

# G.H.Laier



## CITATIONS

"Gunnar Laier asked the correct questions, on background. He completed the work ahead of schedule and with a clarity of communication that is rare."

"Gunnar ... has been responsible for data linkages, data cleaning, and performance of the statistical analysis, and he has done this work with great precision and competence."

"Gunnar ... has shown that he is a very talented and gifted mathematician/statistician who works independently and at a very high level. His professional interests are very wide. He has extraordinary good skills in mathematics and probability theory."

**Gunnar Hellmund Laier**  
**Forbindelsesvejen 116**  
**DK9400 NrSundby**  
**Denmark, EU**  
**+45 5219 2373**

<http://www.addastat.com>  
<https://www.linkedin.com/in/laier/>

[https://www.researchgate.net/profile/Gunnar\\_Laier](https://www.researchgate.net/profile/Gunnar_Laier)

## EXPERIENCED BIOSTATISTICIAN, RESEARCHER AND CONSULTANT

Gunnar possess a multi-disciplinary qualitative understanding way beyond a unique knowledge of epidemiological and statistical methodology. Experience is gained through an educational background with extraordinary results from elementary school to the level of PhD. In total Gunnar has more than eight years of research-based working experience including advanced quantitative analysis, statistical programming and advisory of customers within health sciences, social sciences and industry.

## Employments besides working experiences as independent consultant

Special consultant

**Region Zealand 2015-2019**

## Data & Development

- Expert biostatistical advisory, analysis and research within therapeutical areas
  - Nephrology
  - Cardiology
  - Medical genetics
  - Neurology
  - Psychiatry
  - Orthopaedic Surgery
  - Anesthesiology
  - Obstetrics/Gynaecology
  - Oncology
  - Dermatology
  - Endocrinology
  - Gastroentetology
  - Haematology
  - Family medicine
  - Ophthalmology
  - Emergency medicine
  - Nursing
  - Physiotherapy
- Biostatistical analyses and scientific publication
  - Randomized Trials (including Phase I and II trials)
  - Observational Studies (including cohort register studies)
  - Systematic Reviews
  - Study Protocols
  - Diagnostic/prognostic studies
  - Case Reports
  - Clinical Practice Guidelines
  - Qualitative Research
  - Quality Improvement Studies
  - Economic Evaluations (including measures of QoL)
- Data management, programming, and development of dashboards
  - SQL, R, SAS, Python environments
  - Office, Microsoft BI developer and online BI tools
  - Advanced file revision systems (Sharepoint, Cloud)
  - Survey design and setup (from GUI to php/js based pdf reports)
- Administrative analyses and management consulting related tasks
  - Administrative statistics
  - Writing of formal notes and recommendations
  - Reporting (including GIS supported graphics)

## CERTIFICATES:

Improving Deep Neural Networks: Hyperparameter tuning, Regularization, and Optimization (2019), Neural Networks and Deep Learning (2019), Structuring Machine Learning Projects (2019), Using Databases with Python (2019), Python 3 Tutorial (2019), Foundations of mining non-structured medical data (2019), SQL Fundamentals Course (2019), SQL for Data Science (2019), What is Data Science? (2019), Google Cloud Platform Big Data and Machine Learning Fundamentals (2018), 31st Residential 3-week Summer Course in Epidemiology (2018), 1-week GIS (Geographic Information Systems) in Epidemiology (2018), SAS Advanced Programming 3 (2013) LEAN Leadership in practice (2012), Basic Project management (2012), Advanced SAS macro programming (2003), Basic SAS Programming (2003), Technic Drawing (1991)

## IT PROFICIENCIES:

SAS, SQL, R, Stata, SPSS, Excel, Access, python, Fortran, C++, Java, javascript, perl/regex, git, html5, css, linux shells, batch programming. Other scripting and programming languages.

SurveyMonkey, SurveyXact, LimeSurvey, qualtrics, Office Suite, Google Suite, SharePoint, Microsoft SQL, MySQL, mongoDB, marieDB, QGIS/python extensions, Microsoft BI Developer. Tools matching the project and at hand. Teaching statistical programming packages, advisory on online calculators and tools.

## MEMBERSHIPS

Royal Statistical Society, Danish Society for Theoretical Statistics

Statistician and teacher

**University of Copenhagen 2009-2010, 2013-2014**

## Institute of Computer Science

- Teaching and evaluation of science students. Introductory Mathematics: Calculus, differential equations, optimization. Linear Algebra: Systems of linear equations, transformations, subspaces and shift of base.

## Department of Biostatistics, Institute of Public Health

- Data management and formatting of register health data.
- Poisson, Cox, PH and logistic regression analyses
- SAS programming (inclusive macro-programming and ODS)
- Publication of peer-reviewed papers
- The teaching of medical students: Medical Statistics
- Examination of medical students in the course medical statistics and epidemiology.
- The teaching of social science students in Basic Statistics.

Postdoc, PhD

**University of Aarhus 2006-2009**

## Institute of Mathematical Sciences

- Estimation methods, distribution- and measure theory
- Probability theory and asymptotics
- Stochastic processes and heavy-tail theory
- Spatial point processes generated by stochastic fields
- The teaching of Mathematical Modelling 1.1. and 1.2
- The teaching of Statistical Modelling and Nanostatistics
- Lecturer in Perspectives in Mathematics, Statistics, and Economy

## EDUCATIONAL BACKGROUND

2006-2009

**University of Aarhus**

## PhD in Statistics (Faculty of Sciences Scholarship)

Research within theory and estimation of point processes with stochastic intensity. Point processes with stochastic intensity may be used for modeling point patterns in time and space, i.e. position of trees, time dependent accidents, distribution of galaxies, heatmaps in SEO and market and customer analysis.

2000-2005

## Cand.scient. and bac.scient. in statistics (Summa Cum Laude)

- Spatial statistics, mathematical statistics, Markov chains, stochastic processes
- Advanced probability theory and analysis
- Analysis, algebra and differential geometry
- Data structures and algorithms, programming