

CURRICULUM VITAE

Name Assoc. Prof. Ing. Mag. Dr. Franz Rubel
Year of birth 1962
Place of birth Mödling, Austria
Citizenship Austrian

Professional address Institute for Veterinary Public Health
University of Veterinary Medicine Vienna
Veterinärplatz 1, A-1210, Wien, Austria
Tel.: 43 1 25077 3532, FAX: 43 1 25077 3590
Email: franz.rubel@vetmeduni.ac.at

EDUCATION

1969 - 1973 Primary School, Mödling/Südstadt
1973 - 1977 Realgymnasium, Mödling
1977 - 1982 Technical Highschool for Electrotechnics in Mödling (Ing.)
1982 - 1983 Federal Armed Forces
1983 - 1989 Study of Meteorology and Geophysics, University of Vienna
1989 Awarded the Masters Degree (Mag. rer. nat.)
1994 Awarded the Degree of Doctor of Science (Dr. rer. nat.) in Meteorology
2001 Habilitation in Meteorology at the Department of Natural Sciences and Mathematics, University of Vienna (Dozent)

PROFESSIONALS

1990 - 1992 Research Assistant at the Institute of Meteorology and Geophysics, University of Vienna (Project: European Acid Deposition Model)
1992 - 1994 Research Assistant at the Institute of Medical Physics, University of Veterinary Medicine Vienna
1994 - 2001 Assistant Professor
2002 Associate Professor
2008 Institute for Veterinary Public Health

MEMBERSHIPS

Austrian Meteorological Society (President 3/2008 – 3/2012)
Österr. Gesellschaft der Tierärzte (ÖGT, Chairman of the Sektion Epidemiologie)
Österreichische Gesellschaft für Herpetologie (ÖGH)

SELECTION OF PROJECTS

- 2001 - 2003 Principal investigator in the 5th Framework Programme of the European Union, Project ELDAS - *Development of a European Land Data Assimilation System to predict floods and droughts* (EESD-ENV-2000-0070).
- 2003 – 2004 *Joint Austrian-Hungarian Scientific Seminar in Epidemiology*, funded by the AKTION *Österreich-Ungarn Wissenschafts und Erziehungskooperation*.
- 2004 – 2005 *Pilot Study for Risk Assessment of Airborne Spread of Foot-and-Mouth Disease Virus*, financed by the Austrian Ministry for Health and Woman's Issues and supported by the *Profillinie 4* of the University of Veterinary Medicine Vienna.
- 2004 - 2006 Principal investigator in the 6th Framework Programme of the European Union, Project GEOLAND - *European Global Monitoring for Environment and Security (GMES)* programme, addressing the GMES priorities *Land Cover Change in Europe, Environmental Stress in Europe, and Global Vegetation Monitoring*.
- 2007 – 2008 Principal investigator in the 6th Framework Programme of the European Union, Project EPIMODEL – *Applied Stochastic Modelling in Veterinary Epidemiology*.
- 2009 - 2012 Dynamic epidemic modelling. Investigation of the application of remote sensing data for epidemic predictions within the projects *Global Monitoring of Soil Moisture for Water Hazards Assessment* (GMSM 1 and 2 founded by FFG).

SELECTION OF SCIENTIFIC ACTIVITIES

- 2000 Organisation of the International Conference on Epidemiology and Documentation (in German: *Internationale Fachtagung der Fachgruppe Epidemiologie und Dokumentation, Thema: Veterinärepidemiologie im Interesse von Tier und Mensch*), 6.-8. Sept. 2000, Vienna, Austria.
- 2001 Lecture on Modelling in Veterinary Epidemiology at the Department of Biomathematics and Informatics, Szent Istvan University, Faculty of Veterinary Science, Budapest.
- 2005 Contributions to the book *Observed Global Climate* (Series Landolt-Börnstein – Numerical Data and Functional Relationships in Science and Technology, Springer, Berlin, ISBN 3-540-20206-4) funded by the Austrian Academy of Sciences. Rubel, F., and M. Kottek: Data Management (Chapter 3) and Rudolf, B., and F. Rubel: Global Precipitation (Chapter 11).
- 2005 Formation and Editor of the Series *Austrian Contributions to Veterinary Epidemiology*.
- 3/2008 – 3/2012 President of the Austrian Meteorological Society
- 2008 - present Chairman of the *Sektion Epidemiologie* of the *Österreichische Gesellschaft der Tierärzte (ÖGT)*

References (Selection)

- Rubel, F.**, and M. Hantel, 1999: Correction of daily rain gauge measurements in the Baltic Sea drainage basin. *Nord. Hydrol.*, **30**, 191-208.
- Rubel, F.**, and M. Hantel, 2001: BALTEX 1/6 degree daily precipitation climatology 1996-1998. *Meteorol. Atm. Phys.*, **77**, 155-166.
- Jacob, D., B. J. J. M. van den Hurk, U. Andrae, G. Elgered, C. Fortelius, L. P. Graham, S. D. Jackson, U. Karstens, Chr. Köpken, R. Lindau, R. Podzun, B. Rockel, **F. Rubel**, B. H. Sass, R. N. D. Smith, X. Yang, 2001: A comprehensive model intercomparison study investigating the water budget during the BALTEX-PIDCAP period. *Meteorol. Atm. Phys.*, **77**, 19-43.
- Rubel, F.**, and B. Rudolf, 2001: Global daily precipitation estimates proved over the European Alps, *Meteorol. Z.*, **10**, 403-414.
- Raschke, E., J. Meywerk, K. Warrach, U. Andrae, S. Bergström, F. Beyrich, F. Bosveld, C. Fortelius, L. P. Graham, S.-E. Gryning, S. Halldin, L. Hasse, M. Heikinheimo, H.-J. Isemer, D. Jacob, I. Jauja, K.-G. Karlsson, S. Keevallik, J. Koistinen, A. van Lammeren, U. Lass, J. Launiainen, A. Lehmann, B. Liljebladh, M. Lobmeyr, W. Matthäus, T. Mengelkamp, D. B. Michelson, J. Napiórkowski, A. Omstedt, J. Piechura, B. Rockel, **F. Rubel**, E. Ruprecht, A.-S. Smedman, A. Stigebrandt, 2001: The Baltic Sea Experiment (BALTEX): A European contribution to the investigation of the energy and water cycle over a large drainage basin. *Bull. Amer. Meteor. Soc.*, **82**, 2389-2413.
- Ungersböck, M., **F. Rubel**, T. Fuchs and B. Rudolf, 2001: Bias correction of global daily rain gauge measurements. *Physics and Chemistry of the Earth (B)*, **26**, 411-414.
- Fuchs, T., J. Rapp, **F. Rubel**, and B. Rudolf, 2001: Correction of synoptic precipitation observations due to systematic measuring errors with special regard to precipitation phases. *Physics and Chemistry of the Earth (B)*, **26**, 689-693.
- Rubel, F.**, and M. Hantel, 2001: BALTEX precipitation analysis: Results from the BRIDGE preparation phase. *Physics and Chemistry of the Earth (B)*, **26**, 397-401.
- Rubel, F.**, P. Skomorowski, and B. Rudolf, 2002: Verification scores for the operational GPCP-1DD product over the European Alps. *Meteorol. Z.*, **11**, 367-370.
- Rubel, F.**, Th. Dangl, W. Baumgartner, and G. Windischbauer, 2003: Ein Maul- und Klauenseuchemodell für Tierseuchen-Nachrichtensysteme. *Biomed. Techn.*, **48**, E1, 480-481.
- Rubel, F.**, K. Markon, A. Hois und G. Windischbauer, 2003: Computersimulation der Seehundstaupe-Epidemien 1988 und 2002. *Biomed. Techn.*, **48**, E1, 482-483.
- Rubel, F.**, and M. Kottek, 2005: Data Management. In: Hantel, M. (Ed.): Observed Global Climate, Chapter 3 of the series Landolt-Börnstein – Numerical Data and Functional Relationships in Science and Technology, Springer, Berlin, 3.1-3.18, ISBN 3-540-20206-4.
- Rudolf, B., and **F. Rubel**, 2005: Global Precipitation. In: Hantel, M. (Ed.): Observed Global Climate, Chapter 11 of the series Landolt-Börnstein – Numerical Data and Functional Relationships in Science and Technology, Springer, Berlin, 11.1-11.53, extended online version (11.1-11.24, print version), ISBN 3-540-20206-4.
- Rubel, F.**, and K. Fuchs, 2005: A decision-support system for real-time risk assessment of airborne spread of foot-and-mouth disease virus. *Meth. Inf. Med.*, **44**, 590-595.
- Rubel, F.**, 2005: Process Models in Veterinary Epidemiology (in German). *Austrian Contributions to Veterinary Epidemiology*, **Vol. 1**, DNW, 142pp, ISBN 3-9502042-0-2.
- Harnos, A., J. Reiczigel, **F. Rubel**, and N. Solymosi, 2006: Scaling properties of epidemiological time series. *Appl. Ecol. Environ. Res.*, **4(2)**, 151-158.
- Kottek, M., J. Grieser, C. Beck, B. Rudolf, and **Rubel, F.**, 2006: World map of Köppen-Geiger climate classification updated. *Meteorol. Z.*, **15**, 259-263
- Chvala, S., T. Bakonyi, C. Bukovsky, T. Meister, K. Brugger, **F. Rubel**, N. Nowotny, and H. Weissenböck, 2007: Monitoring of Usutu virus activity and spread by using dead bird surveillance in Austria, 2003-2005. *Vet. Microbiol.*, **122**, 237-245.
- Kottek, M., and **F. Rubel**, 2007: Global daily precipitation fields from bias-corrected rain gauge and satellite observations. Part I: Design and development. *Meteorol. Z.*, **16**, 525-539.
- Mayer, D., J. Reiczigel, and **F. Rubel**, 2008: A Lagrangian particle model to predict the airborne spread of Foot-and-Mouth Disease virus. *Atm. Environm.*, **42**, 466-479.

- Rubel, F.**, K. Brugger, M. Hantel, S. Chvala, T. Bakonyi, H. Weissenböck, and N. Nowotny, 2008: Explaining Usutu virus dynamics in Austria: Model development and calibration. *Prev. Vet. Med.*, **85**, 166-186.
- Brugger, K., and **F. Rubel**, 2009: Simulation of climate change scenarios to explaining Usutu virus dynamics in Austria. *Prev. Vet. Med.*, **88**, 24-31.
- Rubel, F.**, and K. Brugger, 2009: 3-hourly quantitative precipitation estimation over Central and Northern Europe from rain gauge and radar data. *Atm. Res.*, **94**, 544-554.
- Reiczigel, J., K. Brugger, **F. Rubel**, N. Solymosi, and Z. Lang, 2010: Bayesian analysis of a dynamical model for the spread of the Usutu virus. *Stoch. Environ. Res. Risk Assess.*, **24**, 455-462.
- Rubel, F.**, and M. Kottek, 2010: Observed and projected climate shifts 1901-2100 depicted by world maps of the Köppen-Geiger climate classification. *Meteorol. Z.*, **19**, 135-141.
- Acs, F., A. Horvath, H. Breuer, and **F. Rubel**, 2010: Effect of soil hydraulic parameters on the local convective precipitation. *Meteorol. Z.*, **19**, 143-153.
- Laperriere, V., K. Brugger, and **F. Rubel**, 2011: Simulation of the seasonal cycles of bird, equine and human West Nile virus cases. *Prev. Vet. Med.*, **98**, 99-110.
- Rubel, F.**, and M. Kottek, 2011: Comments on: The thermal zones of the Earth by Wladimir Köppen (1884). *Meteorol. Z.*, **20**, 361-365.
- Jäger, W., H. Xu, K. Wlcek, C. Schüller, **F. Rubel**, and R. G. Erben, 2012: Gender- and dose-related effects of cyclosporin A on hepatic and bone metabolism. *Bone*, **50**, 140-148.
- Lebl, K., E. M. Nischler, M. Walter, K. Brugger, and **F. Rubel**, 2013: First record of the disease vector *Anopheles hyrcanus* in Austria. *J. Am. Mosq. Control Assoc.*, in press.
- Wagner, W., S. Hahn, R. Kidd,..., and **F. Rubel**, 2013: The ASCAT soil moisture product: Specifications, validation, results, and emerging applications. *Meteorol. Z.*, in press.
- Brugger, K., and **F. Rubel**, 2013: Bluetongue disease risk assessment based on observed and projected *Culicoides obsoletus* spp. vector densities. *PLoS ONE*, in press.

7 March, 2013