*. Semester thesis in Master of Biostatistics program, University of Zurich.

Lanz, K., Weber M. (2005). *Schleistung unter körperlicher Anstrengung*. Swiss Technical School for Optometrics, Olten, Switzerland.

TEACHING LEADERSHIP

- At Roche, I am responsible for the technical training planning of ~ 220 biostatistics staff.
- I coordinate a major chunk of the biostatistics courses for non-statistics functions.
- I co-lead the official roll-out of the ICH E9 addendum within Roche, for statisticians and partner functions (such as clinical science, regulatory, biometrics, early research).
- A full-day introductory biostatistics course that I have given together with Marcel Wolbers has been selected as part of the official training program for all Roche affiliates globally.

SHORT COURSES FOR STATISTICALLY TRAINED AUDIENCES

06/2020 – 12/2020	A Toolbox for Innovative Confirmatory Trial Designs. Four 2h modules on group-sequential, adaptive, and multiarm multistage designs, with Marcel Wolbers. (Virtual course for all Roche biostatisticians)
10/2019	Advanced methods for group-sequential and adaptive trials. 3-day course, together with Marc Vandemeulebroecke, Gernot Wassmer, and Marcel Wolbers. (Summer school organized on behalf of the German Region of the IBS, Lambrecht, Germany)
07/2019	Advanced methods for group-sequential trials. Half-day pre-conference course, together with Marcel Wolbers. (ISCB40, Leuven, Belgium)
03/2019	Group-sequential clinical trial designs, advanced topics. Half-day course for biostatisticians, together with Marcel Wolbers. (Roche, Basel)
03/2018	Group-sequential and adaptive clinical trial designs, with R practicals. Full-day course for biostatisticians, together with Daniel Sabanés Bové, Marc Vandemeulebroecke, Marcel Wolbers. (Organized by the Basel Biometrics Section, Basel)
06/2013	Analysis of Longitudinal data. 8-hour course for biostatisticians. (Roche, Basel)
01/2011	Analysis of Longitudinal data. 3-day course, given jointly with Prof. Leo Held. (Institut für Medical Biometry, Epidemiology, and Informatics, University of Mainz)
06/2010	Analysis of Longitudinal data, as part of Master in Medical Biometry. 3 day course, given jointly with Prof. Leo Held. (Department of Medical Biometry, University of Heidelberg, Heidelberg)

GRADUATE LEVEL TEACHING FOR STATISTICIANS

Preparing and teaching lecture to Master students, preparing and discussing exercises (blackboard and with R), preparing and grading exams.

12/2019	Introduction to Applied Mathematics and Informatics in Drug Discovery (AMIDD), one session: Interim look into pivotal clinical trials - why it matters and how to do it (Graduate level, University of Basel)
11/2013	Statistical Methods for Clinical Research, one session on group-sequential designs in clinical research (Graduate level, University of Zurich)
11/2012 – 12/2012	Statistical Methods for Clinical Research, two sessions: group-sequential designs in clinical research and measures of agreement (Graduate level, University of Zurich)

09/2011 – 12/2011	Statistical Methods for Clinical Research (Graduate level, University of Zurich)
02/2010 – 06/2010	Longitudinal data analysis (joint with Prof. L. Held, graduate level, University of Zurich)
09/2009 – 12/2009	Biostatistical methods, Part II: Statistical methods for clinical trials (graduate level, University of Zurich)
02/2009 – 05/2009	Likelihood inference (joint with Prof. L. Held, graduate level, University of Zurich)
10/2005 – 02/2006	Introduction to Statistics (undergraduate level, University of Bern)

SHORT COURSES FOR NON-STATISTICAL AUDIENCES

12/2020	Survival analysis in rheumatology. (1-hour course for medical doctors, organized by Roche Switzerland at St. Gallen Hospital (virtual event).)
11/2020	Introduction to statistics. (Two-hour course for all product development colleagues, Roche, Basel)
09/2020	Introduction to survival and interim analyses. (Half-day course for Regulatory Documentation Department, Roche, Basel & Welwyn)
08/2020	Introduction to statistics. (Half-day course for Regulatory Documentation Department, Roche, Basel & Welwyn)
01/2020	Introduction to survival and interim analyses. (Half-day course for Regulatory Documentation Department, Roche, Basel)
01/2020	How to interpret subgroup analyses in clinical trials? (2-hour course for medical doctors, organized by Roche Switzerland at University Hospital Zurich.)
11/2019 – 01/2020	Design of Experiments & Effective Statistical Practices. (Three two-hour courses for early development organization, Roche, Basel)
10/2019	Introduction to statistics. (Half-day course for Regulatory Documentation Department, Roche, Basel)
01/2019	Introduction to statistics in clinical trials. (2-hour course for Medical Science Liaison group, Roche Swiss Affiliate, Reinach)
01/2019	Introduction to survival analysis and clinical trial designs, Part II. (2-hour course for medical doctors, organized by Roche Switzerland at Baden Hospital.)
01/2019	Estimands and real-world data in drug development. (Half-day course for early development Neuroscience, Ophthalmology and Rare Disease scientists, Roche, Basel)
11/2018	Introduction to survival analysis and clinical trial designs. (Half-day course for early development Neuroscience, Ophthalmology and Rare Disease scientists, Roche, Basel)
03/2018	Introduction to survival analysis and clinical trial designs. (3-hour course for medical doctors, organized by Roche Switzerland at Baden Hospital.)
02/2018	Introduction to survival analysis and clinical trial designs. (Half-day course for Regulatory Documentation Department and Global Project Managers, Roche, Basel)
11/2017	Introduction to statistics. (Half-day course for Regulatory Documentation Department and Global Project Managers, Roche, Basel)

07/2017	Sample size planning and survival analysis in clinical trials. (Full-day course for Medical Affairs and Clinical Science Departments, Roche, Basel, jointly with Marcel Wolbers)
04/2017	Introduction to statistics. (Half-day course for Competitive Intelligence Group, Roche, Basel)
03/2017	Introduction to statistics. (2-hour course for Finance Department, Roche, Basel)
11/2016	Introduction to statistics. (Half-day course for Regulatory Documentation Department, Roche, Mississauga)
10/2016	Introduction to statistics. (Half-day course for Regulatory Documentation Department, Roche, Basel)
08/2016	Introduction to statistics. (3-hour course for Media Group Roche, Basel)
03/2016 – 11/2016	Five workshops on specific biostatistical topics in clinical trials. (3-hour courses for medical doctors, organized by Roche Switzerland at hospitals in Sion, St. Gallen, Frauenfeld, Aarau, Zürich.)
05/2016	Introduction to statistics. (Half-day course for Regulatory Documentation Department, Genentech, South San Francisco and Roche, Basel)
02/2016	Introduction to statistics in clinical trials. (Half-day course for Medical Science Liaison group, Roche Swiss Affiliate, Reinach)
01/2016 – 02/2016	Introduction to statistics. Certificate of Advanced Studies (CAS) course, as part of the Master of Advanced Studies in Managed Health Care. (2-day course, ZHAW Zurich University of Applied Sciences, School of Management and Law, Winterthur Institute for Health Economics, Winterthur)
11/2015	Introduction to statistics. (1-day course for Statistical Programming and Analysis Department, Roche Basel)
10/2015	Introduction to statistics. (Two 1-day courses for Regulatory Documentation Department, Roche Basel & Welwyn)
05/2015	Introduction to statistics. (1-day course for Product Development Department, Roche Basel)
02/2015	Introduction to statistics. Certificate of Advanced Studies (CAS) course, as part of the Master of Advanced Studies in Managed Health Care. (2-day course, ZHAW Zurich University of Applied Sciences, School of Management and Law, Winterthur Institute for Health Economics, Winterthur)
06/2014 – 11/2014	Four workshops on specific biostatistical topics in clinical trials. (3-hour courses for medical doctors, organized by Roche Switzerland at hospitals in Zürich, Lausanne, Basel, Baden.)
01/2014 – 03/2014	Introduction to statistics. Certificate of Advanced Studies (CAS) course, as part of the Master of Advanced Studies in Managed Health Care. (3-day course, ZHAW Zurich University of Applied Sciences, School of Management and Law, Winterthur Institute for Health Economics, Winterthur)
11/2013	Workshop on survival analysis in oncology. (3-hour course for Roche Oncology sales force, Reinach)
06/2013 – 04/2014	Seven workshops on survival analysis in oncology. (3-hour courses for medical doctors organized jointly by Roche Switzerland and Novartis Switzerland at hospitals in Basel, Zürich, Bern, Luzern, Lausanne, Lugano, Olten.)
01/2012 – 03/2012	Introduction to statistics. Certificate of Advanced Studies (CAS) course, as part of the Master of Advanced Studies in Managed Health Care. (3-day course, ZHAW Zurich University of Applied Sciences, School of Management and Law, Winterthur Institute for Health Economics, Winterthur)

09/2011	Statistics in oncology. (1-day course, cancer biology PhD program, University of Zurich)
04/2011	How to write a scientific paper – statistical aspects. (4-hour course as part of medical curriculum, University Hospital, Zurich)
02/2011	Introduction to biostatistics. (3-hour course, continuing education for radiologists, University Hospital, Bern)
03/2010	Samples, confidence intervals, statistical tests, and p -values. (1-hour talk, Medical radiology department, University Hospital Zurich, Zurich)
01/2010 – 05/2010	Introduction to statistics. Certificate of Advanced Studies (CAS) course, as part of the Master of Advanced Studies in Managed Health Care. (3-day course, ZHAW Zurich University of Applied Sciences, School of Management and Law, Winterthur Institute for Health Economics, Winterthur)
09/2010	Statistics in oncology. (1-day course, cancer biology PhD program, University of Zurich)
09/2009	Statistics in oncology. (1-day course, cancer biology PhD program, University of Zurich)
09/2009	Assessment of agreement between continuous variables. (1-hour talk, Waid Hospital, Zurich)
02/2009	Introduction to biostatistics. (1-hour talk, Triemli Hospital, Zurich)
01/2009	Introduction to biostatistics. (1-day course, continuing studies for researchers, University of Zurich)
09/2008	Statistics in oncology. (1-day course, cancer biology PhD program, University of Zurich)
02/2008	Linear models. (1-day course, continuing studies for researchers, University of Zurich)
04/2005 – 05/2005	Introduction to R. (2-day course, continuing studies, University of Bern)

FURTHER SHORT COURSES

09/2011	Optimization. (2-hour course, Energy trading academy, BKW FMB Energie AG)
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