Karl Oskar Ekvall

Assistant Professor in Biostatistics
Nobels väg 13, 17177 Stockholm, Sweden
E-mail: k.o.ekvall@gmail.com *Phone:* +46 762 00 88 64 *Web:* koekvall.github.io

Employment

Karolinska Institutet

Assistant Professor	2021 - today
Postdoctoral Researcher	2020 - 2021

TU Wien

Postdoctoral Researcher	2019 - 2020

Education

University of Minnesota – Twin Cities

Ph.D. Statistics	2019
M.S. Statistics	2017

University of Gothenburg

M.Sc. Finance	2012
B.Sc. Economics	2011

Publications

JOURNAL ARTICLES

Ekvall and Jones. 2021. "Convergence analysis of a collapsed Gibbs sampler for Bayesian vector autoregressions." *Electronic Journal of Statistics* 15(1): 691–721.

Ekvall and Jones. 2021. "Consistent maximum likelihood estimation using subsets with applications to multivariate mixed models." *Annals of Statistics* 48(2): 932–952.

Ekvall and Jones. 2019. "Markov chain Monte Carlo." *Wiley StatsRef*.

ARTICLES IN REVIEW

Ekvall and Bottai. 2021+. "Confidence regions near singular information and bondary points with applications to mixed models". https://arxiv.org/abs/2103.10236

Ekvall and Molstad. 2021+. "Mixed-type multivariate response regression with covariance estimation". https://arxiv.org/abs/2101.08436

Ekvall. 2021+. "Targeted principal components regression". https://arxiv.org/abs/2004.14009

Presentations

"Reliable inference on small scale and variance parameters in mixed models". MEB biostatistics seminar. Stockholm, Sweden.	2021
"Confidence intervals for small scale parameters". IMM research day. Stockholm, Sweden	2020
"Consistent maximum likelihood estimation in mixed models using subsets". Joint Statistical Meetings. Philadelphia, PA, U.S.	2020
"Convergence analysis of a collapsed Gibbs sampler for Bayesian vector autoregressions". CMStatistics. London, U.K.	2019
"Consistent maximum likelihood estimation in mixed models using subsets". University of Vienna seminar. Vienna, Austria	2019
"Convergence analysis of a collapsed Gibbs sampler for Bayesian vector autoregressions". TU Wien colloquium. Vienna, Austria	2019
"A multivariate linear model with separable correlation". International Chinese Statistical Association, applied statistics symposium. Chicago, IL, U.S.	2017

Teaching

Karolinska Institutet

Undergraduate biostatistics in bachelor's program in biomedicine, approx. 150h	2020 - 2021
Interprofessional learning day, 3h	2021

University of Minnesota – Twin Cities

Introduction for new teaching assistants, approx. 12h	2018 - 2019
Theory of statistics for advanced undergraduate students, approx. 84h	2017 - 2018
Statistical computing for undergraduate students, approx 84h	2018
Introductory statistics for undergraduate students*, approx. 252h	2014 - 2016

*as teaching assistant

Service

REVIEWER

National Science Foundation

Electronic Journal of Statistics

Journal of Computational and Graphical Statistics

Computational Statistics and Data Analysis

Annales de l'Institut Henri Poincaré

Consulting

University of Minnesota, School of Statistics consulting clinic, approx. 70h	2017
U.S. Geological Survey, estimating monotonic trends in multivariate time series, 339 h	2016

Software

`lmmstest` R package for implementing a modified score test for scale parameters in linear mixed models. https://github.com/koekvall/lmmstest

`lvmmr` R package for estimating mixed-type multivariate response regressions. https://github.com/koekvall/lvmmr

`tpcr` R package for estimating targeted principal components regressions. https://github.com/koekvall/tpcr

Awards

Miscellaneous

The American–Scandinavian foundation fellowship	2016
Fulbright foreign student program	2014
Tom Hedelius foundation scholarship	2014
Sixten Gemzéus foundation scholarship	2014
Malmsten award for best thesis in M.Sc. in Finance program	2014

University of Minnesota – Twin Cities

Graduate research partnership program fellowship	2017
Lynn Y.S. Lin fellowhsip for statistical consulting	2016
School of Statistics first year scholarship	2014