Prof. Dr. Adrienne Grêt-Regamey – Curriculum Vitae

PERSONAL DETAILS

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Name	Adrienne Grêt-Regamey	
Date of birth	August 18th, 1973	
Family	Married, two sons	
Citizenship	Swiss	
Contact	gret@ethz.ch, + 41 79 667 53 31	
Researcher ID	https://orcid.org/0000-0001-8156-9503	
Website	http://www.plus.ethz.ch/	
Education and key qualifications		
2007	PhD in Environmental and Landscape Planning, Department of Civil,	
	Environmental and Geomatic Engineering, ETH Zurich, Switzerland and	
	Environmental and Societal Impact Group, NCAR, USA	
1999	Diploma as Biology and Environmental Sciences Teacher (Höheres	

Lehramt), ETH Zurich, Switzerland

1998Master in Environmental Sciences (Dipl. Natw. ETH), Department of
Environmental Sciences, ETH Zurich, Switzerland

Current position

2014 – ongoing	Full Professor, Planning of Landscape and Urban Systems (PLUS), Institute
	for Spatial and Landscape Planning, Department of Civil, Environmental and
	Geomatic Engineering, ETH Zurich, Switzerland

Previous positions

2008 - 2014	Associate Professor, Institute for Spatial and Landscape Planning, Department of Civil, Environmental and Geomatic Engineering, ETH Zurich, Switzerland
2007 - 2008	Post-Doctoral Research Fellow, Institute for Spatial and Landscape Development,
	D-BAUG, ETH Zurich, Switzerland
2006 - 2007	Scientist Officer, Swiss Federal Office for the Environment, Bern, Switzerland
2002 - 2003	Project Scientist, Environmental and Societal Impact Group at NCAR, Boulder,
	USA
1999 - 2002	Associate, Stratus Consulting, Boulder, USA
1998 – 1999	Biology Teacher, Academia Engadina, Samedan, Switzerland
1997 – 1998	Environmental Sciences Teacher, Landscape Architecture Department,
	University of Applied Sciences HSR, Rapperswil, Switzerland
1994 – 1995	Research Associate, Atmospheric Division Group, NCAR, Boulder, USA

RESEARCH ACHIEVEMENT AND PEER RECOGNITION

Research achievements

Publication summary

Total publications: 225; Peer-reviewed publications: 167; H-index <u>web of science</u>: 43; <u>Google Scholar</u>: 55

Consolidated independence

In the last years, Prof. Dr. Adrienne Grêt-Regamey has been able to consolidate her independence and establish a strong international research team at ETH Zürich, Switzerland. Her **research covers a broad range of sub-domains within the area of land system science and landscape research**. Her initial work, relating to her PhD thesis in the Environmental and Societal Impact Group of NCAR (USA), which she initiated and financed with a **MHV-Stipend from the Swiss National Foundation**, was focused on the development of methods for quantifying and valuing ecosystem services in mountain areas. This kind of work was highly innovative at that time, and was followed by many international calls for research in this area. Dealing with such a topic, which lied beyond the commonly adopted approaches in landscape research, she has soon established herself as an expert in **social-ecological**

modelling and participatory landscape planning approaches, including the development of innovative audio-visual simulations and collaborative decision support tools. In the following years since she had assumed the Chair of Landscape Planning and Urban Systems (PLUS) at ETH Zurich (as the youngest Assistant Professor of ETH Zurich at the age of 34), she expanded her research into a wider range of applications in digitally-supported quantitative landscape planning for which she successfully acquired more than 8 Mio CHF second-party resources and thirdparty funding as PI. In the last five years, she has been able to stabilize a group of more than 25 researchers, which are mostly third-party funded. Her current research focuses on understanding how the interactions and/or actions of humans shape landscapes at various temporal and spatial scales, using different land-use decision models in forecasting and backcasting modes. The focus on participatory quantitative social-ecological modelling has allowed her to open new avenues in landscape planning, supporting scientifically informed plans and designs. For her work, she has been awarded the Most Influential Female Award in Land System Science in 2022. She also explores how an iterative process between design and science can allow co-creating place specific responses that satisfy human demands for well-being in a sustainable manner. For fostering participatory landscape planning, she investigates how people perceive the landscape in her Landscape Virtualization and Modelling Lab (540 kCHF thirdparty funding), where state-of-the-art 3D visualizations and auralizations of landscape changes are generated and decision support tools developed. In 2017, she was awarded an ERC Starting Grant GLOBESCAPE, which run out in May 2023. The funding allowed her to open a new field of research on place-making, focusing on transformation research rather than pattern-process analyses. The gained expertise in urban transformation and her acquired interdisciplinary collaboration in and outside ETH supported her in co-acquiring funding (> 15 Mio. CHF) and co-leading the establishment of a large competence center for sustainable urban development, the Future Cities Lab Global with hubs in Singapore and Zürich, inaugurated in 2021. While GLOBESCAPE focused on small-scale urban landscapes, she has continued, in parallel, investigating new approaches to foster adaptation and transformation in mountain areas, in particular using participatory Bayesian Networks and Earth Observation data. For her work in mountain areas, the consortium was awarded the Swiss National Science Foundation Transdisciplinary Award.

The research of Prof. Grêt-Regamey has led to >167 peer-reviewed publications. The publications are in key journals in the field of Landscape Planning, Landscape Research, and Land System Science. Her network includes scientific organizations such as the Global Land Project (GLP), the Ecosystem Services Partnership (ESP), International Association of Landscape Ecology (IALE) working groups, a US 'Mountain Sentinel Research Collaboration Network', as well as science-policy organizations, government agencies such as the federal office of environment, of agriculture and of energy, and partners from private companies. She is co-PI of the Mountain Research Initiative, a coordination network for research collaboration, bringing the global mountain research community together since 1990. In her teaching activities, she aims at integrating knowledge from different fields for responsible landscape and urban planning. For her leadership, she was finalist for the ALEA Award (Art of Leadership, ETH Zurich) in 2018 and she was awarded the Dandelion Entrepreneurship Award (ETHZ) in 2023. With respect to public outreach, Adrienne Grêt-Regamey has given more than 40 invited talks at international conferences, gives interviews and talks for a non-scientific audience and writes articles in newsletters and magazines addressing the broader public.

Peer recognitions

Selected invited presentations (since 2020)

- 2023 Visual Resource Stewardship on "With heart or mind? Assessing landscapes for sustainability", Argonne National Lab, US Regierungsseminar on "Energie et aménagement du territoire", Interlaken, Switzerland OFEV on "Future Landscapes",
- 2022 Bern, Switzerland
 International Mountain Conference on "Taming climate change", Innsbruck, Austria •
 Spirit of Bern on "Linking design and science to address complexity and use it for decision-making", Bern, Switzerland Green Place on "Key conditions to make 3D visualizations useful for urban and landscape planning", Turku, Finland

- 2021 CUPUM on "TOGETHER point clouds as a new language between passive and active sensing" Helsinki, Finland EUROSOIL on "Integrating soil-based ecosystem services into spatial development", Geneva, Switzerland (virtual congress)
- 2020 World Bank on "The importance of ecosystem services in a tropical, highly urbanized citystate", Singapore (virtual) • Landmanagement Tagung "Netzwerke der multifunktionalen Landschaft", Zurich, Switzerland.

Fellowships and awards

Dandelion Entrepreneurship Award, ETHZ, 2023 • Most Influential Female in Land System Science, MDPI, 2022 • Finalist of Art of Leadership, ETHZ, 2018 • ERC Starting Grant, EU, 2017 • Swiss National Science Foundation, Transdisciplinary Award, 2013 • ETH Silver Medal for PhD Thesis, 2007 • MHV-Stipend from Swiss National Science Foundation, 2003-2006 • ETH Silver Medal for Master Thesis, 1998

ADDITIONAL INFORMATION

Career breaks

03.03.2004 - 30.06.2004	First child, Matéo Grêt
19.08.2006 - 31.12.2006	Second child, Luc Grêt

Other contributions to the research community

Supervision of graduate students and postdoctoral fellows

Postdocs (Currently 2 senior assistants, 4 Postdocs), PhDs (15 ongoing (11 internal and 4 external (WSL, Agroscope, CDE Bern), 26 achieved), supervision of > 100 master theses and > 60 bachelor theses.

Teaching activities (all courses at ETH Zurich)

Master: Landscape Planning and Environmental Systems (lecture and GIS exercises) • Multi-Criteria Decision Analysis • GIS-based 3D Landscape Visualization • Geomatics Seminar • Project Week in Landscape Development • Interdisciplinary Project IPA • Basics of RE&IS (Master in Spatial Development and Infrastructure Systems) • Introduction to the Programming Language R Bachelor: Angewandte Planung zur nachhaltigen Siedlungsentwicklung • Raum- und Landschaftsentwicklung GZ • Land Management • Standortentwicklung • UVP Continuing Education: MAS/DAS/CAS Spatial Planning • MOOC in Systemic Design (led by our chair) • MOOC on ecosystem services with University of Geneva • MOOC on landscape ecology with WSL • Competence Centre Environmental and Sustainability, Winter School on Transdisciplinarity, Summer School on Sustainability.

Organisation of scientific meetings

2022	Scientific committee of INTECOL 22 (International Association for Ecology),
	Geneva, Switzerland
2022	Scientific committee of the IMC2022 (International Mountain Conference) in
	Innsbruck, Austria
2020	Digital Landscape Architecture Conference in Zürich
2008 - 2022	Organization of sessions, workshops, and side events at multiple conferences (e.g.
	IALE, GLP, EUROSOIL, ECOSUMMIT, Landschaftskongress, GEOSUMMIT)

Institutional responsibilities

2023 - ongoing	Study Director Bachelor in Raumbezogene Ingenieurwissenschaften and Master in
	Spatial Development and Infrastructure Systems
2021 - ongoing	Head of the Engagement Platform and Member of the Steering Committee of
	Future Cities Lab Global, ETH Zürich and SEC Singapore
2016 - ongoing	Head of the Institute for Spatial and Landscape Development, ETH
2014 – ongoing	Member of the ETH strategy commission
2015 - 2019	Co-Director and then Director of the Network City and Landscape NSL, ETH
2010 - 2012	Deputy Head of the Institute for Spatial and Landscape Development, ETH

Selected reviewing activities

Editorial Advisory Board (since 2014), Associate Editor (since 2016) Landscape and Urban Planning • Associate Editor DISP (since 2016) • Lead Author IPCC Swiss Report (2015) • Special Issue Editor (e.g. *Regional Environmental Change, Sustainable Cities and Society, Ecosystem Services*) • Member of the Steering committee of the Swiss Excellence Scholarship and Opportunity Programme (ESOP) (since 2013) • Member of the selection committee for Branco Weiss fellowships (2014 -2020) • Scientific evaluation of various proposals for National Research Funding agencies across the world • Reviewer for various journals in the research field.

Memberships of scientific societies

Member of the Advisory Committee of the Wyss Academy for Nature (since 2022) • Member of the Steering Committee of the Swiss FoLAP (since 2010) • Member of the Steering committee of the Mountain Research Initiative (since 2014)

Science – policy expertise

Adrienne has been invited to present her research to the Swiss parliament at several occasions and is highly connected to the various administration offices of the Confederation. Several of her research projects have found their way in newspapers and she has been invited to many meetings of various organisations to present her research and advice on Nature-based Solutions and ecosystem services across Europe (e.g. the recently started large program PEPR SOLU-BIOD, France).

Translation

Spin-off company (2020): Incolab – Kollaboration für den Raum in der Landschaft

Decision-Support Platforms for various decision-makers

- <u>FCL Global views</u> Calculation of urban ecosystem services
- <u>ÖSL-Check</u> Consideration of ecosystem services in planning a working aid for the Swiss Federal Agency of Environment
- <u>PALM 2.0</u>- Cross-municipal potential analysis of the resource soil for sustainable spatial planning for Swiss canton
- <u>LP+</u> Further development of the instrument "agricultural planning" for the Swiss Federal Office of Agriculture
- <u>GrVis</u>- Working aid for the determination of the watercourse area for the canton of Zürich, Switzerland.
- <u>Landscape Generator</u> Generates raster maps of landscapes with a user-defined composition and configuration for researchers.
- <u>Netzausbau</u>- 3D Decision Support System to support the development of energy infrastructures for the Swiss Federal Agency of Energy
- <u>Raum+</u> Method to plan for inner development for Swiss cantons.