

## **DR. BIRGIT MÜLLER**

Head of Junior Research Group POLISES  
Helmholtz Centre for Environmental Research – UFZ Leipzig  
Department of Ecological Modelling  
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<http://www.ufz.de/index.php?en=15522>  
<http://www.polises.de>

Date of birth            February 16, 1975  
Place of birth           Halle/Saale  
Family status           Two children (7 and 10 years old)

### **FIELDS OF EXPERTISE**

modelling of social-ecological systems under global change, social-ecological interactions in agricultural systems, food security, analysis and management of climate risks to natural resources, modelling of human decisions, side effects of institutional and technological change, educational environmental games.

### **EDUCATIONAL DEGREES**

PhD (Dr.rer.nat.) in Applied Systems Science, 2006, Faculty of Mathematics and Computer Science, University of Osnabrück, Title: "Sustainable grazing management in semi-arid rangelands. An ecological-economic modelling approach", Final grade: summa cum laude.

Diploma in Economic Mathematics (Dipl. Wirtsch. Math.), 2000, University of Leipzig, Diploma thesis: "Multi-criteria approaches for an optimization problem in the socio-cultural sector"

### **EDUCATION AND WORK EXPERIENCE**

Since 08/2014            Head of Junior Research Group POLISES "Global food security policies and their social-ecological side effects in regions prone to global change" funded by the BMBF, Call: Global Change 4+1) ([www.polises.de](http://www.polises.de))

2008-2014                PostDoc at Helmholtz Centre for Environmental Research – UFZ, Department of Ecological Modelling, and at Collaborative Research Centre SFB 586 "Difference and Integration" of the Universities of Leipzig and Halle funded by DFG.

03/2009-03/2010        Maternity leave.

2004-2007                Researcher in the interdisciplinary Junior Research Group "Ecological Economics: Modelling and conceptual foundation, with an example of grazing in semi-arid regions" funded by Volkswagen Foundation, program: interdisciplinary environmental research, joint project of UFZ and University of Heidelberg.

08/2006-09/2007        Maternity leave.

- 2002-2006 PhD student at Helmholtz Centre for Environmental Research – UFZ, Department of Ecological Modelling and Institute of Environmental Systems Research at the University of Osnabrück.
- 2001-2002 “Year of Qualification for the Environment” including internship at Helmholtz Centre for Environmental Research – UFZ, Department of Ecological Modelling, Duration 8 months.
- 1996-1997 Studies of Mathematics at the University of Rennes I (France), ERASMUS Program.
- 1993-2000 Studies of Economic Mathematics (Wirtschaftsmathematik) at the University of Leipzig, Specialization: Optimization; Environmental Management.

## RESEARCH GRANTS AND AWARDS

Grant for BMBF Junior Research Group "POLISES: Global food security policies and their social-ecological side effects in regions prone to global change" of the German Federal Ministry of Education and Research (BMBF-01LN1315A), 1.3 Mio €, 2014 – 2018 (until 2019 depending on positive mid-term evaluation, <http://www.polises.de>).

DFG-Project “Effects of microinsurance on informal safety nets and on strategies for natural resource use – a model-based analysis” (Role: PI), 204.000€, 2017-2020.

BMBF Programme BIOTIP “Understanding and Managing Desertification Tipping Points in Dryland Social-Ecological Systems – A Namibian Perspective (NamTip)”, Pre-Phase, (Role: Project partner, PI: Anja Linstädter, University of Cologne) 230.000€, 2017.

BMBF: German-Moroccan Scientific and Technological Cooperation (PMARSIII) “MULTIPP- Detecting and understanding hydro-climatic, ecological and socio-ecological tipping points: A multi-scale study at the Moroccan desert margin”, (Role project partner, PI: Christoph Zielhofer University Leipzig, Physical Geography, 104.000 €, Jan-Dec 2017.

Active participation in successful proposal completion for Collaborative Research Centre 586 "Difference and Integration", 462.000 €, 2008.

PhD grant of German Academic Exchange Service (DAAD) for short-term research stay in Namibia, 2.000€, 2003.

## PUBLICATIONS

Groeneveld, J., **Müller, B.**, Buchmann, C.M., Dressler, G., Hase N., Hoffmann, F., John, F., Guo, C., Klassert, C., Lauf, T., Liebelt, V., Nolzen, H., Pannicke N., Schulze J., Weise, H. & N. Schwarz (2017). Theoretical foundations of human decision-making in agent- based land use models – a review. *Environmental Modelling & Software* 87, 39-48. (IF: 4.4).

Schlüter, M., Schwarz, N., Orach, K., Baeza, A., Dressler, G., Frank, K., Groeneveld, J., Jager, W., Janssen, M., McAllister, R., **Müller, B.**, & N. Wijermans (2017): A framework for mapping and comparing behavioral theories in models of social-ecological systems. *Ecological Economics* 131, 21-35. (IF: 2.7).

- Sun, Z., Lorscheid, I., Millington, J.D., Lauf, S., Magliocca, N.R., Groeneveld, G, Balbi, S., Nolzen, H., **Müller, B.**, Schulze, J. & C.M. Buchmann (2017): Simple or complicated agent-based models? A complicated issue. *Environmental Modelling & Software* 86, 56-67 (IF: 4.4).
- Dressler, G., **Müller, B.**, Frank, K. & C. Kuhlicke (2016). Towards thresholds of disaster management performance under demographic change: exploring functional relationships using agent-based modeling. *Nat. Hazards Earth Syst. Sci.* 16 (10), 2287-2301.
- Martin, R., Linstädter, A., Frank, K. & **B. Müller** (2016). Livelihood security in face of drought — Assessing the vulnerability of pastoral households. *Environmental Modelling and Software* 75 414-423 (IF: 4.4).
- Müller, B.** & Kreuer, D. (2016). Ecologists Should Care about Insurance, too. *Trends in Ecology and Evolution* 31(1) 1-2 (IF: 16.2).
- Schulze, J. Frank, K. & **B. Müller** (2016). Governmental response to climate risk: Model-based assessment of livestock supplementation in drylands. *Land Use Policy* 54 47-57 (IF: 2.6).
- Müller, B.**, Schulze, J., Kreuer, D., Linstädter, A. & K. Frank (2015). How to avoid unsustainable side effects of managing climate risk in drylands — The supplementary feeding controversy. *Agricultural Systems* 139 153-165 (IF: 2.9).
- Haila, Y., Henle, K., Apostolopoulou, E., Cent, J., Framstad, E., Görg, C., Jax, K., Klenke, R., Magnusson, W.E., Matsinos, Y., **Müller, B.**, Paloniemi, R., Pantis, J., Rauschmayer, F., Ring, I., Settele, J., Similä, J., Touloumis, K., Tzanopoulos, J. & G. Pe'er (2014). Coming Across and Coping with Uncertainty in Biodiversity Research and Praxis. *Nature Conservation* 8 45-75.
- Jakoby, O., Quaas, M., **Müller, B.**, Baumgärtner, S. & K. Frank (2014). How do farmers' objectives and climate variability influence rotational grazing management? *Journal of Applied Ecology* 51(2) 483-493 (IF: 4.6).
- Martin, R., **Müller, B.**, Linstädter, A. & K. Frank (2014). How much climate change can pastoral livelihoods tolerate? Modelling rangeland use and evaluating risk. *Global Environmental Change* 24 183–192 (IF: 5.1).
- Müller, B.**, Balbi, S., Buchmann, C.M., de Sousa, L., Dressler, G., Groeneveld, J., Klassert, C.J., Le, Q.B., Millington, J.D.A., Nolzen, H., Parker, D.C., Polhill, J.G., Schlüter, M., Schulze, J., Schwarz, N., Sun, Z., Taillandier, P. & H. Weise (2014). Standardised and transparent model descriptions for agent-based models: Current status and prospects. *Environmental Modelling & Software* 55(0) 156-163 (IF: 4.4).
- Speybroeck, N., Van Malderen, C., Sam Harper, S., **Müller, B.** & B. Devleeschauwer (2014). Simulation models for socioeconomic inequalities of health: A systematic review. *International Journal of Environmental Research and Public Health* 10(11) 5750-5780 (IF: 2.1).
- Müller, B.**, Bohn, F., Martin, R., Dressler, G., Groeneveld, J., Klassert, C., Schlüter, M., Schulze, J., Weise, H., & N. Schwarz (2013). Describing human decisions in agent-based models - ODD+D, an extension of the ODD protocol. *Environmental Modelling & Software* 48(0) 37-48 (IF: 4.4).
- Schlüter, M., McAllister, R.R.J., Arlinghaus, R., Bunnefeld, N., Eisenack, K., Hölker, F., Milner-Gulland, E.J., **Müller, B.**, Nicholson, E., Quaas, M. & M. Stöven (2012). New horizons for managing the environment: A review of coupled social-ecological systems modeling. *Natural Resource Modeling* 25(1): 219-272 (IF: 1.2).
- Müller, B.**, Quaas, M.F., Frank, K. & S. Baumgärtner (2011). Pitfalls and Potential of Institutional Change: Rain-Index Insurance and the Sustainability of Rangeland Management. *Ecological Economics* 70, 2137-2144 (IF: 2.7).

Baumgärtner, S., Becker, C., Frank, K., **Müller, B.** & M.F Quaas (2008). Relating the philosophy and practice of ecological economics. The role of concepts, models and case studies in inter- and transdisciplinary sustainability research. *Ecological Economics* 67(3), 384-393 (IF: 2.7).

**Müller, B.**, Frank, K. & C. Wissel (2007). Relevance of rest periods in non-equilibrium rangeland systems - a modelling analysis. *Agricultural Systems* 92: 295-317 (IF: 2.9).

**Müller, B.**, Linstädter, A., Frank, K., Bollig, M. & C. Wissel (2007). Learning from local ecological knowledge: Modeling the pastoral-nomadic range management of the Himba, Namibia. *Ecological Applications* 17(7): 1857–1875 (IF: 4.1).

Quaas, M., Baumgärtner, S., Becker, C., Frank, K. & **B. Müller** (2007). Uncertainty and sustainability in the management of rangelands. *Ecological Economics* (62): 251-266 (IF: 2.7).

Grimm, V., Berger, U., Bastiansen, F., Eliassen, S., Ginot, V., Giske, J., Goss-Custard, J., Grand, T., Heinz, S., Huse, G., Huth, A., Jepsen, JU., Jørgensen C., Mooij, W.M., **Müller, B.**, Pe'er, G., Piou, C., Railsback, S.F., Robbins, A.M., Robbins M.M., Rossmannith E., Rüger N., Strand E., Souissi, S., Stillman, R.A., Vabø, R., Visser, U. & D.L. DeAngelis (2006). A standard protocol for describing individual-based and agent-based models. *Ecological Modelling* 198 (1-2): 115-126 (IF: 2.3).

#### **MONOGRAPHS / BOOK CHAPTERS**

Frank, K., Baumgärtner, S., Becker, C., **Müller, B.** & M. Quaas (2006). Ecological-economic models for sustainable grazing in semi-arid rangelands: between concepts and case studies, In: H. Leser, (Ed.), *The Changing Culture and Nature of Namibia: Case Studies*, Basler Afrika Bibliographien, Basel and Windhoek, 171-176.

**Müller, B.** (2006) Sustainable grazing management in semi-arid rangelands. An ecological-economic modelling approach. PhD Dissertation 02/2006, UFZ Centre for Environmental Research Leipzig-Halle, ISSN 1860-0387.

#### **OTHER PEER-REVIEWED PUBLICATIONS (SELECTION)**

Drees, R., Linstädter, A., Frank, K. & **B. Müller** (2012). Which household tolerates droughts? - Strategies to secure pastoral livelihoods. Proceedings of the iEMSs Fifth Biennial Meeting: International Congress on Environmental Modelling and Software (iEMSs 2012). International Environmental Modelling and Software Society, Leipzig, Germany, July 2012, pages 8.

Dressler, G., **Müller, B.** & K. Frank (2012). Mobility – a panacea for pastoralism? An ecological-economic modelling approach. Proceedings of the iEMSs Fifth Biennial Meeting: International Congress on Environmental Modelling and Software (iEMSs 2012). International Environmental Modelling and Software Society, Leipzig, Germany, July 2012, pages 8.

Groeneveld, J., **Müller, B.**, Angermüller, F., Drees, R., Dressler, G., Klassert, C., Schlüter, M., Schulze, J., Weise, H. & N. Schwarz (2012). Proceedings of the iEMSs Fifth Biennial Meeting: International Congress on Environmental Modelling and Software (iEMSs 2012). International Environmental Modelling and Software Society, Leipzig, Germany, July 2012 pages 5.

**Müller, B.**, Breuer, I., Kreuer, D., Mahdi, M. & K. Frank (2011). New Institutions and Technologies to Cope with Risk in Pastoral Systems – Pitfalls and Chances, Tropentag 2011, Book of Abstracts Biophysical and Socio-economic Frame Conditions for the Sustainable Management of Natural Resources: International research on food security, natural resource management and rural development, Hamburg. (ed. by Eric Tielkes), ISBN: 978-3-9801686-7-0.

Jakoby, O., Quaas, M.F., **Müller, B.** & K. Frank (2010). Risk management in an uncertain environment. A study from semi-arid grazing systems. 8 pages. In Proceedings: International Congress on Environmental Modelling and Software (iEMSs) 2010, Ottawa, Canada (eds. by D.A. Swayne, W. Yang, A. A. Voinov, A. Rizzoli, T. Filatova).

### **INTERNATIONAL AND NATIONAL COOPERATIONS (SELECTION)**

SESYNC-UFZ-IDiv funded international Project Group: “Synthesis of micro-scale human decision making to mitigate risks to ecosystem services” (PI: Maja Schlüter, Stockholm Resilience Centre & Marco Janssen, Arizona State University, since 2014, ongoing).

NSF funded Research Coordination Network: “Bridging Communities and Scales Through a Global Transdisciplinary Mountain Sustainability Network” (PI: Julia Klein, Colorado State University, Co-PIs: Anne Nolin, Oregon State University, Catherine Tucker, Indiana University, together with Sandra Lavorel, Grenoble, Grêt-Regamey, ETH), 2014 –2019.

CGIAR Institute ILRI Nairobi (International Livestock Research Institute, Munenobu Ikegami, Andrew Mude, Lance Robinson)

CGIAR Institute IFPRI (International Food and Policy Research Institute, Washington), New York University (Andrew Bell)

Leibniz Institute of Agricultural Development in Transition Economies IAMO (Zhanli Sun)

University of Hannover, Institute of Development and Agricultural Economics (Susan Steiner)

### **PLANNING & ORGANISATION OF INTERNATIONAL CONFERENCES/WORKSHOPS/ SUMMERSCHOOLS**

International Summer School „How to model human decision making in social-ecological agent-based models”, a SESYNC-UFZ-sDiv Initiative, Kohren-Sahlis, July 5–10, 2015, 10 days (Conceptual preparation, coordination and teaching).

Member of organising team for the conference session and workshop: “Human decisions in agent-based models for natural resource use” at the International Congress on Environmental Modelling and Software iEMSs, Leipzig, July 1-5, 2012.

Leader of the organisation team for the Seminar and Workshop: “Inter- and transdisciplinary research on sustainable resource use - Experiences, methods and instruments”, at the Helmholtz Centre for Environmental Research – UFZ, Leipzig, 45 international participants, January 30 – February 1, 2009.

Member of local and scientific organisation team of the 7th conference of the European Society for Ecological Economics at the Helmholtz Centre for Environmental Research – UFZ, Leipzig, 370 international participants, June 5 – 8, 2007.

### **INVITED ORAL PRESENTATIONS / INVITED PARTICIPATION AT INTERNATIONAL WORKSHOPS (SELECTION)**

International Workshop ‘Theoretical foundations and empirical specification of decision rules in agricultural agent-based modelling approaches: Current state and future prospects’ organised by Agricultural Economics and Policy Group of ETH Zurich (January 26-27, 2017).

Keynote Speaker at Seminar “Insurance, finance and the biosphere” in the Programme “Global Economic Dynamics and the Biosphere” of the Royal Swedish Academy of Sciences, April 6, 2016.

Policy and Academic Workshop: Mobile Pastoralism, Index Insurance, Computational Sustainability and Policy Innovations for the Arid and Semi-arid Lands of East Africa, International Livestock Research Institute (ILRI), Nairobi, Kenya, June 08-10, 2015.

MRI Synthesis Workshop: “Building Resilience of Mountain Social-Ecological Systems to Global Change”, Fort Collins, Colorado (US), May 21-25, 2012.

International Workshop: “Modelling Social-ecological Systems”, Leibniz Institute of Freshwater Ecology and Inland Fisheries Berlin, December 15-16, 2010.

### **INVITED PRESENTATIONS AT UNIVERSITIES / RESEARCH INSTITUTIONS (SELECTION)**

Oregon University, Geography Department (planned April 2017).

University of Leipzig, Institute of Biology, February 7, 2017.

Arizona State University, Tempe, US, January 9, 2017

University of Leipzig, Institute of Geography, December 14, 2016.

University of Potsdam, Plant Ecology and Nature Conservation, December 12, 2016.

Stockholm Resilience Centre, Sweden, April 6, 2016.

TU Munich, Agricultural Production and Resource Economics, Socio-economic Colloquium, January 12, 2016.

International Food Policy Research Institute, Washington, US, October 28, 2014.

International Research Institute for Climate and Society (IRI), Columbia University, New York, US, October 27, 2014.

Institut Agronomique et Vétérinaire Hassan II, Rabat, Morocco, November 9, 2008.

### **ORAL PRESENTATIONS AT INTERNATIONAL CONFERENCES AND WORKSHOPS (SELECTION)**

International Workshop “Agent-based modeling in Ecological Economics – A useful tool or just a fancy gadget” Berlin, Germany, Mai 2016.

Tropentag 2015: International Research on Food Security, Natural Resource Management and Rural Development, Berlin, Germany, 2015.

Global Land Project Open Science Meeting ‘Land transformations: between global challenges and local realities’, Berlin, Germany, 2014.

Tropentag 2013: International Research on Food Security, Natural Resource Management and Rural Development, Hohenheim, Germany, 2013.

The 2012 Research Conference on Microinsurance, University of Twente, Netherlands, 2012.

Tropentag 2011: International Research on Food Security, Natural Resource Management and Rural Development, Bonn, Germany, 2011.

European Society for Ecological Economics, Istanbul, Turkey, 2011.

Resilience 2011: Resilience Innovation and Sustainability: Navigating the Complexity of Global Change, Tempe, Arizona, USA, 2011.

ESF-Africa Frontier Research Conference: Dynamic interlinkages between social and ecosystem changes: Towards an Europe Africa Partnership, Hulshout, Netherlands, 2010.

EURECO (European Ecological Federation) - GFOE, Leipzig, Germany, 2008.

BIOECON Conference "Economics and Institutions for Biodiversity Conservation", Cambridge, GB, 2007.

European Society for Ecological Economics, Leipzig, Germany, 2007.

Economics of Poverty, Environment and Natural Resource Use, Wageningen, Netherlands, 2006.

European Society for Ecological Economics, Lisbon, Portugal, 2005.

Tropical Savannas & Seasonal Dry Forests, Edinburgh, GB, 2003.

Frontiers 2 – European Applications in Ecological Economics, Tenerife, Spain, 2003.

## **REVIEWER FOR INTERNATIONAL JOURNALS**

Agricultural Economics, Agriculture Ecosystems & Environment, American Journal of Agricultural Economics, Ecological Complexity, Ecological Economics, Ecology & Society, Environmental Modelling and Software, Journal of Applied Ecology, Journal of Arid Environments, Journal of Biogeography, Journal of Environmental Management, Landscape Ecology, World Development.

## **REVIEWER FOR FUNDING AGENCIES, POLICY REPORTS AND PHD THESES**

Agence Nationale de Recherche (France) for Collaborative Research Projects involving Enterprises in Theme: "Ecosystem dynamics to improve their sustainable management" (2016).

IUCN "Technical Guide on Implementing the Voluntary Guidelines on responsible Governance of Tenure of Land, Fisheries and Forests in Pastoral Areas" (2015).

PhD-Proposal of Graduate School of Wageningen Institute for Environment and Climate Research (WIMEK) (2015).

FAO – HLPE e-consultation: Report on Sustainable Agricultural Development for Food Security and Nutrition, Including the Role of Livestock (2015).

External reviewer for PhD Thesis at Institute for Food and Resource Economics, Rheinische Friedrich-Wilhelms-Universität Bonn (2015).

## **TEACHING EXPERIENCE**

### **INTERNATIONAL**

Winter School "How to Model Human Decision-Making in Social-Ecological Agent-Based Models". Arizona State University, Jan 2-7 2017, full time (Lecture und project supervision).

International course „Teaching Individual/Agent-based Modeling“ lead by Prof. Volker Grimm & Prof. Steve Railsback, Helmholtz Centre for Environmental Research – UFZ, Leipzig, September 15-19, 2014 (Lecture).

International GrassNet Summerschool „Modelling approaches to support grassland management“ at DITSL – German Institute for Tropical and Subtropical Agriculture supported by DAAD, Witzenhausen, September 18-29, 2012, one full day (Lecture).

Summer-School "Identification and modelling of controls in marine ecosystems", Dragerup field station, Denmark, June 18 – 28, 2006, three days (Lecture und project supervision in part "Individual-based modelling").

ALARM Graduate Training Course: "Models in Risk Assessment to Biodiversity", Helmholtz Centre for Environmental Research – UFZ, Leipzig, April 26 – May 5, 2004, full time (Lecture und project supervision).

## **NATIONAL**

Lecture Master-Module "Sustainability" University Osnabrück (led by Prof. Claudia Pahl-Wostl, May 24, 2016).

Lecture at UFZ-Winter-School in Ecological Modelling, Helmholtz Centre for Environmental Research – UFZ, Leipzig, Kohren-Sahlis, 10-Days-Course, February/March 2014 (one day).

Project supervision at UFZ-Winter-School in Ecological Modelling, Helmholtz Centre for Environmental Research – UFZ, Leipzig, Kohren-Sahlis, 10-Days-Course, February/March 2005 (whole time).

Project supervision at UFZ-Winter-School in Ecological Modelling, Helmholtz Centre for Environmental Research – UFZ, Leipzig, Kohren-Sahlis, 10-Days-Course, February/March 2004 (whole time).

Teaching (lecture und project supervision) in course „Modelle in der Ökologie: Neuere Ansätze zu Modellbildung und -analyse“, Part of Study Program "Computational Science - Informatik in den Naturwissenschaften", University of Osnabrück, September 29 – October 10, 2003 (whole time, led by Prof. Karin Frank).

## **MENTORING PHD STUDENTS**

Meike Will, Title: „Effects of microinsurance on informal safety nets and on strategies for natural resource use – a model-based analysis“ (ongoing).

Felix John, Title: „Social-ecological impacts of financial risk-coping instruments for East African smallholders“, Institute of Environmental Systems Research at the University of Osnabrück (ongoing).

Gunnar Dressler, Title: „Analyzing resource use decisions under global change by agent-based modelling“, Institute of Environmental Systems Research at the University of Osnabrück (ongoing).

Romina Drees, Title: „The role of key resources to ensure livelihood security and ecological sustainability – a range management modeling study“ at the University of Cologne, Botanical Institute (2009-2013, finished).

## **MENTORING OF MASTER'S AND BACHELOR STUDENTS**

Diploma and Master Theses: Hendrik Gelsmann-Kaspers (University of Osnabrück, Institute for Environmental Systems Research, ongoing), Falk Hoffmann (University of Tübingen, Institute of Physics, 2014, finished); Jule Schulze (University of Greifswald, Department of Mathematics and Computer Science, 2012, finished);

Bachelor Thesis: Mads Hoffmann University of Leipzig, Institute for Geography (2014, finished).



## **FURTHER EDUCATION IN THE INTER- AND TRANSDISCIPLINARY DOMAIN**

Accomplishment of Online Course on “Social and Economic Networks: Models and Analysis” provided by Stanford University in 2013.

Participation at Winter School “Science meets practice” organised by the Competence Centre Environment and Sustainability of the ETH Zurich, Switzerland, January 9 – 13 and February 6- 10, 2012.

Participation at First International Winter School: Physics of socio-economic systems, University of Konstanz, Germany, February 15 – 22, 2004.

## **SOFTWARE AND PROGRAMMING SKILLS**

C++, Statistic Software R, Netlogo, Mathematica, Matlab, ArcGIS.

## **FOREIGN LANGUAGES**

English                      fluent in speaking and writing.

French                        fluent in speaking and writing (Diplome d'études en langue française).

Russian                      basic level, Intensive Language Course in St. Petersburg, Certificate: „Russian Resound“.

## **ENGAGEMENT IN UFZ COMMITTEES AND CROSS-DEPARTMENTAL ACTIVITIES**

Member of the Working Group “Postdocs” of the Scientific and Technical Council of the Helmholtz Centre for Environmental Research – UFZ, since 2014.

Representative of the doctoral students at the Helmholtz Centre for Environmental Research – UFZ, Organisation of two PhD seminars outside of Leipzig for several days, 50 participants, 2003 – 2004.

Leipzig, February 14, 2017