

## Curriculum Vitae Judit Lienert, Dr. sc. nat.

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<http://www.eawag.ch/en/department/ess/main-focus/decision-analysis-da/>

Researcher ID: <https://orcid.org/0000-0003-1925-3895>; Web of Science: [B-1138-2013](#); [Google scholar](#)

### Education / Titles / Further education

2017 Certificate of Advanced Studies FHNW (CAS) Leadership in Science. Windisch, Switzerland  
 2002 Doctoral degree in natural sciences (Dr. sc. nat.), Faculty of Science, University of Zürich, Switzerland. Title of thesis: "Population biology of wetland plants in fragmented landscapes"  
 2000 Diploma in biology, University of Zürich, Switzerland  
 1993 Adults high school (Eidg. Matura Typus B; Kant. Maturitätsschule f. Erwachsene, KME), Zürich, Switzerland  
 1988 Diploma in boat building, City & Guilds London, Internat. Boatbuilding Training Centre, IBTC, Lowestoft, UK  
 1986 Diploma in general nursing (Allgemeine Krankenpflege, AKP), Krankenpflegeschule Zürich, Switzerland

### Academic employment / Institutional responsibilities

2013–current Cluster leader Decision Analysis, Dept. of Environmental Social Sciences (ESS), Eawag, Dübendorf  
 2022 Visiting researcher Finnish Environment Institute (SYKE), Helsinki, Finland  
 2018 Department head ad interim, Dept. of Environmental Social Sciences (ESS), Eawag  
 2009–2013 Group leader Decision Analysis, Dept. Systems Analysis, Integrated Assessm. & Modelling (Siam), Eawag  
 2010 Visiting researcher Inst. Resources, Environ. & Sustain. (IRES), Univ. British Columbia (UBC), Vancouver CA  
 2007–2009 Senior scientist, Departments Siam and Urban Water Management (UWM), Eawag  
 2001–2007 Researcher and co-project leader of the transdisciplinary project Novaquatis, Department UWM, Eawag

### Research interests

- Methodologically, the main focus is on Multi-Criteria Decision Analysis (MCDA) in environmental decision problems:
  - problem structuring (e.g. stakeholder analysis, creativity techniques, building objectives hierarchies)
  - elicitation of stakeholder preferences (e.g. interviews, surveys, group decision-making workshops)
  - behavioral (psychological) aspects (e.g. biases when eliciting weights from people, online elicitation)
  - dealing with uncertainty (e.g. scenario planning, sensitivity analyses, Multi-Attribute Utility Theory, MAUT)
- Simplify decision processes to increase their practicability
- Interdisciplinary approaches to integrate facts (scientific evidence) and stakeholders' subjective values
- Transdisciplinary approaches to involve stakeholders in applied projects about complex environmental decisions
- Application fields are urban water management, river management, flood risk research, sustainable agriculture

### Publications

- Full list of publications: <https://www.eawag.ch/en/aboutus/portrait/organisation/staff/profile/judit-lienert/show/>
- Currently 59 publications listed in Web of Science, H-index 30, 2'409 citing articles ([WOS](#), 27.09.2022)

### Awards

- Haag, Reichert, P., Maurer, M., Lienert, J. Decision Analysis Society, [DAS. of INFORMS Student Paper Award 2020](#). Integrating uncertainty of preferences and predictions in decision models. [Jenvman 252: 109652-109652](#).
- Haag, F., Lienert, J., Schuwirth, N., Reichert, P. [OMEGA Best Paper Award 2019](#): Identifying non-additive multi-attribute value functions based on uncertain indifference statements. [OMEGA 85: 49-67](#).
- Marttunen, M., Lienert, J., Belton, V. [EURO Award for Best EJOR Paper 2019](#). Structuring Problems for Multi-Criteria Decision Analysis in practice: A literature review of method combinations. [EJOR 263: 1-17](#).
- Larsen, T.A., Lienert J. [Swiss academies award for transdisciplinary research 2008](#), td-net and Stiftung Mercator Schweiz, given to the project [Novaquatis](#).
- Lienert, J. [Semester Award](#) 1998 University of Zürich for Semester Thesis "Plant populations in fragmented habitats"

### Scientific boards, committees, reviewing activities

- 2017–current: Member management board of [EURO working group on Behavioral OR](#)
- 2016–current: Member advisory board of Swiss Academic Society for Environmental Research and Ecology ([SAGUF](#))
- 2012–current: Member editorial board of [EURO Journal on Decision Processes](#)
- 2001–current: Reviewer for various journals, including: Ecological Indicators, Environmental Reviews, Environmental Science & Technology, EURO Journal on Decision Processes, European Journal of Operational Research, Journal of Environmental Management, Journal of Multi-Criteria Decision Analysis, Operation Research Perspectives, Risk Analysis, Urban Water Journal, Plos One, Water Policy, Water Research
- 2021–2023: Core jury member for the [EURO Award for the Best EJOR Paper](#) (EABEP)
- 2018–2019: Lienert, J., Linkov, I. Guest Editors of [Feature Issue on Environmental Decisions](#). EJDP 7(3-4): 151-386.
- 2015–2017: Member [working group “Einzugsgebietsmanagement”](#) (integrated catchment management) Wasser-Agenda 21

### Active memberships in scientific societies

[EURO](#) (Assoc. Europ. Operational Res. Societies), [GOR](#) (Gesellsch. Operations Res.), [INFORMS](#) (Inst. for Operations Res. and Managem. Sciences), [MCDM](#) (Intern. Soc. on Multiple Criteria Decision Making), [SVOR](#) (Swiss Operations Res. Soc.)

### Teaching

- 2011–current: Multi-Criteria Decision Analysis, ETH Zürich, Dept. Environm. Sciences, yearly (SS) 701-1522-00L
- 2014–current: Introduction to MCDA in: Advanced Environmental, Social and Economic Assessments, ETH Zürich, Dept. Civil, Environmental & Geomatic Engineering, Chair Ecological Systems Design, yearly (AS) 102-0317-00L

### Current research projects (funding in brackets)

- 2021–current: TRAPEGO: Transformation in [pesticide governance](#) (Swiss National Science Foundation, [Sinergia](#))
- 2021–current: MOVE-NBS: Evaluation of tools for strategic planning of [blue-green infrastructure](#) (EC [Marie S.-Curie Action](#))
- 2018–current: EDANAGA: Environmental decision analysis with [games](#) (Swiss National Science Foundation, [Ambizione](#))

### Main completed research projects (funding in brackets)

- 2018–2021: FANFAR: Operational [flood forecasting and alerts in West Africa](#) ([EU Horizon 2020](#) Research & Innovation)
- 2018–2020: [Fairness](#) in the planning of new wastewater infrastructures (Eawag internal)
- 2016–2020: Decision-making for [wastewater infrastructure transitions](#) ([Environmental Agency canton Solothurn](#))
- 2015–2019: [Value-focused planning](#) of wastewater infrastructures (Eawag discretionary funds)
- 2015–2017: [Serious games](#) as an element of Multi-Criteria Decision Analysis ([Eawag postdoctoral fellowship](#))
- 2015–2017: Improving [problem structuring](#) in Multi-Criteria Decision Analysis (Eawag internal)
- 2010–2014: SWIP: Sustainable [water infrastructure](#) planning (Nat. Res. Progr. NRP 61, [Sustainable water management](#))
- 2010–2011: Valuing adaptation to [climate change risks](#) in the water sector ([Federal Office for the Environment](#), FOEN)
- 2008–2010: How to handle [hospital wastewater](#) (Eawag discretionary funds)
- 2007–2014: A decision analysis approach to [river rehabilitation](#) (Eawag internal)
- 2001–2007: [Novaquatis](#) – A transdisciplinary research project about urine source separation as a new element in wastewater management (cross-cutting Eawag research project and many third party funds)

### Supervision summary

7 postdocs, 4 PhD students (2 awards for PhD-publications F. Haag 2019/2020, Otto Jaag water protection price 2014 for PhD Lisa Scholten), 11 scientific assistants (master degree), 2 master thesis supervisions, 5 semester thesis/internships

### Major scientific achievements and outreach

- Currently, 59 peer-reviewed papers in recognized scientific journals, some highly cited / several academic awards
- Co-editor of book: Larsen, T.A., Udert, K.M., Lienert, J. (eds.) (2013) Source Separation and Decentralization for Wastewater Management. IWA publishing, London, UK. ISBN 9781843393481, <https://doi.org/10.2166/9781780401072>
- Project PI or work package PI in 13 research projects; third party funding includes SNSF, EU Horizon 2020, FOEN
- Mentored around 30 scientific collaborators, including 7 postdocs, 4 PhD students (2 receiving awards of excellence)
- Many international conference presentations/session chair including invited talks (keynote speaker [EURO 2021](#)), organizer of EURO Working Group Behavioral OR ([EWG-BOR meeting 2018](#)), session chair EWG-BOR [summer school 2021](#)
- Stakeholder participation in inter-/transdisciplinary projects, [Swiss academies award for transdisciplinary research 2008](#)
- Real-world outreach includes many publications in expert journals/reports for agencies, organizer of many Swiss and international stakeholder workshops, interviews (newspaper, TV), and videos (see full publication list and [homepage](#))