

PROF DR. BARBARA M. ROTHEN-RUTISHAUSER



## BIOGRAPHICAL INFORMATION

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- Date of birth: 13.9.1968, Bern, Switzerland
- Profession: Biologist
- Current position: Co-Chair BioNanomaterials, Adolphe Merkle Institute, University Fribourg (Position equally shared with Prof. Alke Fink)
- Professional address: Adolphe Merkle Institute, University Fribourg, Ch. des Verdiers 4, CH-1700 Fribourg, Switzerland / e-mail: [barbara.rothen@unifr.ch](mailto:barbara.rothen@unifr.ch) / website: <http://ami.swiss/en/groups/bionanomaterials/>

## EDUCATION

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- 1988: Matura Typus C, Kantonsschule Schaffhausen, Schaffhausen
- 1992: Diploma in Biology. Institute Cell Biology, Dep. Biology, ETH, Zuerich, Switzerland
- 1996: PhD. Institute Cell Biology, Dep. Biology, ETH, Zuerich. Diss. ETH Nr. 11857 (1996)
- 2009: Venia Docendi in Cell Biology, Medical Faculty, University of Bern, Bern

## PROFESSIONAL EDUCATION

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- 1988-1992: Studies in Biology at the ETH Zuerich, Zuerich, Switzerland
- 1993-1996: Graduate Student, Institute Cell Biology, Dep. Biology, ETH Zuerich, Switzerland
- 1996-2000: Research associate, Institute Biopharmacy, Dep. Pharmacy, ETH Zuerich, Switzerland
- 2000-2005: Research associate, Division of Histology, Dep. Anatomy, University of Bern, Switzerland
- 2007: Research associate, School of Life Science, Napier University, Edinburgh, Schottland
- 2006-2010: Group leader, Division of Histology, Department of Anatomy, University of Bern, Switzerland
- 2010-2011: Coordinator of the Microscopy Imaging Centre, University of Bern, Switzerland
- 2011-2013: Group Leader at the Respiratory Medicine, Department of Clinical Research and Bern University Hospital, University of Bern, Switzerland
- 2011-: Co-Chair Bio-Nanomaterials, Adolphe Merkle Institute, University of Fribourg, Switzerland

## NATIONAL AND INTERNATIONAL RESEARCH ACTIVITIES (2015-)

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- Work package leader in the project “Physiologically Anchored Tools for Realistic nanomaterial hazard assessment” (PATROLS; H2020) (2018-2021)
- Partner in the EU Marie Skłodowska-Curie Innovative Training Network (ITN) project CITYCARE (2017-2020)
- Associate Editor of “Particle Fibre Toxicology”
- Editorial board member of “Nanotoxicology”
- Module Co-leader and Faculty Delegate for the Advancement of Young Researchers and Women within the NCCR Bio-Inspired Stimuli-Responsive Materials (2014-)
- Review activities for journals (Nat Commun, Nanoscale, Nanotoxicology, Particle Fiber Toxicology, ACS Nano, etc); for infrastructure or project proposals

## EXPERT ACTIVITIES (2015-)

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- Expert within a working group to draft a WHO /IPCS Environmental Health Criteria Document on Principles and Methods for Assessing the Risk of Immunotoxicity Associated with Exposure to Nanomaterials
- Representative of Switzerland for the Federal Institute of Public Health to adapt OECD test guidelines on inhalation toxicity testing for nanomaterial safety testing
- ProSafe Task Force expert under Horizon 2020
- President of steering board for Contactpointnano, an independent, national platform pooling the scientific and regulatory knowledge and expertise available in Switzerland on the safe handling of synthetic nanomaterials
- Scientific advisory board member for the company NanoLockin
- Co-lead of the Swiss NanoAnalytic Platform for the analysis of nanomaterials in consumer goods together with Prof. Alke Fink
- Member of Federal Commission for Air Hygiene (FCAH) 2020-2024

#### AWARDS (2015-)

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- PETA International Science Consortium Ltd. Award 2015 for the development of an in vitro lung test to predict the toxicity of inhaled nanomaterials (140'000 CHF)
- Run4Science Award 2017, for the project “Automatized engineering of human epithelial tissue barriers by a bioprinting approach - the next generation of in vitro alternatives” (25'000 CHF)
- Prix CUSSTR 2017 awarded to A. Groso, T. Meyer, H. Hofmann at EPFL, and A. Fink and B. Rothen-Rutishauser at UniFR for the paper “Engineered nanomaterials – toward effective safety management in research laboratories”
- Recipient for the 2019 Materials Today Agents of Change Award with S. Martin Caba and A. Fink

#### FUNDING (ONGOING; TOTAL > 4 MIO EURO FUNDING FROM SWISS NATIONAL SCIENCE FOUNDATION, EU, REGULATORY OFFICES AND INDUSTRY AS PI

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- SNSF Project Nr 310030\_192056 / 1 (791'000 CHF, 2020-2023)
- Innosuisse grant with Silvia Angeloni and Raniero Pittini (1'081'280 CHF, 2020-2021)
- EU Marie Skłodowska-Curie Innovative Training Network (ITN) CITYCARE (770'000 €; 2017-2021)
- Partner and WP leader in the project “Physiologically Anchored Tools for Realistic nanomaterial hazard assessment” (PATROLS; H2020) (12.7m € global project; 2018-2021)
- PIRE: Bio-inspired Materials and Systems, Co-PI's B. Rothen-Rutishauser / A. Fink (312'000 CHF, 2017-2021)
- SNSF Sinergia grant with V. Heinzelmann, U. Pieleles and I. Martin (1.9 Mio CHF, 2017-2020)
- SNSF Project Nr 310030\_169207 / 1, PI P. Wick, Co-Applicant B. Rothen-Rutishauser, J. Wang (525'000 CHF, 2016-2020)
- NCCR Center for Bio-Inspired Stimuli-Responsive Materials PI Chris Weder (550'000 CHF for the subproject B. Rothen-Rutishauser, 2014-2017; 550'000 CHF for second phase 2018-2021)

PUBLICATIONS (more than 290 articles / reviews since 1992, 12 book chapter contributions, sum of times cited without self-citations: >7'200, h-Index 58 (Web of Science)).

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- Link to the complete publication list:  
<http://ami.swiss/en/groups/bionanomaterials/publications.html>
- [orcid.org/0000-0002-7805-9366](https://orcid.org/0000-0002-7805-9366)