

# Sereina M. Graber

PhD · Data Scientist · Health Researcher

Zurich, Switzerland

Proactive and creative data scientist with a strong interest in drug development and prescribing patterns, leveraging strong analytical, statistical and programming skills to drive innovative solutions and actionable insights.

# Experience

#### **Data Scientist & Researcher**

Aug 2019 - current

Department of Health Sciences, Helsana Insurance Group, Zurich

- Lead, conceptualize and execute scientific studies and analytical projects, e.g.:
  - · Antibiotic pack sizes vs. guidelines (link to study)
  - ► Inappropriate drug prescribing and integrated care (link to study)
- Development of automated processes to cleanse, aggregate and consolidate diverse "big data" sources (including SQL procedures and R software pkgs)
- · Data analyses and statistical programming
  - b data extraction and processing (using SQL and R)
  - development and validation of statistical/ machine learning models (a.o.: GLM, GLMM, GEE, RF, survival analyses)
  - visualizations (mainly using ggplot, plotly, shiny)
- Interpret/ present/ discuss results to/ with external/ internal stakeholders and collaborate on publishing scientific publications
- · Supervision of PhD student and mentoring team members

Data Scientist Aug 2017 - Jul 2019

Advanced Analytics, Sanitas Insurance Group, Zurich

- Lead, design and implementation of analytical projects: Data mining & preparation, analyses & machine learning, preparation of results and discussion with internal/external stakeholders, project examples:
  - · Predictive models (RF and GLM) for forecasting churn probabilities
  - Development of a chatbot in the area of customer consulting using NLP and Machine Learning (in collaboration with external consultants)
- → Health services research: effectiveness of case management
- Claim audit system: efficiency testing and further development of rules and regulations (including implementation of analysis tool in R shiny)
- · In-house consulting and teaching of statistical and analytical skills

#### Academic Career

## Ph.D. in Evolutionary Biology

Aug 2013 - Jul 2017

Anthropological Institute and Museum, University of Zurich

## **Master of Science - Biostatistics**

Sept 2012 - May 2015

Epidemiology, Biostatistics and Prevention Institute, University of Zurich

#### Master of Science - Biology

Sept 2010 - May 2012

Anthropological Institute and Museum, University of Zurich

#### Bachelor of Science - Biology

Sept 2007 - May 2010

University of Zurich

#### Extracurricular

Member of the organizing committee Zurich R User Group!

## Skills

R			•	
R Shiny	•	•	•	
Quarto			•	
Python	•	•		
SQL			•	
LaTex	•	•		
Git			•	
Bash/ Shell				
SPSS				
JMP				
MS Office				

# Languages \_\_\_\_\_

German			
English			
French			

## Personal Interests

R programming, visualizing, cycling & hiking with my dog

#### References

available upon request