

CURRICULUM VITAE

LEONHARD HELD

December 19, 2011

PERSONAL DATA

Born: July 15, 1966, Erlangen, Germany.

Nationality: German.

Married, three children.

Business Address:

University of Zurich
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Division of Biostatistics
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Berghaldenstrasse 31
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EDUCATION

Habilitation	2000	LMU Munich	Statistics
Promotion (PhD, "summa cum laude")	1997	LMU Munich	Statistics
Diplom (MSc, "mit Auszeichnung")	1993	LMU Munich	Statistics

PROFESSIONAL EXPERIENCE

Full Professor of Biostatistics
Member of Faculty of Medicine and Faculty of Science ("Doppelprofessur")
Division of Biostatistics
Institute of Social and Preventive Medicine
University of Zurich
2006-present

Professor of Biostatistics
Department of Statistics
Ludwig-Maximilians-University Munich
2003-2006

Senior Lecturer in Medical Statistics
Department of Mathematics and Statistics
Lancaster University, UK
2001-2002

Professor of Biostatistics (temporary appointment)
Department of Statistics
Ludwig-Maximilians-University Munich
Summer, 2001

Lecturer in Statistics
Department of Epidemiology and Public Health
Imperial College London, UK
2000-2001

Assistant Professor (“wissenschaftlicher Assistent”) in Statistics
Department of Statistics
Ludwig-Maximilians-University Munich
1997-2000

Visiting Scholar
Department of Statistics
University of Washington, USA
1995-1996

Research Associate (“wissenschaftlicher Mitarbeiter”) in Statistics
Department of Statistics
Ludwig-Maximilians-University Munich
1994-1997

SELECTED PROFESSIONAL ACTIVITIES

Program Committee, CEN 2011, Bridging Biostatistical Theory and Application, September 12-16 2011, University of Zurich.

Organizer of Workshop on Bayesian Inference for Latent Gaussian Models with Applications 2011, Zurich. www.math.uzh.ch/bilgm11

Scientific Program Committee (SPC) of the International Society for Clinical Biostatistics (ISCB) Annual meeting 2010, Montpellier.

Scientific Committee, International Workshop on Statistical Modelling 2010, Glasgow.

Scientific Organizer of Oberwolfach workshop ”Statistical Issues in Prediction”, Oberwolfach, 2010.

Program Committee, Lifestat 2008, Statistics and Life Sciences, March 10-13 2008, Ludwig-Maximilians-Universität München

Program Committee, UseR!, The R User Conference 2008, August 12-14, Technische Universität Dortmund, Germany

Local Organizer, *SemStat* Summer School “Statistics of spatio-temporal systems” in Höhenried near Munich, Dezember 12-19, 2004

Editorial Board Membership:

Editor, *Biometrical Journal*, Wiley, 2008 – 2011.

Impact Factor: 1.114 (2008), 1.208 (2009), 1.438 (2010)

Associate Editor, *Biometrical Journal*, Wiley, 2006-2008

Associate Editor, *Biostatistics*, Oxford University Press, 2001-2007

Associate Editor, *Applied Statistics (Journal of the Royal Statistical Society, Series C)*, 2002-2005.

Associate Editor, *Statistical Modelling*, Sage, 2007-2008

Associate Editor, *ISBA Bulletin*, 2001

Corresponding Editor, *ISBA Bulletin*, 1999-2000

Membership in Professional Societies:

Member, *SemStat* (“Séminaire Européen de Statistique”) Steering Committee 2004-2006

Member, Research Section of the Royal Statistical Society 2001-2002

Membership in Royal Statistical Society, American Statistical Association, International Biometric Society, International Society for Bayesian Analysis

Selected Peer-Review Activities:

Referee of research proposals for: *German Science Foundation (DFG)*; *Austrian Science Fund (FWF)*; *Dutch Research Council (NWO)*; *Research Council of Norway (RCN)*; *Swiss National Science Foundation (SNF)*; *Wiener Wissenschafts-, Forschungs- und Technologiefonds (WWTF)*; *Österreichischer Akkreditierungsrat (ÖAR)*; *Deutsches Bundesministerium für Bildung und Forschung (BMBF)*

Reviewer of book proposals for: John Wiley & Sons; Oxford University Press; Pearson Education

Ad hoc referee for: *American Journal of Epidemiology*; *Biometrical Journal*; *Biometrics*; *Biometrika*; *Biostatistics*; *BMC Cancer*; *BMC Medical Education*; *Canadian Journal of Statistics*; *Computational Statistics and Data Analysis*; *Epidemiology and Infection*; *International Journal of Methods in Psychiatric Research*; *Journal of Applied Statistics*; *Computational and Mathematical Methods in Medicine*; *Journal of Computational and Graphical Statistics*; *Journal of Statistical Planning and Inference*; *Journal of the American Statistical Association: Applications and Case Studies*; *Journal of the American Statistical Association: Theory and Methods*; *Journal of the Royal Statistical Society; Series A, B, C and D*; *Journal of Statistical Planning and Inference*; *Metrika*; *PLoS ONE*; *Parasites and Vectors*; *Scandinavian Journal of Statistics*; *Statistical Modelling*; *Statistics in Medicine*

HONORS AND AWARDS

Research Grant of the *European Science Foundation (ESF)*, Scientific Programme on *Highly Structured Stochastic Systems*, Autumn 1999

Research Grant of the *German Academic Exchange Service (DAAD)*, 1995-1996

PUBLICATIONS (Statistical Methodology)

Books/Monographs:

Held, L. and Sabanés Bové, D.

Applied Statistical Inference. Springer, in preparation.

Held, L., Rufibach, K. and Seifert, B.
Medizinische Statistik: Konzepte, Methoden, Anwendungen. Pearson Education, in preparation.

Held, L.
Methoden der statistischen Inferenz - Likelihood und Bayes. Spektrum Akademischer Verlag (Springer), 2008.

Finkenstädt, B., Held, L. and Isham, V. (eds.)
Statistical Methods for Spatio-temporal Systems. Chapman & Hall/CRC Press, Monographs in Statistics and Applied Probability No. 107, 2006.

Rue, H. and Held, L.
Gaussian Markov Random Fields; Theory and Applications. Chapman & Hall/CRC Press, Monographs in Statistics and Applied Probability No. 104, 2005.
Awarded with an **honorable mention** in the competition for the 2007 DeGroot Prize, see <http://www.bayesian.org/awards/DeGrootPrize.html>

Knorr-Held, L.
Hierarchical Modelling of Discrete Longitudinal Data; Applications of Markov Chain Monte Carlo. Herbert Utz Verlag, Munich, 1997.

Journal Articles:

Schrödle, B., Held, L. and Rue, H.
Assessing the impact of a movement network on the spatio-temporal spread of infectious diseases.
Biometrics, early view DOI:10.1111/j.1541-0420.2011.01717.x

Riebler, A., Held, L. and Rue, H.
Estimation and extrapolation of time trends in registry data - Borrowing strength from related populations.
Annals of Applied Statistics, accepted.

Riebler, A., Held, L., Rue, H. and Bopp, M.
Gender-specific differences and the impact of family integration on time trends in age-stratified Swiss suicide rates.
Journal of the Royal Statistical Society, Series A (Statistics in Society), accepted.

Braun, J., Held, L. and Ledergerber, B.
Predictive cross-validation for the choice of linear mixed-effects models with application to data from the Swiss HIV Cohort Study
Biometrics, early view. DOI:10.1111/j.1541-0420.2011.01621.x

Sabanés Bové, D. and Held, L.
Hyper-g Priors for Generalized Linear Models.
Bayesian Analysis, 2011, **6**, 387-410.

Sabanés Bové, D. and Held, L.
Bayesian fractional polynomials.
Statistics and Computing, 2011, **21**, 309-324.

Roos, M. and Held, L.
Sensitivity analysis in Bayesian generalized linear mixed models for binary data.
Bayesian Analysis, **6**, 259-278, 2011.

- Paul, M. and Held, L.
 Predictive assessment of a non-linear random effects model for multivariate time series of infectious disease counts.
Statistics in Medicine, **30**, 1118-1136, 2011.
- Schrödle, B., Held, L., Riebler, A. and Danuser, J.
 Using INLA for the evaluation of veterinary surveillance data from Switzerland: A case study.
Journal of the Royal Statistical Society, Series C (Applied Statistics), **60**, 261-279, 2011.
- Schrödle, B., Held, L.
 Spatio-temporal disease mapping using INLA.
Environmetrics, **22**, 725-734, 2011.
- Schrödle, B. and Held, L.
 A primer on disease mapping and ecological regression using INLA.
Computational Statistics, **26**, 241-258, 2011.
- Held, L. and Riebler, A.
 A conditional approach for inference in multivariate age-period-cohort models.
Statistical Methods in Medical Research, <http://dx.doi.org/DOI:10.1177/0962280210379761>.
- Held, L., Rufibach, K. and Balabdaoui, F.
 A score regression approach to assess calibration of continuous probabilistic predictions.
Biometrics, **66**, 1295-1305, 2010.
- Paul, M., Riebler, A., Bachmann, L., Rue, H., and Held, L.
 Bayesian bivariate meta-analysis of diagnostic test studies using integrated nested Laplace approximations.
Statistics in Medicine, **29**, 1325-1339, 2010.
- Riebler, A. and Held, L.
 The analysis of heterogeneous time trends in multivariate age-period-cohort models.
Biostatistics, **11**, 57-69, 2010.
- Kohlmann, M., Held, L. and Grunert, V.-P.
 Classification of therapy resistance based on longitudinal biomarker profiles.
Biometrical Journal, **51**, 610-626, 2009.
 Reply to Letter to the Editor in *Biometrical Journal*, **52**, 567-569, 2010.
- Frühwirth-Schnatter, S., Frühwirth, R., Held, L. and Rue, H.
 Improved auxiliary mixture sampling for hierarchical models of non-Gaussian data.
Statistics and Computing, **19**, 479-492, 2009.
- Czado, C., Gneiting, Held, L.
 Predictive model assessment for count data.
Biometrics, **65**, 1254-1261, 2009.
- Paul, M., Held, L., Toschke, A.M.
 Multivariate modelling of infectious disease surveillance data.
Statistics in Medicine, **27**, 6250-6267, 2008.
- Gneiting, T., Stanberry, L.I., Grimit, E.P., Held, L., Johnson, N.A.
 Assessing probabilistic forecasts of multivariate quantities, with an application to ensemble predictions of surface winds.
Test, **17**, 211-235, 2008.

- Gneiting, T., Stanberry, L.I., Grimit, E.P., Held, L., Johnson, N.A.
 Rejoinder on: Assessing probabilistic forecasts of multivariate quantities, with an application to ensemble predictions of surface winds.
Test, **17**, 256-264, 2008.
- Riebler, A., Held, L., Stephan, W.
 Bayesian variable selection for detecting adaptive genomic differences among populations.
Genetics, **178**, 1817-1829, 2008.
- Soubeyrand, S., Held, L., Höhle, M. and Sache, I.
 Modelling the spread in space and time of an airborne plant disease.
Journal of the Royal Statistical Society, Series C (Applied Statistics), **57**, 253-272, 2008.
- Hennerfeind, A., Held, L. and Sauleau, E.A.
 A Bayesian analysis of relative cancer survival with geoaddivitive models.
Statistical Modelling, **8**, 117-139, 2008.
- Schmid, V. J. and Held, L.
 Bayesian age-period-cohort modeling and prediction - BAMP
Journal of Statistical Software, **21**(8), 2007.
- Sauleau, E.A., Hennerfeind, A., Buemi, A. and Held, L.
 Age, period and cohort effects in Bayesian smoothing of spatial cancer survival with geoaddivitive models.
Statistics in Medicine, **26**, 212-229, 2007.
- Dargatz, C., Georgescu, V., and Held, L.
 Stochastic modelling of the spatial spread of influenza in Germany.
Austrian Journal of Statistics, **35**, 5-20, 2006.
- Held, L., Graziano, G., Frank, C. and Rue, H.
 A joint spatial analysis of gastrointestinal infectious diseases.
Statistical Methods in Medical Research, **15**, 465-480, 2006.
- Held, L., Hofmann, M., Höhle, M. and Schmid, V.
 A two-component model for counts of infectious diseases.
Biostatistics, **7**, 422-437, 2006.
- Ranyimbo, A.O. and Held, L.
 Estimation of the false negative fraction of a diagnostic kit through Bayesian regression model averaging.
Statistics in Medicine, **25**, 653-667, 2006.
- Holmes, C.C. and Held, L.
 Bayesian auxiliary variable models for binary and multinomial regression.
Bayesian Analysis, **1**, 145-168, 2006.
 Reply to Letter to the Editor in *Bayesian Analysis*, **6**, 357-358, 2011.
- Held, L., Höhle, M. and Hofmann, M.
 A statistical framework for the analysis of multivariate infectious disease surveillance counts.
Statistical Modelling, **5**, 187-199, 2005.
- Held, L., Natario, I., Fenton, S.E., Rue, H. and Becker, N.
 Towards joint disease mapping.
Statistical Methods in Medical Research, **14**, 61-82, 2005.

- Held, L. and Vollnhals, R.
Dynamic rating of European football teams.
IMA Journal of Management Mathematics, **16**, 121-130, 2005.
- Held, L.
Simultaneous posterior probability statements from Monte Carlo output.
Journal of Computational and Graphical Statistics, **13**, 20-35, 2004.
- Schmid, V. and Held, L.
Bayesian extrapolation of space-time trends in cancer registry data.
Biometrics, **60**, 1034-1042, 2004.
- Held, L. and Ranyimbo, A.O.
A Bayesian approach to estimate and validate the false negative fraction in a two-stage multiple screening test.
Methods of Information in Medicine, **43**, 461-464, 2004.
- Crook, A., Knorr-Held, L. and Hemingway, H.
Measuring spatial effects in time to event data: A case study using months from angiography to coronary artery bypass graft (CABG).
Statistics in Medicine, **22**, 2943-2961, 2003.
- Knorr-Held, L. and Richardson, S.
A hierarchical model for space-time surveillance data on meningococcal disease.
Journal of the Royal Statistical Society, Series C (Applied Statistics), **52**, 169-183, 2003.
- Nataro, I. and Knorr-Held, L.
Non-parametric ecological regression and spatial variation.
Biometrical Journal, **45**, 670-688, 2003.
- Carvalho, M.S. and Knorr-Held, L.
Modelling discrete time survival data with random slopes: Evaluating hemodialysis centres.
Statistics in Medicine, **22**, 3543-3555, 2003.
- Knorr-Held, L., Raßer, G. and Becker, N.
Disease mapping of stage-specific cancer incidence data.
Biometrics, **58**, 492-501, 2002.
- Knorr-Held, L. and Rue, H.
On block updating in Markov random field models for disease mapping.
Scandinavian Journal of Statistics, **29**, 597-614, 2002.
- Knorr-Held, L. and Best, N.
A shared component model for detecting joint and selective clustering of two diseases.
Journal of the Royal Statistical Society, Series A, **164**, 73-85, 2001.
- Knorr-Held, L. and Rainer, E.
Projections of lung cancer mortality in West Germany: A case study in Bayesian prediction.
Biostatistics, **2**, 109-129, 2001.
- Knorr-Held, L. and Raßer, G.
Bayesian detection of clusters and discontinuities in disease maps.
Biometrics, **56**, 13-21, 2000.
- Knorr-Held, L.
Bayesian modelling of inseparable space-time variation in disease risk.
Statistics in Medicine, **19**, 2555-2567, 2000.

Giudici, P., Knorr-Held, L. and Raßer, G.
Modelling categorical covariates in Bayesian disease mapping by partition structures.
Statistics in Medicine, **19**, 2579-2593, 2000.

Knorr-Held, L.
Dynamic rating of sports teams.
The Statistician (Journal of the Royal Statistical Society, Series D), **49**, 261-276, 2000.

Knorr-Held, L. and Becker, N.
Bayesian modelling of spatial heterogeneity in disease maps with application to German cancer mortality data.
Allgemeines Statistisches Archiv (Journal of the German Statistical Society), **84**, 121-140, 2000.

Knorr-Held, L.
Conditional prior proposals in dynamic models.
Scandinavian Journal of Statistics, **26**, 129-144, 1999.

Knorr-Held, L. and Besag, J.
Modelling risk from a disease in time and space.
Statistics in Medicine, **17**, 2045-2060, 1998.

Fahrmeir, L. and Knorr-Held, L.
Dynamic discrete-time duration models.
Sociological Methodology, **27**, 417-452, 1997.

PUBLICATIONS (Substantive Research)

Huber, M., Ledergerber, B., Sauter, R. [...] , Held, L., Weber, R. and the Swiss HIV Cohort Study
Outcome of smoking cessation counselling of HIV-positive persons by HIV care physicians.
HIV Medicine, accepted.

Walitza, S., Sabanés Bové, D., Romanos, M., Renner, T., Held, L., Simons, S., Wewetzer, C., Fleischhaker, C., Remschmidt, H., Warnke, A., Grünblatt, E.
Pilot study on HTR2A promoter polymorphism, -1438G/A (rs6311) and a nearby copy number variation showed association with onset and severity in early-onset obsessive-compulsive disorder.
Journal of Neural Transmission, accepted.

Scherrer, A.U., Ledergerber, B., von Wyl, V., Böni, J., Yerly, S., Klimkait, T., Bürgisser, P., Furrer, H., Hirschel, B., Cavassini, M., Battegay, M., Vernazza, P.L., Bernasconi, E., Held, L., Günthard, H.F. and the Swiss HIV Cohort Study (SHCS)
Improved Long-Term Virological Outcome in Caucasians Infected With HIV-1 non-B subtypes compared to subtype B.
Clinical Infectious Diseases, **53**, 1143-1152.

Johansen, P., Fettelsschoss, A., Amstutz, B., Selchow, P., Waeckerle-Men, Y., Keller, P., Deretic, V., Held, L., Kündig, T.M., Böttger, E.C. and Sander, P.
Relief from Zmp1-mediated arrest of phagosome maturation is associated with facilitated presentation and enhanced immunogenicity of mycobacterial antigens
Clinical and Vaccine Immunology, **18**(6), 907-913.

- Schönbucher, V., Maier, T., Held, L., Mohler-Kuo, M., Schnyder, U., Landolt, M. A. Prevalence of Child Sexual Abuse in Switzerland: A Systematic Review *Swiss Medical Weekly*, **141**, 34-34, 2011.
- Gilomen, S., Ruef, C., Held, L., Tili, A., French, L. E., Hafner, J. Successful control of methicillin-resistant *Staphylococcus Aureus* (MRSA) outbreak at a university department of dermatology. *Journal of the European Academy of Dermatology & Venereology*, **25**, 441-446, 2011.
- Herzog, S., Paul, M., Held, L. Heterogeneity in vaccination coverage explains the size and occurrence of measles epidemics in German surveillance data. *Epidemiology and Infection*, **139**, 505-515, 2011.
- Held, L. A nomogram for *P* values. *BMC Medical Research Methodology*, 2010, **10**: 21. <http://dx.doi.org/DOI:10.1186/1471-2288-10-21>
- Bentz, S., Hausmann, M., Piberger, H., Kellermeier, S., Paul, S., Held, L., Falk, W., Obermeier, F., Fried, M., Schölmerich, J., Rogler, G. Clinical relevance of IgG antibodies against food antigens in Crohn's disease - A double blind cross-over diet intervention study. *Digestion*, **81**, 252-264, 2010.
- Höhle, M., Paul, M. and Held, L. Statistical approaches to the monitoring and surveillance of infectious diseases for veterinary public health. *Preventive Veterinary Medicine*, **91**, 2-10, 2009.
- Endrass, J., Urbaniok, F., Held, L., Vetter, S., Rossegger, A. Accuracy of the Static-99 in predicting recidivism in Switzerland. *International Journal of Offender Therapy and Comparative Criminology*, **53**, 482-490, 2009.
- Urbaniok, F., Rinne, T., Held, L., Rossegger, A., Endrass, J. Forensic risk calculation: Basic methodological aspects for the evaluation of the applicability and validity of diverse methods. (in German) *Fortschritte der Neurologie - Psychiatrie*, **76**, 470-477, 2008.
- Frank, C., Kapfhammer, S., Werber, D., Stark, K., Held, L. Cattle density and Shiga toxin-producing *Escherichia coli* infection in Germany - increased risk for most but not all serogroups. *Vector-Borne and Zoonotic Diseases*, **8**, 635-644, 2008.
- Kuster, S.P., Kuster, D., Schindler, C., Rochat, M.K., Braun, J. Held, L., Brändli, O. Reference equations for lung function screening of healthy never smoking adults aged 18-80 years. *European Respiratory Journal*, **29**, 860-868, 2008.
- Fuerst, A., Meier, D., Michel, S., Schmidlin, A., Held, L. and Laib, A. Effect of age on bone mineral density and micro architecture in the radius and tibia of horses: An Xtreme computed tomographic study. *BMC Veterinary Research*, **4**, No. 3, 2008.
- Radon, K., Gerhardinger, U., Schulze, A., Zock, J.-P., Norback, D., Toren, K., Jarvis, D., Held, L., Heinrich, J., Leynaert, B., Nowak, D., Kogevinas, M., and for the occupational

- group of the ECRHS study
Occupation and adult onset of rhinitis in the general population.
Occupational and Environmental Medicine, **65**, 38-43, 2008.
- Lopez, A.D., Shibuya, K., Rao, C., Mathers, C.D., Hansell, A.L., Held, L., Schmid, V. and Buist, S.
Chronic obstructive pulmonary disease: current burden and future projections.
European Respiratory Journal, **27**. 397-412, 2006.
- Hansell A, Held L., Best, N, Schmid, V. and Aylin, P.
Did the 1956 Clean Air Act make a difference to COPD mortality trends 1950-1999?.
Thorax, **58**, S3, 74-75, 2003.
- Staubach, C., Schmid, V., Knorr-Held, L. and Ziller, M.
A Bayesian model for spatial wildlife disease prevalence data.
Preventive Veterinary Medicine, **56 (1)**, 75-87, 2002.
- Hansell, A, Knorr-Held, L., Best, N, Schmid, V and Aylin, P.
COPD mortality trends 1950-1999 in England & Wales - Did the 1956 Clean Air Act make a detectable difference?
Epidemiology, **14 (5)**: S55, 2002.
- Hansell, A, Knorr-Held, L., and Schmid, V.
Mortality projections for obstructive lung disease in England & Wales.
Thorax, **57**, S151, 2002.

CHAPTERS AND DISCUSSIONS

- Held, L.
Bayesian Methods in Epidemiology. In: *Handbook of Epidemiology*, W. Ahrens, I. Pigeot, Editors. Springer, 2nd Edition, to appear.
- Held, L., Paul, M.
Modeling of Infectious Disease Surveillance Data. In: *Infectious Disease Surveillance*, N. M. M'ikanatha, R. Lynfield, C. A. Van Beneden, H. de Valk, Editors. Wiley, 2nd Edition, to appear.
- Held, L., Schrödle, B. and Rue, H.
Posterior and cross-validatory predictive checks: A comparison of MCMC and INLA. In: *Statistical Modelling and Regression Structures - Festschrift in Honour of Ludwig Fahrmeir*, T. Kneib, G. Tutz, Editors. Physica-Verlag, 91-110, 2010.
- Rue, H. and Held, L.
Markov random fields.
In: *Handbook of Spatial Statistics*, A. Gelfand, P. Diggle, M. Fuentes, P. Guttorp, Editors. Chapman & Hall/CRC Press, 171-200, 2010.
- Held, L. and Rue, H.
Conditional and intrinsic autoregressions.
In: *Handbook of Spatial Statistics*, A. Gelfand, P. Diggle, M. Fuentes, P. Guttorp, Editors. Chapman & Hall/CRC Press, 201-216, 2010.
- Held, L. and Riebler, A.
Discussion of Rue, H., Martino, S. and Chopin, N. (2009) "Approximate Bayesian inference for latent Gaussian models by using integrated nested Laplace approximations".
Journal of the Royal Statistical Society, Series B, **71**, 357-358, 2009.

Rousson, V., Held, L. and Held, U.

Statistische Analyse.

In: *Patientenorientierte Forschung; Einführung in die Planung und Durchführung einer Studie*, L. M. Bachmann, M. A. Puhan and J. Steurer, Editors. Bern: Hans Huber, 61-71, 2008.

Held, L.

Quantitative assessment of probabilistic forecasts with applications in epidemiology.

In: *Proceedings of the 21st International Workshop on Statistical Modelling*, J. Hinde, J. Einbeck and J. Newell, Editors. 38-49, 2006.

Held, L.

Simultaneous inference in risk assessment; a Bayesian perspective.

In: *COMPSTAT 2004 Proceedings in Computational Statistics*, J. Antoch, Editor. Heidelberg: Physica-Verlag, 213-222, 2004.

Knorr-Held, L.

Some remarks on Gaussian Markov random field models for disease mapping.

In: *Highly Structured Stochastic Systems*, P. Green, N. Hjort and S. Richardson, Editors. Oxford University Press, 260-264, 2003.

Diggle, P., Knorr-Held, L., Rowlingson, B., Su, T.-L., Hawtin, P. and Bryant, T.

On-line monitoring of public health surveillance data.

In: *Monitoring the Health of Populations: Statistical Principles and Methods for Public Health Surveillance*, R. Brookmeyer and D. Stroup, Editors. Oxford University Press, 233-266, 2003.

Fahrmeir, L. and Knorr-Held, L.

Dynamic and semiparametric models.

In: *Smoothing and Regression: Approaches, Computation and Application*, M. G. Schimek, Editor. John Wiley & Sons, New York, 513-544, 2000.

Knorr-Held, L.

Joint disease mapping.

In *The Yearbook of the Finnish Statistical Society 1999-2000*, 59-75, 2000.

M. G. Schimek and Knorr-Held, L.

Discussion of the paper "A Bayesian approach to nonparametric bivariate regression" by M. Smith and R. Kohn.

Proceedings of the 29th Symposium on the Interface, **29** (1), 250-252, 1997.

EDITORIALS

Hothorn, T., Held, L. and Friede, T.

Biometrical Journal and Reproducible Research

Biometrical Journal, **51**, 553-555, 2009.

Friede, T., Held, L.

Statistics and Life Sciences 2008 - First Conference of the Central European Network of the International Biometric Society

Biometrical Journal, **51**, 233-234, 2009.

BOOK REVIEWS

Encyclopedia of Biostatistics, 2nd Edition, Peter Armitage and Theodore Colton, Editors-in-Chief. Chichester, England, John Wiley and Sons, Inc. (2005).

In: *Biometrical Journal*, **49**, 636-637, joint with Siegfried Schach, 2007.

Bayesian Statistics VII, J.M. Bernardo, M.J. Bayarri, J.O. Berger, A.P. Dawid, D. Heckerman, A.F.M. Smith and M. West, Editors. Oxford University Press, Oxford (2004).

In: *Biometrics*, **60**, 841-842, 2004.

Spatial Statistics through Applications, J. Mateu and F. Montes, Editors. WIT Press, Southampton (2002).

In: *Metrika*, **59**, 102-103, 2004.

Statistical Models in Epidemiology, the Environment, and Clinical Trials, M. E. Halloran and D. Berry, Editors. Springer-Verlag, New York (2000).

In: *Biometrics*, **57**, 983-984, joint with Vanessa Didelez, 2001.

Analysis of Incomplete Multivariate Data by J. L. Schafer, Chapman & Hall, London (1997).

In: *Statistics in Medicine*, **19**, 1006-1008, 2000.

SELECTED INVITED PRESENTATIONS AND SEMINARS

September 2011	Statistical Modelling for Biological and Environmental Systems (SMBES) 2011 Summer School, Venice, Italy Statistical models for the temporal and spatial evolution of biomedical data
April 2011	Memorial for Julian Besag FRS, 1945-2010, Bristol, UK Bayesian Age-Period-Cohort Analysis
March 2011	InFER2011 (Inference For Epidemic-related Risk), Warwick, UK Spatio-temporal Modelling of Infectious Disease Surveillance Data
August 2010	COMPSTAT Conference, Paris, France Spatio-temporal disease mapping using INLA
June 2010	Conference on Statistical Methods for Outbreak Detection, Milton Keynes, UK A model-based view on outbreak detection.
July 2009	TIES 09 Conference, Bologna, Italy Spatio-temporal disease mapping using INLA
June 2009	Workshop on Statistical Computing, Reims, Germany INLA in action: Bayesian inference without (MCMC) tears?
June 2009	First Workshop on Spatio-temporal Disease Mapping, Valencia, Spain Spatio-temporal disease mapping using INLA
May 2008	Conference on "Statistics for Public Health Surveillance", Milton Keynes, UK Multivariate modelling of infectious disease surveillance data
January 2008	Leopoldina-Symposium "Recent Challenges for Statistics in Biosciences - 100 Years after Gustav Zeuner", Freiberg, Germany Markov Chain Monte Carlo for Bayesian Inference
August/September 2007	ISI 2007 satellite meeting, Porto, Portugal

	Modelling the spread in space and time of an airborne plant disease
August 2007	GisVet 07, Copenhagen, Denmark Statistical approaches to the temporal and spatio-temporal surveillance of infectious diseases (Keynote lecture, joint with Michael Höhle).
July 2006	21st International Workshop on Statistical Modelling, Galway, Ireland Quantitative assessment of probabilistic forecasts with applications in epidemiology.
May 2006	Bayesian Inference in Complex Stochastic Systems, Warwick, UK Quantitative assessment of probabilistic forecasts with applications in epidemiology.
October 2005	ROeS Seminar 2005, Graz, Austria “Parameter- and observation-driven space-time interaction in epidemiology”
October 2005	GEOMED 2005, Cambridge, UK “Spatial variation of underreporting in infectious disease surveillance data”
July 2005	European young statisticians training camp 25th European Meeting of Statisticians, Oslo, Norway “Statistical models and methods for spatial dependence”
April 2005	ETH Zürich, Department of Statistics, Switzerland “A two-component model for counts of infectious diseases”
August 2004	COMPSTAT 2004, Prague, Czech Republic “Simultaneous inference in risk assessment; a Bayesian perspective”
July 2004	6th World Congress of the Bernoulli Society, Barcelona, Spain “Statistical challenges in space-time surveillance of infectious diseases”
March 2004	Lancaster University, Department of Mathematics and Statistics, UK “Simultaneous posterior probability statements from Monte Carlo output”
June 2003	International Biometric Society - Nordic Regional Meeting, Uppsala, Sweden “Towards joint disease mapping”
October 2002	10th Annual Meeting der Belgian Statistical Society, Kerkrade, Netherlands “Towards on-line disease surveillance”
August 2001	ISCB 2001, Stockholm, Sweden “A hierarchical model for space-time surveillance data on meningococcal disease”
August 2001	European Meeting of Statisticians, Funchal, Madeira, Portugal “Disease mapping of stage-specific cancer incidence data”
July 2001	Mixtures 2001, Hamburg, Germany

	“A hierarchical model for space-time surveillance data on meningococcal disease”
February 2001	University of Warwick, Department of Statistics, UK “Disease mapping of stage-specific cancer incidence data”
November 2000	Highly Structured Stochastic Systems (HSSS) closing workshop Luminy, France “Some remarks on Gaussian Markov random field models for disease mapping”
October 2000	University of Bristol, Department of Mathematical Sciences, UK “Gaussian Markov random fields: Theory and applications”
June 2000	University of Kent, Institute of Mathematics, Statistics and Actuarial Science, UK “Hierarchical modelling of infectious disease incidence”
May/June 2000	International Society for Bayesian Analysis Sixth World Meeting (ISBA 2000) Heraklion, Greece “A shared component model for detecting joint and selective clustering of two diseases”
May 2000	Workshop on Hierarchical Modeling in Environmental Statistics (WHIES) Columbus, Ohio, USA Group discussion leader
February 2000	80 Years Anniversary Conference of the Finnish Statistical Society Helsinki, Finland “Joint disease mapping”
December 1999	“Analysis and interpretation of disease clusters and ecological studies” RSS International Conference, London, UK ”Shared component models for detecting joint and selective clustering of two diseases”
December 1999	Workshop “Design and analysis of infectious disease studies” Mathematical Research Institute Oberwolfach, Germany ”Hierarchical modelling of infectious disease incidence”
November 1999	<i>INFORMS</i> 1999, Philadelphia, USA ”Bayesian analysis of binomial time series with structural changes”
December 1998	International Biometric Conference (IBC) 1998, Cape Town, South Africa “Bayesian modelling of inseparable space-time variation in disease risk”
April 1998	INSERM workshop, Paris, France “Space-time models”
September 1997	ROeS Seminar 1997, Vienna, Austria “Bayesian analysis of dynamic duration models by Markov chain Monte Carlo”

PHD STUDENTS

1. Günter Raßer: Clustering Partition Models for Discrete Structures with Applications in Geographical Epidemiology. Ludwig-Maximilians-Universität München (2003)
2. Angela Mary Crook: Explaining Area Effects on Time to Coronary Revascularisation and Clinical Outcomes in Patients with Coronary Artery Disease. Imperial College London (2004)
3. Anna L Hansell: Temporal Variations in COPD Mortality in England & Wales in Relation to the 1956 Clean Air Act. Imperial College London (2004)
4. Volker Schmid: Bayesian Space-Time Modelling in Epidemiology (in German). Ludwig-Maximilians-Universität München (2004)
5. Arwings Otieno Ranyimbo: Application of Bayesian Methods in Medical Classification. Ludwig-Maximilians-Universität München (2006)
6. Mathias Hofmann: Statistical Models for Infectious Disease Surveillance Counts. Ludwig-Maximilians-Universität München (2007)
7. Andrea Riebler: Multivariate Age-Period-Cohort Models. Universität Zürich (2010)
8. Mareike Kohlmann: Discriminant Analysis for Longitudinal Data with Application in Medical Diagnostics. Ludwig-Maximilians-Universität München (2010)
9. Michaela Paul: Statistical Analysis of Multivariate Infectious Disease Surveillance Time Series. Universität Zürich (2010)
10. Birgit Schrödle: Statistical Analysis of Spatio-Temporal Veterinary Surveillance Data: Applications of Integrated Nested Laplace Approximations. Universität Zürich (2011)
11. Julia Braun, Universität Zürich
12. Daniel Sabanés Bové, Universität Zürich