
PATRICIA HOLM



CURRENT POSITIONS

PROF. DR. RER. NAT. / PROFESSOR OF ECOLOGY

HEAD OF THE PROGRAM “MAN – SOCIETY - ENVIRONMENT” (MGU)

Since 2003

Department of Environmental Sciences, University of Basel, Switzerland

CONTACT DETAILS

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PROFESSIONAL EXPERIENCE

- 1999 – 2003 **DIRECTOR OF THE NATIONAL RESEARCH PROGRAM ON FISH CATCH DECLINE “NETZWERK FISCHRÜCKGANG SCHWEIZ” (FISCHNETZ)**
EAWAG, Dübendorf, Switzerland
- 1992 – 1999 **ASSISTANT PROFESSOR**
Interdisciplinary Center for General Ecology, University of Bern and
Institute for Animal Pathology, University of Bern
- 1997– 1999 **DEPUTY DIRECTOR OF THE DEPARTMENT FOR ELECTRON MICROSCOPY**
University of Bern
- 1990 – 1992 **POST-DOC**
Department of Neurobiology, Swiss Federal Institute of Technology (ETH),
Zurich, Switzerland (50%)
- 1989 – 1990 **CONSULTANT FOR BIOLOGY AND ECOLOGY**
RauCon Bioinformatics and Consulting GmbH, Dielheim, Germany

EDUCATION

- 1999 **VENIA DOCENDI**
for Ecology, Phil. Nat. Faculty
University of Bern
- 1989 **PH.D., SUMMA CUM LAUDE**
Title: Histochemische und cytologische Untersuchungen zum Darm von
Osteichthyes und die Beeinflussung durch Ernährungsbedingungen und
toxische Substanzen
(Histochemical and electron microscopical studies on the intestinal tract of
teleosts under different nutritional conditions)
Zoological Institute I, University of Heidelberg, Germany
- 1985 **M.SC.**
Biology and Sports Science
Ruprecht-Karls-University Heidelberg, Germany

EDUCATIONAL GRANTS

1997	Travel grant, "Schweizerische Hochschulstiftung", for participation at the Ultrastructural Pathology of Toxicologic Diseases workshop, Ames, Iowa, USA
1994 – 1999	Grant for the promotion of junior scientists, "Nachwuchsförderungsprogramm des Bundes" (Federal support fund for young researchers), Swiss Federal Government
1991 – 1993	Educational grant "Deutsche Forschungsgemeinschaft" (DFG, German Research Council), Title: Auftreten ausgewählter Erkennungsmoleküle bei der Neurogenese, der Bildung, der Wanderung und Differenzierung von Neuronen im HVC, einem Kerngebiet des vokalmotorischen Systems adulter Zebrafinken (Title: Occurrence of selected recognition molecules in neurogenesis, development, migration and differentiation of neurones in HVC, a nucleus in the vocalmotor system of adult zebrafishes)
1988	Grant for the preparation of the thesis, "Studienstiftung des Deutschen Volkes", German National Merit Foundation
1987	"Deutscher Akademischer Austauschdienst" (German Academic Exchange Service) for a short term professional stay (2 months) in Goteborg, Sweden
1987	"Landesgraduiertenförderungsgesetz Baden-Württemberg", Graduate Government Aid
1982 – 1985	"Studienstiftung des Deutschen Volkes", German National Merit Foundation

EXTENDED PROFESSIONAL STAYS ABROAD

2012 - 2020	Several stays at NTU, Singapore, in the context of planning projects and conferences on higher education for sustainability
2008 - 2018	Several stays at AWRI Alberta Water Research Institute and University of Alberta, Edmonton, Canada, in the frame of research projects and adjunct professorship
1998	Team of Dr. C. Hogstrand, Thomas Hunt Morgan School of Biological Sciences, University of Kentucky, Lexington, Kentucky, USA (2 months)

- 1987 Team of Dr. S. Holmgren, Institute for Zoophysiology, University of Goteborg, Sweden (two months)
- 1983 University of San Carlos, Cebu City and Iloilo, Southeast-Asian Fisheries Development Center (SEAFDEC), Philippines (two months)

ACADEMIC HONOURS AND MERITS

- 2022 Award for the 2nd best poster: Wiegleb, J., Hirsch, Ph. E., Seidel, F., Rauter, G., **Burkhardt-Holm, P.** "Swimming competition! Who beats the flow in a hydraulic barrier for invasive fish?", INTECOL 2022 congress, 28.8.-2.9.2022
- 2006 Award for the best poster: Knauer, S., Bopp, S., **Burkhardt-Holm, P.**, Knauer, K. Contaminant-stimulated oxidative stress in algal and fish cells. Workshop on environmental chemistry and ecotoxicology, Geneva, February 2006.
- 2005 Award for the best poster: Bopp, S., **Holm, P.** and Knauer, K. "Ist die Detektion reaktiver Sauerstoffspezies (ROS) ein geeigneter unspezifischer Biomarker für Mikroverunreinigungen?", 10th Annual Meeting of SETAC-GLB, 28.-30. September 2005, Basel
- 2003 Merit bonus from EAWAG (course "International Water Management")
- 2002 ALTEX Award by FFVFF ("Stiftung Fonds für versuchstierfreie Forschung", Zurich) for the publication: Schweigert, N., Eggen, R.I.L., Escher, B.I., **Burkhardt-Holm, P.** and Behra, R. "Ecotoxicological Assessment of Surface Waters: A Modular Approach Integrating In Vitro Methods". ALTEX 19, Supplement 1, 30-37.
- 2000 Merit bonus from EAWAG for project "Fischnetz"
- 1999 Berner Umweltforschungspreis for the habilitation thesis, University of Bern

PATRICIA HOLM

TRACK RECORD

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Supervision of Academic Theses	10
Research Grants (Selection)	17
Publications	26
Public Outreach (Selection)	63

ADDITIONAL PROFESSIONAL ACTIVITIES

SELECTED CURRENT ADDITIONAL PROFESSIONAL ACTIVITIES

since 2022	Member of the International Scientific Advisory Board, University of Frankfurt a.M., Germany
since 2021	Member of the Board of Trustees International Convention of Environmental Laureates
since 2021	Member of the Academia Europaea
since 2020	Vice president of the Swiss Committee on Polar and High Altitude Research (SKPH). Swiss Academies of Sciences.
since 2019	Deputy president of the Committee “Naturhistorisches Museum Basel”
since 2017	Member of the Committee “Naturhistorisches Museum Basel”
since 2015	Member of the Scientific Advisory Board “Naturforschende Gesellschaft Senckenberg”, Frankfurt a. Main, Germany
since 2010	Founding Member of “International Centre for Water Management Services” (CEWAS), Willisau, Switzerland
since 2010	Member of the Board of “Foundation for Information and Research on Marine Mammals” (firmm) Switzerland and Spain
since 2009	Swiss delegate for the International Whaling Commission (IWC), scientific committee and steering committee member of the sub-commission “Pollution 2000+”
since 2008	Member of “Society of Environmental Toxicology and Chemistry Europe” (SETAC)
since 2008	Mentor of the Swiss Study Foundation
since 2005	Representative of the Faculty of Science and Chairperson of the curriculum commission of the Master’s Degree in Sustainable Development at the University of Basel
since 1995	Member of “European Association of Fish Pathologists” (EAFP)

 PREVIOUS ADDITIONAL PROFESSIONAL ACTIVITIES (SELECTED)

2019 – 2022	Appointed convenor/chair subcommisson ‘Environmental Concern’, Scientific Committee, International Whaling Commission
2020	Expert for the SNF research commission
2019	Swiss expert of the Scientific Advisory Committee on ‘Marine Plastic Litter and Microplastics’ of the UN Environment Program (UN Environmental Resolution 4).
2014 – 2019	Member of the Scientific Board of the State Museums of Natural History Karlsruhe and Stuttgart, Germany
2013 – 2020	Member of the Steering Committee of the Foundation of “Schweizerische Greina-Stiftung” (SGS)
2011 – 2018	Adjunct Professor, Department of Biological Sciences, University of Alberta, Edmonton, Canada
2011 – 2015	Member of the Steering Committee of the “Research Center for Sustainable Energy and Water Supply” at the University of Basel
2010 – 2013	Member of the Scientific Board of “Biodiversity and Climate Research Center” (BiK-F), Frankfurt a.M., Germany
2007 – 2016	Member of the Scientific Board of “Institute for Social-Ecological Research” (ISOE), Frankfurt a. M., Germany
2007 – 2011	Member of the Expert Group “Ecotoxicology of the Swiss Federal Office for Environment” (FOEN)
2007 – 2014	Member of the “Center for Xenobiotic and Environmental Risk Research” (XERR), Zurich, Switzerland
2005 – 2007	Member of the Scientific Board of “Swiss Federal Institute for Forest, Snow and Landscape Research” (WSL), institution of the “Swiss Federal Institute of Technology” (ETH)
2004 – 2010	Member of the Project Team “Pilotregion Basel der 2000-Watt-Gesellschaft”
2004 – 2010	Member of the Commission “Hochschule neu denken”, Altner-Combecher Foundation Hannover, Germany
2003 – 2008	Member and president of the Steering Committee “Fischnetz plus” (FN+)
2003 – 2007	Member of the Board “Swiss Academy Society for Environmental Research and Ecology” (SAGUF)
2002 – 2007	Member of the Foundation Board of “Praktischer Umweltschutz Schweiz” (PUSCH)

- 2002 – 2004 Member of the Swiss Working Group “Gewässerschutzkonzeption 21” (KVU)
- 1999 – 2010 Member of the Swiss Expert Commission “Endocrine Active Compounds” of the Swiss Federal Office for Environment (FOEN)
- 1993 – 1996 Member of the “Commission of European Affairs”, University of Bern
- 1993 – 1995 Member of the “Commission of Environmental Observation, Switzerland” (SKUB)

MAJOR RESEARCH INTERESTS

- Ecology, biology, physiology, biochemistry and ecotoxicology of aquatic animals, especially fish, but also invertebrates and marine mammals
- Effects of natural and anthropogenic stress factors, such as microplastics, temperature, fine sediments, synthetic chemicals, hormones and food on aquatic organisms
- Invasive species in aquatic ecosystems
- Microplastics in aquatic and terrestrial ecosystems
- Education for sustainability

ORGANIZATION OF MEETINGS AND WORKSHOPS

- 2021 Pollution 2025, IWC Intersessional Workshop (Chair), online, 01.-04.11.2021
- 2017 Network in Education for Sustainability Asia Conference, Singapore, Program Committee, 02- 03. 05. 2017
- 2013 Academia Engelberg: Food Security, Program Committee, Engelberg, 15.10. 2014
- 2012 Mini-Symposium, Research at MGU, Basel, 24. 09. 2012
- 2011 Mini-Symposium, MGU & Center for Fish and Wildlife Research, Basel, 18. 11. 2011
- 2005 10. Annual Meeting SETAC-GLB, Basel, 28.–30.09.2005
- 1999- 2003 Annual Meeting 'Project Fish Catch Decline in Switzerland' (Chair)

REVIEWER ACTIVITY (SELECTION)

SCIENTIFIC JOURNALS AND BOOKS

Aquatic Toxicology; Aquatic Sciences; Aquatic Biology; Biological Chemistry; Cambridge University Press; Canadian Journal of Fisheries and Aquatic Sciences; Canadian Journal of Zoology; Cell and Tissue Research; Cellular and Molecular Life Sciences; Chemosphere; Comparative Biochemistry & Physiology, Conservation Biology, Developmental and Comparative Immunology; Diseases of Aquatic Organisms; Ecological Applications; Environment Asia Journal; Environmental Chemistry; Environment International; Environmental Pollution; Environmental Science and Technology; Environmental Science and Pollution Research; Environmental Toxicology and Chemistry; Gaia, Global Change Biology; Histochemical Journal; Fish Physiology and Biochemistry; Marine Biology; Nature Communications; Parasite Epidemiology and Control; PLOS ONE; Proceedings of the Royal Society B; Science of the Total Environment; Scientific Reports; Water Research and various books and book chapters (for publishers such as Springer, Routledge, et al.)

SCIENCE FOUNDATIONS, EVALUATION PANELS AND FUNDING BOARDS

Akademien der Wissenschaften Schweiz (*Swiss Academies of Arts and Sciences*); BMBF-Förderinitiative "Soziale Dimensionen von Klimaschutz und Klimawandel"; Deutsche Bundesstiftung Umwelt DBU (*German Federal Environmental Foundation*), Deutsche Forschungsgemeinschaft DFG (*German National Science Foundation*), Exploratory Grants Evaluation Panel of the Swiss Polar Institute; European Academies Science Advisory Council (EASAC); foraus - Swiss Forum on Foreign Policy; German Research Foundation, Microplastic; Geschäftsstelle des Gutachterpanels Forschungsschiffe (GPF) (*German Research Vessels Portal*); Leibniz-Institute for Freshwater Ecology and Inland Fisheries, Berlin; Nanyang Technological University, Singapore; Federal Veterinary Office (Schweiz), Faculty of Life Sciences, University of Frankfurt; Swiss National Science Foundation (SNF); Swiss Polar Institute; Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung (AWI)

TEACHING ACTIVITIES

LECTURES	TIME FRAME
<i>Sustainable Development: Introduction into Topics and Approaches*</i> (3)	Since Fall 2017
<i>Der Fisch und seine Umwelt</i> (2)	Spring 2004 – Fall 2014
<i>Principles and Processes of Ecosystems*</i> (2)	Fall 2011
<i>Umweltwissenschaften II Naturwissenschaftliche Grundlagen</i> (3)	Fall 2003-Fall 2006
LECTURES WITH EXERCISES/TUTORIALS	TIME FRAME
<i>Perspectives of natural sciences on sustainability</i> (3)	Since Fall 2015
<i>Grundkurs II: naturwissenschaftliche Grundlagen der Nachhaltigkeit</i> (3)	Fall 2007 - Fall 2014
<i>Quantitative und qualitative Aspekte globaler Wasserfragen</i> (4)	Spring 2012 – Spring 2013
COURSES	TIME FRAME
<i>Sustainability in Practice</i> *(2)	Since Fall 2021
<i>Nachhaltige Entwicklung: Einführung in Thema und MSD-Studium*</i> (1)	Fall 2010 – Fall 2016
<i>Research Design Master's Thesis</i> *(3)	Since Spring 2018
SEMINARS	TIME FRAME
<i>Vorbereitung für Projektarbeit*</i> (3)	Spring 2011 – Spring 2017
<i>Bioinvasoren und Klimawandel*</i> (3)	Spring 2013 – Spring 2014
<i>Quantitative und qualitative Aspekte globaler Wasserfragen</i> (3)	Spring 2009 – Spring 2014
<i>Vorbereitung für Projekt: Sustainability Assessment*</i> (3)	Spring 2013
<i>Umweltprobleme und ihre Auswirkung auf natürliche Ressourcen und ihre Nutzbarkeit</i> (3)	Spring 2006 – Spring 2008
<i>Ökologische Aspekte urbaner Räume</i> (3)	Spring 2008
<i>2000-Watt-Gesellschaft</i> * (3)	Fall 2007
<i>Fisch und Umwelt: Ökotoxikologie*</i> (3)	Fall 2004 – Fall 2005
<i>Schutz und Nutzung des Rheins*</i> (3)	Fall 2004 – Fall 2005

Values in brackets indicate number of academic credits; * indicates team teaching.

PRACTICAL COURSES	TIME FRAME
<i>Eigenständiges Forschen*</i> (2)	Since Fall 2011
<i>Moderne Biomarker*</i> (2)	Spring 2013 - Spring 2017
<i>Aquatische Ökologie und Ökotoxikologie*</i> (2)	Fall 2007 - Spring 2011
<i>Nachhaltigkeit in der Ökosystemforschung*</i> (5)	Fall 2007- Spring 2009
<i>Sustainability in Ecosystem Research*</i> (3)	Spring 2006

FIELD TRIPS	TIME FRAME
<i>Aquatic Ecosystems in Practice (Marine or Freshwater) - Functional Basics and Interaction with the Anthroposphere</i> (3)	Spring 2021
<i>Meeresbiologischer Kurs an der Strasse von Gibraltar / Marine Biological Considerations at the Strait of Gibraltar*</i> (3)	Since Spring 2008
<i>Sustainability in Ecosystem research I*</i> (2)	Fall 2007 - Spring 2010

STUDENT PROJECTS	TIME FRAME
<i>Training for Sustainability Research *</i> (6)	Since Spring 2018
<i>Internationale Organisationen und das nachhaltige Management von natürlichen Ressourcen am Beispiel von Walen*</i> (6)	Fall 2017
<i>Nutzungskonflikte in der Waldnutzung aus ökologischer, gesellschaftlicher und ökonomischer Sicht*</i> (6)	Fall 2016
<i>Kleinwasserkraftwerke im Spannungsfeld von Nutzungskonflikten aus ökologischer, gesellschaftlicher und ökonomischer Sicht*</i> (6)	Fall 2015
<i>Projektarbeit: Klimawandel - nationale Adaptationsstrategien*</i> (6)	Fall 2012 – Fall 2014
<i>Sustainability in Ecosystem research II*(3)</i>	Spring 2010
<i>Fischnetz: Bedeutung und Auswirkungen eines inter- und transdisziplinären Projektes*</i> (6)	Fall 2010
<i>Bewertung der Ressource Wasser am Beispiel Westkanadas*</i> (6)	Spring 2009
<i>Millenium development Goals in der Schweiz*</i> (6)	Fall 2007
<i>Vorbereitung Projektkurs SS 2006: Pilotregion Basel der 2000 Watt Gesellschaft*</i> (3)	Spring 2006
<i>Revitalisierung von Kleinwasserkraftwerken (KWKW) Chance zur nachhaltigen Wasserkraftnutzung?*</i> (6)	Spring 2004
<i>Schutz und Nutzung des Rheins*</i> (6)	Fall 2004

DOCTORAL COURSES	TIME FRAME
Research on Sustainable Development* (3) Sustainability Science*(3) Interdisciplinarity in disciplinary PhD research in the context of sustainability (Winter School)* (3)	Spring 2016 - Spring 2017 Spring 2014 Fall 2014

COLLOQUIA	TIME FRAME
Presentation of Results of MSD Master's Thesis *(1)	Since Spring 2019
Introduction to Ongoing MSD Master's Thesis* (1)	Since Spring 2018
Präsentation und Diskussion von MSD-Masterarbeiten* (1)	Since Fall 2017
Presentation of Concepts of MSD Master's Thesis* (1)	Since Fall 2018
MSD Life Science *(*)(1)	Since Fall 2008
Institutskolloquium* (1)	Fall 2007 - Spring 2008
Doctoral colloquium* (1)	Fall 2005

CONTRIBUTIONS TO OTHER STUDY PROGRAMS AND UNIVERSITIES	TIME FRAME
Wasserethik. Ethik in Geo- und Umweltwissenschaften: 30206-01, Universität Basel, Switzerland	05.04.2022
Invasive Grundeln aus dem Schwarzen Meer erobern heimische Gewässer. Tierpflegerseminar, University of Basel, Switzerland	12.11.2015
Microplastics' and Antarctic fish. Lecture to graduate students in the School of Public Health SPH 522, University of Alberta, Canada	01.10.2015
Invasive Schwarzmeergrundeln auf dem Weg in die Schweiz. FHNW-Fachdidaktik Modul 3.1. Wissenschaftsorientierung, Basel, Switzerland	06.12.2013
What is an endocrine disruptor and why do we have to study these compounds? Toxicology Courses, Biological Sciences Department, University of Alberta, CA-Edmonton, Canada	11.01.2012
Cellular effects of microplastics in the blue mussel <i>Mytilus edulis</i> . Biological Sciences Departmental Seminar (Biology 642 Series), University of Alberta, CA-Edmonton, Canada	11.01.2012

Values in brackets indicate number of academic credits; * indicates team teaching.

SUPERVISION OF ACADEMIC THESES

Co-supervisors from University of Basel, unless noted otherwise

DIPLOMA AND MASTER THESES

Tiffany Meyer	2022: Microplastic in the River Rhine near Basel. Spatial Distribution and Diversity in River Shore Sediments.
Ricardo Bentele	2022: Noah, the Ark and the Unknown. The Noah's Ark Problem in the Case of Species Conservation (Co-Supervisor: Rolf Weder).
Anita Feierabend	2022: Age an Trait Variability of <i>Dryas octopetala</i> L. in a Changing Climate. (Co-Supervisor: Christian Rixen, WSL).
Nandhakumar Govindasamy	2022: Hydraulic Forces that Preserved Round Goby (<i>Neogobius melanostomus</i> Pallas, 1814) Experience In Flow Channel (Co-Supervisor: Joschka Wiegleb).
Eva-Maria Hanninger	2022: Injuries, Emaciation, and Skin Conditions in Cetaceans of the Strait of Gibraltar. A qualitative health assessment.
Sina Sohneg	2022: Effects of luminaire shape, light level, and LED color temperature on nocturnal insect abundance (Co-Supervisor: Janine Bolliger).
Belinda Biesuz	2021: The interactive potential of native and inoculated microorganisms to support crop yield (Co-Supervisor: Sebastian Franz Bender).
Lea Masserey	2021: Microplastics in gills and gastrointestinal tract of Antarctic fishes (<i>Pleurogramma antarcticum</i> , <i>Neopagetopsis ionah</i> and <i>Notothenia rossii</i>) from the Antarctic Peninsula and Eastern Weddell Sea (Co-Supervisor: Gabriel Erni Cassola).
Florian Christ	2020: Comparison of microplastics in bagged soil.
Mila Mi Hua Yong	2020: Microplastics in faecal samples of whale sharks (<i>Rhincodon typus</i>) and surface water in the Coral Triangle.
Risto Krebs	2019: Pollination of Sweet Cherry (<i>Prunus avium</i>) by Wild Pollinating Insects under Variable Weather Conditions (Co-Supervisor: Matthias Albrecht, Agroscope).
David Scherrer	2019: Possible migration barrier for <i>Neogobius melanostomus</i> : Block ramps in a restored river section – Case Birs (Co-Supervisor: Philipp E. Hirsch).
Sophie Bosshart	2019: Microplastics Uptake by Round Gobies (<i>Neogobius melanostomus</i>) in the Rhine River.

Hydrobiology-Limnology-Award 2021 for the best master thesis

- Aita Gianelli 2019: „A Systematic Study of Sustainable Development Goals within Key Literature on Sustainable Water Management in Switzerland” (Co-Supervisor: Flurina Schneider).
- Markus Schüpbach 2019: „Nachhaltigkeit durch Berücksichtigung der Hochwassergefahren? Eine Analyse der Besiedlung im Grenzbereich der kartierten Hochwassergefahrengebiete in der Schweiz” (Co-Supervisor Margaretha Keiler, Uni Bern).
- Stefan Frehland 2019: Fate of Nanoplastic Particles and Microplastic Fibers in Wastewater Treatment Plants (Co-Supervisor: Denise Mitrano, Eawag).
- Andreas Kalberer 2018: Microplastics in Swiss Agricultural Soils The Relevance of Mulch Foil and Digestate Fertilizer for Plastic Pollution (Co-Supervisor: Christian Körner).
- Vincent Somerville 2017: Methylome wide association study of two mating season phenotypes in a wild Round Goby population (Co-Supervisors: Irene Adrian-Kalchhauser, Walter Salzburger).
- Sandrine Straub 2017: Uptake and effects of biodegradable microplastics on the freshwater amphipod *Gammarus fossarum*.
- Özdal Nilgün 2017: Feeding habits of round goby (*Neogobius melanostomus*) in the Kleinhüningen Harbour, Basel (Co-Supervisor: Philipp E. Hirsch).
- Monika Hübner 2017: Mikroplastikeinträge in den Rhein: Analyse möglicher Herkünfte und Eintragungspfade sowie von Massnahmen zu deren Verminderung
- Céline Mäder 2016: Die Ernährungsweise der Schwarzmundgrundeln (*Neogobius melanostomus*) in Basel im Vergleich mit anderen Ökosystemen.
- Paolo Ferrara 2015: Charakterisierung von Genen, die am Abbau von Schadstoffen in antarktischen Fischarten beteiligt sind. Nachweis des Cytochrom P450 1a Transkripts in antarktischen Fischarten und ein Vergleich der Expression in verschiedenen antarktischen Fischarten.
- Christina Geiger 2015: Decrease of benthic macroinvertebrates caused by hydropower-induced water level fluctuations with potential effects on fish.
- Lisa Wilmsmeier 2015: Flussrenaturierung nach dem Prinzip „Perlenkette» – Ein vielversprechender Ansatz für den Mungnaukanal und den Grundbach?
- Thomas Mani 2015: Mikroplastikerhebung im Rhein – von der Schweizergrenze bis zum Meer.
- Pascal Blarer 2015: Aufnahme und Effekte von Mikroplastik in Amphipoden.
- Katharina Appoloni 2015: Wasserstandschwankungen in Stauseen und deren Auswirkungen auf die Primärproduktion im Kontext der Wirtschaftlichkeit des Stauseebetriebs.

- Tanja Erzinger 2014: Wirksamkeit von Wildtierschutz-Kampagnen bei Freeridern (Co-Supervisor: Marcel Hunziker, WSL Birmensdorf)
- Sylvie Flämig 2014: Potential of Recreational Boating as a Distribution Vector for Invasive Gobies in Switzerland and Development of Recommendations for Action (Co-Supervisor: Philipp E. Hirsch).
- Maya Bütikofer 2014: Wie nachhaltig ist die Schafsömmernung im regionalen Naturpark Gantrisch? (Co-Supervisors: Christine Scheidegger, FRG Parkwissen, Gantrisch, Switzerland; Cornel Werder, Alpe Beratung, Switzerland; Manuel K. Schneider, Agroscope Reckenholz-Tänikon, Switzerland).
- Sebastian Schillinger 2014: Ecological effects of water level fluctuations in a hydropower reservoir. (Co-Supervisors: Hannes Weigt, Philipp E. Hirsch).
- Kerstin Glaus 2014: Bycatch or Targeted Fisheries? Artisanal Shark Fishing in Fiji. (Co-Supervisors: Jürg Brunnschweiler, ETHZ; Rolf Weder, Irene Kalchhauser)
- Renata Estevão Pollini 2013: Sustainability assessment of mango production: A case study with small-scale growers in the Nilo Coelho irrigation project in Petrolina, northeast of Brazil. (Co-Supervisor: Ronnie Juraske, ETHZ)
- Anouk N'Guyen 2013: Potential economic impacts of invasive gobies on recreational angling and commercial fishing. The exemplary case of Lake Zurich. (Co-Supervisor: Philipp E. Hirsch).
- Peter Mutzner 2012: Genetic Diversity and Population Structure of the Invasive Goby Species *Ponticola kessleri* in Kleinhüningen and Birsfelden. (Co-Supervisor: Walter Salzburger).
- Mollie Chapman 2012: Linking People and Rivers: An interdisciplinary approach to understanding pesticide use among farmer (Jaime Diaz Gomez) Programa de Ingenieria Sanitaria, Universidad de Boyocá, Tunja, Colombia) in Colombia.
- Simon Herzog 2012: Cytotoxic effects of mineral particles on fish gill cells in vitro (Co-Supervisor: Christian de Capitani).
- Tina Skerlak 2012: An Integrative System Dynamics Model of Farmers' Fertilizing Behaviour with Special Focus on Phosphorus (Co-Supervisor: Claudia R. Binder, ETHZ, University of Graz, Austria).
- Karla Schlie de Ramos 2012: Quantifiable Effects of Chemicals on Life Cycle Parameters (Co-Supervisor: Nele Schuwirth, Eawag).
- Priska Sacher 2012: Dezentrale Sanitärsysteme – Eine vergleichende Fallstudie von Pilotprojekten mit Stoffstromtrennung unter Einbezug von Hotelbauten (Co-Supervisor: Heiko Gebauer, Eawag).

- Max Reichenbach 2012: Die Sensibilität unterschiedlicher Mobilitätstypen für die Begünstigung von Verhaltensänderungen durch Kontextänderungen. Eine Untersuchung ausgewählter Gruppen am Beispiel der Bewertung des E-Bikes (Co-Supervisor: Susanne Bruppacher).
- Tobias Fischer 2012: Untersuchung der Verbuschung von landwirtschaftlichen Flächen im Unter-alptal vor dem Hintergrund der Nachhaltigen Entwicklung. Eine Analyse auf der Basis von Luftbilddaten 1967-2000 (Co-Supervision. Principal Supervisor: Nikolaus J. Kuhn).
- Elvira Stürmer 2011: Wahrnehmung energieeffizienter Gebäude durch Private und Darstellung in den Medien: Implikationen für eine Kommunikationsstrategie zur Verbreitungsförderung energieeffizienter Bauweise (Co-Supervisor: Susanne Bruppacher).
- Martin Wiech 2011: Gear Avoidance Behavior, Personality, Growth, and Metabolic Rate in Guppies. (Co-Supervisor: Miko Heino, University of Bergen).
- Nina Weiss 2011: Dynamics of fish (salmonid) habitat in running water courses of Alberta's forests: Impact of natural and anthropogenic disturbance. (Co-Supervisor: Frank Krysiak).
- Marco Felicioni 2011: An Assessment of the Components of the Water Footprint of Swiss Paper Consumption. (Co-Supervisor: Hong Yang, Eawag)
- Tara Hadler 2011: Virtual Water in the Context of Alberta's Irrigation Districts: Assessing Water-Food-Trade Relationships at a Localized Level. (Co-Supervisor: Alexander J.B. Zehnder, Alberta Water Research Institute).
- Barbara Berli 2011: Effects of turbidity on individual and schooling performance of three strains of salmonids (*Oncorhynchus mykiss* and *Salmo trutta*). (Co-Supervisor: Keith Tierney, University of Alberta, Edmonton, Kanada).
- Angela Solothurnmann 2010: Die Pilotwalpopulation in der Strasse von Gibraltar 1999 bis 2009: Zustand, Veränderungen und deren Ursachen. (Co-Supervisor: Jürgen Holm, University of Applied Sciences, Bern)
- Sabine Wirthner 2010: Das Entscheidungsverhalten von Einfamilienhausbesitzern und -besitzerinnen bezüglich einer energetischen Sanierung: Eine quantitative Untersuchung in den Kantonen Basel-Stadt und Basel-Landschaft. (Co-Supervisor: Susanne Bruppacher, Uni Bern).
- Nadia von Moos 2010: Histopathological and cytochemical analysis of ingested polyethylene powder in the digestive gland of the blue mussel, *Mytilus edulis* (L.). (Co-Supervisor: Angela Köhler, Alfred-Wegener-Institut für Polar- und Meeresforschung, Bremerhaven).
- Awarded the best Master Thesis of the year, SETAC-GLB 2011***
- Maiti L. de Himpsl 2010: Sustainability of malaria vector control, with special consideration to indoor residual spraying. (Co-Supervisor. Supervisor: Jürg Utzinger, STPH)

- Corina Schmitz 2010: Plastikmüll an den Stränden in Südspanien - wo, wie viel, wie umfangreich, wie sichtbar? (Co-Supervisor: Susanne Bruppacher, Uni Bern).
- Giorgia Crivelli 2010: Comparison of oxidative stress induction by pentachlorophenol (PCP) and its metabolite tetrachlorohydroquinone (TCHQ) on different fish cell lines. (Co-Supervisor: Constanze Pietsch).
- Daniel Eglin 2010: Fishing Down the Food Web: Auswirkungen und Regulierungsmöglichkeiten. (Co-Supervisor: Frank Krysiak).
- Venla Kontiokari 2009: Induction of oxidative stress by atrazine and isoproturon (IPU) in different permanent fish cell lines. University of Helsinki. (Co-Supervisor: Constanze Pietsch, Olli-Pekka Penttinen, University of Helsinki).
- Nadja Häfeli 2009: Untersuchung zur Fischtoxizität von Sedimenten und Biofilmen. (Co-Supervisor: Patrick Schwartz).
- Patrick Weber 2009: Monitoring der Verstädterung im Grossraum Istanbul mit den Methoden der Fernerkundung. (Co-Supervisor: Eberhard Parlow).
- Aleix Ferrer 2008: Health risks related to wastewater reuse in Thailand using quantitative microbial risk assessment. (Co-Supervisors: Hung Nguyen-Viet, Antoine Morel, Swiss Tropical Institute).
- Fanny Frei 2008: Scenario Analysis of the Swiss Passenger Car Sector from a Sustainability Perspective. (Co-Supervisors: Wolfgang Hoffelner, Konstantinos Boulouchos, ETH Zurich).
- Clea Henzen 2008: The Impact of Land Use on Biodiversity in the Framework of Life Cycle Assessment. (Co-Supervisor: Koellner Thomas, Swiss Federal Institute of Technology Zurich).
- Sophia Bloch 2007: Temperature and Estrogen Effects on the Physiology of Brown Trout.
- Andreas Taverna 2005: Die Gonadenentwicklung bei der Elritze (*Phoxinus phoxinus*).
- Patrick Faller 2001: Hat die ARA Surental einen Einfluss auf die Reproduktionsfähigkeit von Gründlingen (*Gobio gobio*)? Zoological Department, University of Zurich.
- Candidate for the Best Student's Paper Award, Environmental Toxicology and Chemistry***
- René Benguerel 1998: Bachforellen im Langzeitmonitoring: Einfluss beeinträchtigter Wasserqualität auf die Ultrastruktur der Epidermis Phil.-nat. Fakultät. University of Bern.
- Hydrobiology-Limnology-Award 1999 for the best diploma thesis***

 MASTER THESES (ONGOING)

Kevin Leuenberger	Microplastics in fish of the Southern Ocean
Lucas Bergmann	Microplastics pollution and animal swimming behaviour

 PH.D COMMITTEES (EXTERNAL)

Bianca Unger	2017: Meeresmüll in der Nord- und Ostsee: raum-zeitliche Verteilung und Vorkommen in Meeressäugern, University of Veterinary Medicine, Hannover
Martin Wagner	2013: Endocrine Disruptors in Bottled Water and Foodstuff: A Bioassay-based Approach, Johann Wolfgang Goethe-University, Frankfurt
Michael Wenger	2009: Impact of multiple stressors on fish: responses to pathogens and pollutant exposures at the molecular and organism levels, University of Berne
Kathrin Bettge	2008: The Proliferative Kidney Disease of salmonids: Dynamics of the parasite in the fish host, University of Berne
Richard Burki	2006: Environmental estrogens as endocrine disruptors in Swiss rivers: Assessment of exposure, effects on brown trout and interactions with other stressors, University of Berne

 PH.D. THESES (INTERNAL, ONGOING)

Sara Schubert	resumed 2022: Estrogenic Endocrine Disruption in Switzerland: Assessment of Effects on Brown Trout at different Life Stages using Field and Laboratory Methods (Working title)
Clara Leistenschneider	since 2018: Microplastics: A potential threat to the remote and pristine ecosystem(s) of Antarctic Seas? (Working title)

 PH.D. THESES (COMPLETED)

ACTED AS PRINCIPAL SUPERVISOR, UNLESS NOTED OTHERWISE

- Karen Bussmann 2022: Ecological, behavioural and molecular aspects enabling invasive round goby translocation via boats.
- Joschka Wiegler 2022: Hydraulic burden and swimming behaviour of benthic fish in a vertical slot fish pass.
- Thomas Mani 2019: Microplastics in the Rhine River – from the Swiss catchment towards the North Sea.
- Anouk N’Guyen 2016: Non-native goby species in Switzerland – Impacts and management.
- Christian Michel 2013: Fine Sediment Effects in Trout – New Insights from Laboratory and Field Studies.
- Maria a Marca 2011: Ex vivo and in vivo studies to assess chemical effects on steroidogenesis in fish: development and application of methods.
- Patrick Schwartz 2011: Ecotoxicological characterization of the estrogenic mycotoxin zearalenone and environmental samples: Effects on zebrafish development and reproduction.
- Oliver Körner 2007: Field and laboratory approaches to assess estrogen disruption in the brown trout *Salmo trutta*.
- Awarded best Ph.D. thesis of the year, SETAC-GLB 2008**
- Gisela Lamche 1999: The fish epidermis as a model for ecotoxicological studies. Faculty of Natural Science, University of Bern (Co-supervision).
- Daniel Bernet 1999: Development of instruments to assess the influence of waste water on brown trout in the river. Faculty of Natural Science, University of Bern (Co-supervision).
- Heike Schmidt 1998: Effect of environmental influences on brown and rainbow trout. Evaluation of several biomarkers in the field and in the laboratory. Faculty of Veterinary Medicine, University of Bern (co-supervision).
- Awarded best Ph.D. thesis of the year, Faculty of Veterinary Medicine, University of Berne**
- Matthias Escher 1996: Assessment of the influence of waste water on the health status of brown trout (*Salmo trutta fario*). Faculty of Veterinary Medicine, University of Bern (Co-supervision).

RESEARCH GRANTS (SELECTION)

Cruise: Antarctic Project “Eastern Weddell Sea Observation System I”

Project Leader: **Holm, P.**

Duration: März 2022 - April 2022

Financed by: Germany

Research vessel: FS Polarstern, PS129.

Non-cash contribution: EUR 159'600

Cruise: Antarctic Project “Microplastics in the Southern Ocean”

Project Leader: **Holm, P.**

Duration: Februar - March 2021

Financed by: Germany

Research vessel: FS Polarstern, PS124.

Non-cash contribution: EUR 120'000

Title: Role of Rhine in global plastic waste problem

Project Leader: **Holm, P.**

Duration: 2020-2023

Financed by: Wilson-Mettler Foundation

Amount: CHF 30'000

Approved Cruise: Antarctic Project “Microplastics off Antarctic Peninsula’ (postponed due to COVID-19 pandemic)

Project Leader: **Holm, P.**

Duration: March 2020- April 2020

Financed by: Germany

Research vessel: Maria S. Merian, MSM90

Non-cash contribution: EUR 127'272

Cruise: Antarctic Project “Occurrence of microplastics in the Antarctic Seas”

Project Leader: **Holm, P.**

Duration: December 2018 - February 2019

Financed by: Germany,

Research vessel: FS Polarstern, PS117.

Non-cash contribution: EUR 202'040

Title: Microplastics in Antarctic ocean

Project Leader: **Holm, P.**

Duration: 2019-2021

Financed by: Ricola Foundation, Laufen

Amount: CHF 36'000

Title: Expedition for sampling of microplastics in the Antarctic sea
Project Leader: **Holm, P.**

Duration: December 2018 – February 2019

Financed by: FAG Basel

Amount: CHF 15'000

Title: Invasive gobies (aggregated several sub-projects)
Project Leader: **Holm, P.**

Duration: April 2017 – April 2022

Financed by: Different funding sources (swisslos-fonds BL, SO, AG, Canton BS; Federal Office for the Environment FOEN, University Basel)

Amount: CHF 755'000

Title: Round goby in Switzerland
Project Leader: **Holm, P.**

Duration: October 2015 - September 2017

Financed by: AWEL, Amt für Abfall, Wasser, Energie und Luft, Abteilung Gewässerschutz, Zürich, Switzerland

Amount: CHF 67'200

Title: Microplastic in Rhine catchment. Sources and assessment of biological and ecological effects
Project Leader: **Holm, P.**

Duration: July 2015 - June 2016

Financed by: WWF Switzerland

Amount: CHF 49'500

Title: Microplastic in Rhine catchment. Occurrence, Sources and Meaning
Project Leader: **Holm, P.**

Duration: 2016 - 2019

Financed by: FAG Basel

Amount: CHF 43'000

Title: Towards societal consensus – Influencing the perception and evaluation of energy policy measures by means of self-reflection and information
Project Leader: **Holm, P.**

Duration: January 2015 – December 2018

Financed by: Swiss National Science Foundation

Amount: CHF 266'000

Title: Microplastic in running waters. Load and concentration of microplastics in Rhine between Basel and the North Sea

Project Leader: **Holm, P.**

Duration: June 2014 – May 2015

Financed by: Stiftung Emilia Guggenheim-Schnurr der Naturforschenden Gesellschaft in Basel

Amount: CHF 8'970

Title: Discovering the cold: Are Antarctic fish capable of coping with anthropogenic chemicals?

Project Leaders: **Holm, P.**, Segner, H., Schmid, P.

Duration: March 2014 – November 2017

Financed by: Swiss National Science Foundation

Amount: CHF 439'000

Title: Sustainable Development on Bachelor Level – an Immersive Program in Sustainable Development

Project Leaders: **Holm, P.**, Krysiak, F.C., Burger, P.

Duration: June 2013 – December 2016

Financed by: Swiss Academies of Arts and Sciences

Amount: CHF 98'068

Title: Sustainable Development at Universities Program: Summer School

Project Leaders: Burger, P., Krysiak, F.C., **Holm, P.**

Duration: June 2013 – December 2016

Financed by: Swiss Academies of Arts and Sciences

Amount: CHF 99'860

Title: Invasive Species

Project Leaders: **Holm, P.**, Kalchhauser I., Hirsch, P.

Duration: January 2013 – December 2016

Financed by: Federal Office for the Environment FOEN, Bern; Amt für Umwelt und Energie Basel-Stadt; Lotteriefonds Solothurn; Swisslos Fonds Aarau; Swisslosfonds Baselland;

Amount: CHF 489'068

Title: Invasive Species – pre-project

Project Leaders: **Holm, P.**, Kalchhauser I., Hirsch, P.

Duration: September 2012 – December 2012

Financed by: Canton of Aargau; Federal Office for the Environment FOEN

Amount: CHF 20'000

Title: Research Center for Sustainable Energy and Water Supply
 Project Leaders: Burger, P., **Holm, P.**, Krysiak, F.
 Duration: August 2011 – July 2016
 Financed by: Different funding sources
 Amount: CHF 1'753'585

Title: Physiological Capacity of Antarctic Fish
 Project Leader: **Holm, P.**
 Duration: December 2011 – December 2014
 Financed by: Freiwillige Akademische Gesellschaft (FAG), Basel
 Amount: CHF 25'000

Title: Methodologies to measure and characterize fine sediment input to alpine rivers and their effects on health and reproduction of gravel spawning brown trout (*Salmo trutta*)
 Project Leaders: **Holm, P.**, Alewell, C., Huggenberger, P.
 Duration: September 2011 – August 2012
 Financed by: Swiss National Science Foundation, CoRe
 Amount: CHF 129'268

Title: Deterioration of habitats for fish (*Salmonidae*) in running water courses of Alberta due to fine sediment input from forestry
 Project Leader: **Holm, P.**
 Duration: 2010 – 2012
 Financed by: Alberta Water Research Institute, Edmonton, Alberta (Canada)
 Amount: CAD 43'000

Title: Supporting measures on energy efficiency of buildings: awareness, effects and energetic potential
 Project Leaders: **Holm, P.**, Bruppacher, S.
 Duration: 2010 – 2012
 Financed by: Amt für Umwelt und Energie, Basel
 Amount: CHF 30'000

Title: Untersuchung der Auswirkungen von Microplastics auf marine Ökosysteme. Study on the effects of microplastics on marine ecosystems.
 Project Leader: **Holm, P.**
 Duration: 2009 – 2010
 Financed by: usitawiNetwork Club Basel
 Amount: CHF 2'124

Title: PhastSystem with Separation-Control and Development Units

Project Leaders: **Holm, P.**, Pietsch, C.

Duration: 2009 – 2010

Financed by: Freiwillige Akademische Gesellschaft (FAG), Basel

Amount: CHF 10'000

Title: Application of a brown trout (*Salmo trutta fario*) ex vivo conad culture for investigating the effects of chemical exposure and steroidogenesis

Project Leaders: **Holm, P.**, Thorpe, K.

Duration: 2009 – 2010

Financed by: Emilia Guggenheim-Schnurr Stiftung der Naturforschenden Gesellschaft in Basel

Amount: CHF 15'000

Title: Ecological risk assessment of PCB in aquatic food webs

Project Leaders: **Holm, P.**, Pietsch, C.

Duration: 2009

Financed by: Federal Office for the Environment FOEN

Amount: CHF 15'000

Title: PCB in fish, risk of toxic effects on fish on Switzerland and their predators

Project Leaders: **Holm, P.**, Pietsch, C.

Duration: 2008 – 2009

Financed by: Federal Office for the Environment FOEN

Amount: CHF 12'000

Title: Study on the effects of fine sediments on brown trout in Swiss running waters. Stress effects on gills

Project Leader: **Holm, P.**

Duration: 2008 – 2009

Financed by: Emilia Guggenheim-Schnurr-Stiftung, Aesch

Amount: CHF 9'400

Title: Methodologies to measure and characterise fine sediment input to alpine rivers and their effects on health and reproduction of gravel spawning brown trout (*Salmo trutta*)

Project Leaders: **Holm, P.**, Alewell, C., Bänninger, D.

Duration: September 2008 –August 2011

Financed by: Swiss National Science Foundation, KID

Amount: CHF 394'850

Title: Method development of effect monitoring in aquatic ecosystems

Project Leader: **Holm, P.**

Duration: 2008

Financed by: Federal Office for the Environment FOEN

Amount: CHF 30'000

Title: Study on estrogenic effects on zebra fish

Project Leader: **Holm, P.**

Duration: 2007

Financed by: Freiwillige Akademische Gesellschaft (FAG), Basel

Amount: CHF 8'000

Title: Library of the Master's Degree in Sustainable Development of the University of Basel

Project Leader: **Holm, P.**

Duration: June 2007 – May 2010

Financed by: Ingo-Finanz AG

Amount: CHF 36'000

Title: Development of a Master program in Sustainable Development at the University of the Philippines Cebu College

Project Leader: **Holm, P.**

Duration: 2007

Financed by: Freiwillige Akademische Gesellschaft (FAG), Basel

Amount: CHF 1'714

Title: Comparison of fish species responses to endocrine disruptors

Project Leaders: Thorpe, K.L., **Holm, P.**

Duration: August 2006 – July 2009

Financed by: Syngenta

Amount: CHF 33'000

Title: Effects of temperature and ethinylestradiol on the physiology of brown trout (*Salmo trutta*)

Project Leaders: Körner, O., **Holm, P.**

Duration: 2006

Financed by: Basler Stiftung für Experimentelle Zoologie

Amount: CHF 2'500

Title: Assessment of the effects of aromatase inhibitors and solvents by means of an in vitro assay

Project Leaders: a Marca, M., **Holm, P.**

Duration: April 2006 – March 2009

Financed by: Syngenta

Amount: CHF 33'000

Title: Micropollution in Swiss Surface Waters (MicroPoll)

Project Leaders: Knauer, K., **Holm, P.**

Duration: January 2005 – December 2007

Financed by: Federal Office for the Environment FOEN

Amount: CHF 100'000

Title: Project N° 252: Master Studies of Sustainable Development

Project Leader: **Holm, P.**

Duration: 2005 – 2007

Financed by: Velux Stiftung

Amount: CHF 300'000

Title: Endocrine disruption in Switzerland: Assessment of fish exposure and effects (SAFE I & II)

Project Leaders: **Holm, P.**, Segner, H., Peter, A., Suter, M.

Duration: June 2002 – July 2007

Financed by: Swiss National Science Foundation, NFP 50

Amount: CHF 350'000 + CHF 233'000

Title: Modul-Stufen-Konzept, Modul Ökotoxikologie (Modular concept for comprehensive assessment of streams, modul ecotoxicology)

Project Leaders: Schweigert, N., Eggen, R.I.L., Behra, R., Bundi, U., Escher, B., **Holm, P.**

Duration: January 2001 – December 2004

Financed by: Federal Office for the Environment FOEN, Eawag

Amount: CHF 405'000

Title: Äschenbestand Inn Oberengadin (Abundance of grayling in the river Inn, Oberengadin)

Project Leader: **Holm, P.**

Duration: June 2000 – December 2000

Financed by: Jagd- und Fischereiinspektorat und Amt für Umwelt GR

Amount: CHF 25'800

Title: Evaluierung von Ansätzen und Methoden zur ökotoxikologischen Gewässerbeurteilung (Evaluation of concepts and methods for an ecotoxicological assessment of water quality)

Project Leaders: R. Behra, R. Eggen, B. Escher, **P. Holm.**

Duration: March 2000 – September 2001

Financed by: Eawag Dübendorf

Amount: CHF 45'000

Title: Untersuchung der Biozönose im Linthkanal im Bereich der Salzwassereinleitung der KVA Niederurnen (Investigation on the biocenose in the channel of Linth, in the area of the salt water inflow of the sewage plant Niederurnen)

Project Leader: **Holm, P.**

Duration: January 2000 – June 2001

Financed by: KVA Linthgebiet Niederurnen

Amount: CHF 58'130

Title: Project Fishnet

Project Leader: **Holm, P.**

Duration: 1999 – 2004

Financed by: All 26 Swiss cantons, the Principality of Liechtenstein, Eawag, Federal Office for the Environment FOEN

Amount: CHF 5'000'000

Title: Gonadenveränderungen (Ovotestis) in männlichen Forellen (Alteration of gonads (ovotestis) in male brown trout)

Project Leaders: Wahli, T., **Holm, P.**

Duration: July 1999 – December 1999

Financed by: Federal Office for the Environment FOEN

Amount: CHF 29'000

Title: Immunhistologische Untersuchung der Vitellogenin-Expression in Bachforellen aus schweizerischen Fließgewässern (Immunohistological investigation of the expression of vitellogenin in brown trout of Swiss running water systems)

Project Leader: **Holm, P.**

Duration: November 1998 – July 1999

Financed by: Federal Office for the Environment FOEN

Amount: CHF 49'000

Title: Biomonitoring in Fließgewässern des Kantons Bern (Biomonitoring in running water systems in the canton Berne)

Project Leaders: Meier, W., Wahli, T., **Holm, P.**

Duration: April 1998 – September 1999

Financed by: Kantonales Amt für Gewässerschutz, Bern

Amount: CHF 110'000

Title: Water quality: development of a set of biomarkers as an instrument to assess water quality

Project Leaders: Meier, W., **Holm, P.**

Duration: April 1996 – March 1999

Financed by: Swiss National Science Foundation

Amount: CHF 179'690

Title: Einfluss verschiedener Gewässeranteile der Langeten (Flusswasser, ARA-Auslauf, Grundwasser) auf Fische als Biomonitoren. Vergleich mit chemisch-analytischen, ökomorphologischen und anderen biologischen Untersuchungen (Influence of the different parts of the river water of the river Langeten (river water, sewage water, groundwater) on fish as bioindicators)

Project Leaders: **Holm, P.**, Wahli, T., Meier, W.

Duration: February 1996 – February 1999

Financed by: Kantonales Amt für Gewässerschutz, Bern, Fischereinspektorat Bern, Federal Office for the Environment FOEN

Amount: CHF 255'732

Title: Entwicklung eines Instrumentariums zur Bewertung des Einflusses der Abwasserqualität von ARA-Ausläufen auf die Organismengemeinschaft im Vorfluter (Development of instruments to assess the influence of the sewage water quality of sewage water treatment plants on organisms in the river)

Project Leaders: Meier, W., **Holm, P.**

Duration: October 1994 – July 1997

Financed by: Kantonales Amt für Gewässerschutz, Bern, Fischereiinspektorat, Bern, Federal Office for the Environment FOEN

Amount: CHF 249'000

Title: Methods for evaluation of nutritional status of fish larvae

Project Leaders: Paulsen, H., Poulsen, N.E. Lavens, P., Korsgaard, B., Iglesias, J., Olmedo, M., **Holm, P.**

Duration: January 1990 – December 1992

Financed by: EG-Project Fisheries Sector

Amount: ECU 242'262

PUBLICATIONS



PEER-REVIEWED JOURNAL ARTICLES

1. Wiegleb, J., Hirsch, Ph. E., Seidel, F., Rauter, G., **Burkhardt-Holm, P.**, 2023. Round goby [*Neogobius melanostomus* (Pallas, 1814)], gudgeon (*Gobio gobio* L.) and bullhead (*Cottus gobio* L.) show distinct swimming patterns in a vertical slot fish pass. *Front. Environ. Sci.* 2023. doi.org/10.3389/fenvs.2023.1156248
2. Wiegleb, J., Hirsch, Ph. E., Seidel, F., Rauter, G., **Burkhardt-Holm, P.**, 2022. Impact of hydraulic forces on the passage of round goby (*Neogobius melanostomus*), gudgeon (*Gobio gobio*) and bullhead (*Cottus gobio*) in a vertical slot fish pass. *Ecology of Freshwater Fish* 2022. doi: 10.1111/eff.12696
3. Leistenschneider, C., Le Bohec, C., Eisen, O., Houstin, A., Neff, S., Primpke, S., Zitterbart, D.P., **Burkhardt-Holm, P.**, Gerds, G., 2022. No evidence of microplastic ingestion in emperor penguin chicks (*Aptenodytes forsteri*) from the Atka Bay colony (Dronning Maud Land, Antarctica). *STOTEN* 2022, 85 | Part 2, doi: 10.1016/j.scitotenv.2022.158314
4. Bussmann, K., Hirsch, Ph.E., Lehmann, M.F., **Burkhardt-Holm, P.**, 2022. Differential habitat use of a notorious invasive fish, the round goby, in a translocation-relevant system. *Ecology and Evolution* 2022:12:e9202. doi: 10.1002/ece3.9202
5. Bussmann, K., Hirsch, Ph.E., **Burkhardt-Holm, P.**, 2022. Invasive goby larvae: first evidence as stowaways in small watercraft motors. *Management of Biological Invasions* 13(1), 191-203. doi: 10.3391/mbi.2022.13.1.11.

6. Purser, A., Hehemann, L., Boehringer, L., Tippenhauer, S., Wege, M., Bornemann, H., Pineda-Metz, S.E.A., Flintrop, C.M., Koch, F., Hellmer, H.H., **Burkhardt-Holm, P.**, Janout, M., Werner, E., Glemser, B., Balaguer, J., Rogge, A., Holtappels, M., Wenzhoefer, F. 2022. A vast icefish breeding colony discovered in the Antarctic. *Current Biology*. doi:10.1016/j.cub.2021.12.022.
7. Strobel, A., Lille-Langøy, R., Segner, H., **Burkhardt-Holm, P.**, Goksøyr, A., Odd, A.K. 2021. Xenobiotic metabolism and its physiological consequences in high-Antarctic Notothenioid fishes. *Polar Biology*. doi: 10.1007/s00300-021-02992-4.
8. Wiegleb, J., Hirsch, Ph.E., Seidel, F., Rauter, G., **Burkhardt-Holm, P.**, 2021. Flow, force, behaviour: assessment of a prototype hydraulic barrier for invasive fish. *Hydrobiologia* (2022) 849, 1001–1019. doi: 10.1007/s10750-021-04762-z.
9. Leistenschneider, C., **Burkhardt-Holm, P.**, Mani, T., Primpke, S., Taubner, H., Gerdts, G. 2021. Microplastics in the Weddell Sea (Antarctica): A Forensic Approach for Discrimination between Environmental and Vessel-Induced Microplastics. *Environ. Sci. Technol.* 55, 23, 15900–15911. doi: 10.1021/acs.est.1c05207 (most read).
10. Paler, M.K.O., Leistenschneider, C., Migo, V, **Burkhardt-Holm, P.** 2021. Low microplastic abundance in *Siganus* spp. From the Tañon Strait, Central Philippines. *Environmental Pollution* 284, 117166. doi: 10.1016/j.envpol.2021.117166.
11. Yong, M.M.H., Leistenschneider, C., Miranda, J.A., Paler, M.K., Legaspi, Ch., Germanov, E., Araujo, G., **Burkhardt-Holm, P.**, Erni-Cassola, G. 2021. Microplastics in fecal samples of whale sharks (*Rhincodon typus*) and from surface water in the Philippines. *Microplastics and Nanoplastics*, 1, 17. doi: 10.1186/s43591-021-00017-9.
12. Hirsch, P.E., N'Guyen, A., **Burkhardt-Holm, P.** 2021. Hobbyists acting simultaneously as anglers and aquarists: Novel pathways for non-native fish and impacts on native fish. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 31, 6, 1285-1296. doi: 10.1002/aqc.3557.
13. Egger, B., Wiegleb, J., Seidel, F., **Burkhardt-Holm, P.**, Hirsch, P.E. 2020. Comparative swimming performance and behaviour of three benthic fish species: The invasive round goby (*Neogobius melanostomus*), the native bullhead (*Cottus gobio*), and the native gudgeon (*Gobio gobio*). *Ecology of freshwater fish*. 30 (3), 391-405. doi: 10.1111/eff.12592.

14. Bosshart, S., Erni-Cassola, G., **Burkhardt-Holm, P.** 2020. Independence of microplastic ingestion from environmental load in the round goby (*Neogobius melanostomus*) from the Rhine river using high quality standards. *Environmental Pollution*, 267, 115664.
15. Wiegleb, J., Hirsch, P.E., Egger, B., Seidel, F., **Burkhardt-Holm, P.** 2020. Flow field-induced drag forces and swimming behavior of three benthic fish species. *Limnologica*. 84, 125812.
16. Bussmann, K, **Burkhardt-Holm, P.** 2020. Round gobies in the third dimension – use of vertical walls as habitat enables vector contact in a bottom-dwelling invasive fish. *Aquatic Invasions* 15, 683-699.
17. Unger, B., Herr, H., Viquerat, S., Gilles, A., **Burkhardt-Holm, P.**, Siebert, U. 2020. Opportunistically collected data from aerial surveys reveal spatio-temporal distribution patterns of marine debris in German waters. *Environmental Science and Pollution Research international* 28, 2893-2903.
18. Lutz, E., Hirsch, P.E. , Bussmann, K. , Wiegleb, J., Jermann, H-P., Muller, R., **Burkhardt-Holm, P.**, Adrian-Kalchhauser, I. 2020. Predation on native fish eggs by invasive round goby revealed by species-specific gut content DNA analyses. *Aquatic Conservation 30: Marine and Freshwater Ecosystems*, 1566-1577.
19. Herr, H., **Burkhardt-Holm, P.**, Heyer, K., Siebert, U., Selling, J. 2020. Injuries, Malformations, and Epidermal Conditions in Cetaceans of the Strait of Gibraltar. *Aquatic Mammals*, 46(2), 215-235.
20. Mani, T., **Burkhardt-Holm, P.** 2019. Seasonal microplastics variation in nival and pluvial stretches of the Rhine River – From the Swiss catchment towards the North Sea. *Science of The Total Environment*, 135579.
21. Ruesch Schweizer, C., Di Giulio, A., **Burkhardt-Holm, P.** 2019. Scientific Support for Redesigning a Higher-Education Curriculum on Sustainability. *Sustainability* 11, 6035.
22. Di Giulio, A., Ruesch Schweizer, C., Defila, R., Hirsch, P., **Burkhardt-Holm, P.** 2019. "These Grandmas Drove Me Mad. It Was Brilliant!" - Promising Starting Points to Support Citizen Competence for Sustainable Consumption in Adults. *Sustainability* 11, 681.
23. **Burkhardt-Holm, P.**, N'Guyen, A. 2019. Ingestion of microplastics by fish and other prey organisms of cetaceans, exemplified for two large baleen whale species. *Marine Pollution Bulletin*, 144, 224-234.

24. Mani, T., Primpke, S., Lorenz, C., Gerdt, G., **Burkhardt-Holm, P.** 2019. Microplastic Pollution in Benthic Midstream Sediments of the Rhine River. *Environ. Sci. Technol.*, 53, 6053–6062.
25. Mani, T., Blarer, P., Storck, F.R., Pittroff, M., Wernicke, T., **Burkhardt-Holm, P.** 2019. Repeated detection of polystyrene microbeads in the Lower Rhine River. *Environmental Pollution*, 245, 634-641.
26. Mani, T., Frehland, S.; Kalberer, A.; **Burkhardt-Holm, P.** 2019. Using castor oil to separate microplastics from four different environmental matrices. *Analytical Methods*, 11 (13), 1788-1794.
27. Somerville, V., Schwaiger, M., Hirsch, P. E., Walser, J., Bussmann, K., Weyrich, A., **Burkhardt-Holm, P.**, Adrian-Kalchhauser, I. 2019. DNA Methylation Patterns in the Round Goby Hypothalamus Support an On-The-Spot Decision Scenario for Territorial Behavior. *Genes*. 10 (3), 1-22.
28. Adrian-Kalchhauser, I., Walser, J., Schwaiger, M., **Burkhardt-Holm, P.** 2018. RNA sequencing of early round goby embryos reveals that maternal experiences can shape the maternal RNA contribution in a wild vertebrate. *BMC Evolutionary Biology*, 18 (1), 34.
29. **Burkhardt-Holm, P.**, Zehnder, A.J.B. 2018. Fischnetz: Assessing outcomes and impacts of a project at the interface of science and public policy. *Environmental Science & Policy*, 82, 52-59.
30. Hirsch, P. E., N'Guyen, A., Muller, R., Adrian-Kalchhauser, I., **Burkhardt-Holm, P.** 2018. Colonizing islands of water on dry land - on the passive dispersal of fish eggs by birds. *Fish and Fisheries*, 19(3), 502-510.
31. N'Guyen, A., Hirsch, P.E., Bozzuto, C., Adrian-Kalchhauser, I., Hôrková, K., **Burkhardt-Holm, P.**, Zenni, R. 2018. A dynamical model for invasive round goby populations reveals efficient and effective management options. *Journal of Applied Ecology*, 55 (1), 342-352.
32. Strobel, A., Mark, F., Segner, H., **Burkhardt-Holm, P.** 2018. Expression of aryl hydrocarbon receptor-regulated genes and superoxide-dismutase in the Antarctic eelpout *Pachycara brachycephalum* exposed to Benzo(a)pyrene. *Environmental Toxicology and Chemistry*, 37 (5) 1487- 1495.
33. Strobel, A., Schmid, P., **Burkhardt-Holm, P.**, Segner, H., 2018, Zennegg, M. 2018. Persistent organic pollutants in red- and white-blooded High-Antarctic notothenioid fish from the remote Weddell Sea. *Chemosphere*. 193, 213 – 222.

34. Unger, B., Herr, H., Benke, H., Böhmert, M., **Burkhardt-Holm, P.**, Dähne, M., Hillmann, M., Wolff- Schmidt, K., Wohlsein, P., Siebert, U. 2017. Marine debris in harbor porpoises and seals from German water. *Marine Environmental Research*, 130: 77-84.
35. Adrian-Kalchhauser, I., N'Guyen, A., Hirsch, P.E., **Burkhardt-Holm, P.** The invasive round goby may attach its eggs to ships or boats –but there is no evidence. 2017. *Aquatic Invasions*, 12 (2): 263–267.
36. Galetti Vernazzani, B., **Burkhardt-Holm, P.**, Cabrera, E., Iniguez, M., Luna, F., Parsons, E.C.M., Ritter, F., Rodriguez-Fonseca, J., Sironi, M., Stachowitsch, M. 2017: Management and conservation at the International Whaling Commission: a dichotomy sandwiched within a shifting baseline. *Marine Policy* 83, 164–171.
37. Straub, S., Hirsch, P.E., **Burkhardt-Holm, P.**, 2017. Biodegradable and petroleum-based microplastics do not differ in their ingestion and excretion but in their biological effects in a freshwater invertebrate *Gammarus fossarum*. *International Journal of Environmental Research and Public Health* 14: 774.
38. Adrian-Kalchhauser, I., Svensson, O., Kutschera, V.E., Rosenblad, M.A., Pippel, M., Winkler, S., Schloissnig, S., Blomberg, A., **Burkhardt-Holm, P.** 2017. The mitochondrial genome sequences of the round goby and the sand goby reveal patterns of recent evolution in gobiid fish; *BMC Genomics*, 18:177.
39. Hirsch, P., Thorlacius, M., Brodin, T., **Burkhardt-Holm, P.** 2017. An approach to incorporate individual personality in modelling fish dispersal across in-stream barriers. *Ecology and Evolution*, 7 (2): 720-732.
40. Hirsch, P.E., Schillinger, M., Appolini, K., **Burkhardt-Holm, P.**, Weigt, H. 2016. Integrating economic and ecological benchmarking for sustainable development of hydropower. *Sustainability* 8 (9): 875.
41. Hirsch, P.E., N'Guyen, A., Adrian-Kalchhauser, I., **Burkhardt-Holm, P.** 2016. What do we really know about the impacts of one of the 100 worst invaders in Europe? A reality check. *AMBIO* 45 (3): 267-279.
42. **Holm, P.**, Holm, F.J., Holm, J. 2016. Jagen – beobachten – vergöttern: Wal und Mensch. *Biologie in unserer Zeit* 46: 300-307.
43. Strobel, A., Schmid, P., Segner, H., **Burkhardt-Holm, P.**, Zennegg, M. 2016. Persistent organic pollutants in tissues of the white-blooded Antarctic fish *Champscephalus gunnari* and *Chaenocephalus aceratus*. *Chemosphere* 161: 555-562.

44. Blarer, P., **Burkhardt-Holm, P.** 2016. Microplastics affect assimilation efficiency in freshwater amphipod *Gammarus fossarum*. *Environmental Science and Pollution Research* 23 (23): 23522–23532.
45. Adrian-Kalchhauser, I., Hirsch, P.E., Behrmann-Godel, J., N'Guyen, A., Watzlawczyk, J., Gertzen, S., Borchering, J., **Burkhardt-Holm, P.** 2016. The invasive bighead goby *Ponticola kessleri* displays large-scale genetic similarities and small-scale genetic differentiation in relation to shipping patterns. *Molecular Ecology*. 25 (9): 1925-1943.
46. Hirsch, P.E., **Burkhardt-Holm, P.**, Töpfer, I., Fischer, P. 2016. Movement patterns and shelter choice of spiny-cheek crayfish (*Orconectes limosus*) in a large lake's littoral zone. *Aquatic Invasions* 10 (1): 55-65.
47. Hirsch, P.E., Adrian-Kalchhauser, I., Flämig, S., N'Guyen, A., Defila, R., Di Giulio, A., **Burkhardt-Holm, P.** 2016. A tough egg to crack: recreational boats as vectors for invasive goby eggs and transdisciplinary management approaches. *Ecology and Evolution* 6 (3): 707-715.
48. Adrian-Kalchhauser, I., **Burkhardt-Holm, P.** 2016. An eDNA assay to monitor a globally invasive fish species from flowing freshwater. *PLOS ONE* 11 (1): e0147558.
49. Kalchhauser, I., Kutschera, V.E., **Burkhardt-Holm, P.** 2016. The complete mitochondrial genome of the invasive Ponto-Caspian goby *Ponticola kessleri* obtained from high-throughput sequencing using the Ion Torrent Personal Genome Machine. *Mitochondrial DNA Part A* 27 (3): 1887-1889.
50. Glaus, K., Kalchhauser, I., **Burkhardt-Holm, P.**, White, W., Brunnschweiler, J. 2015. Characteristics of the shark fisheries of Fiji. *Scientific Reports* 5: 17556.
51. N'Guyen, A., Hirsch, P., Adrian-Kalchhauser, I., **Burkhardt-Holm, P.**, 2015. Improving invasive species management by integrating priorities and contributions of scientists and decision makers. *Ambio* (45), 3, 280-9
52. Mani, T., Hauk, A., Walter, U., **Burkhardt-Holm, P.** 2015. Microplastics profile along the Rhine River. *Scientific Reports* 5: 17988.
53. Pietsch, C., Kersten, S., Valenta, H., Dänicke, S., Schulz, C., **Burkhardt-Holm, P.**, Junge, R. 2015. Effects of dietary exposure to zearalenone (ZEN) on carp (*Cyprinus carpio* L.). *Toxins* 7: 3465-3480.
54. Pietsch, C., Katzenback, B., Garcia-Garcia, E., Schulz, C., Belosevic, M., **Burkhardt-Holm, P.** 2015. Acute and subchronic effects on immune responses of carp (*Cyprinus carpio* L.) after exposure to deoxynivalenol (DON) in feed. *Mycotoxin Research* 31: 151-164.

55. Strobel, A., **Burkhardt-Holm, P.**, Schmid, P., Segner, H. 2015. Benzo(a)pyrene Metabolism and EROD and GST Biotransformation Activity in the Liver of Red- and White-Blooded Antarctic Fish. *Environmental Science and Technology* 49: 8022-8032.
56. Pietsch, C., Junge, R., **Burkhardt-Holm, P.** 2015. Immunomodulation by Zearalenone in Carp (*Cyprinus carpio* L.). *BioMed Research International*: 420702, 9pp.
57. Pietsch, C., **Burkhardt-Holm, P.** 2015. Feed-borne exposure to deoxynivalenol leads to acute and chronic effects on liver enzymes and histology in carp. *World Mycotoxin Journal* 8 (5): 619-627.
58. Reichenbach, M., Bruppacher, S., **Holm, P.** 2015. Veränderte Bewertung von Pedelecs nach einer Testerfahrung. Unterschiede zwischen Mobilitätstypen und Wegezwecken am Beispiel der Basler Energy Tours. *Umweltpsychologie* 1: 79-98.
59. Wilmsmeier, L., **Holm, P.** 2015. Instream Revitalisierung – eine geeignete Massnahme zur Aufwertung von Fließgewässern? *Aqua Viva* 4: 11-15.
60. **Holm, P.**, Kalchhauser, I., Hirsch, P. 2014. Schwarzmundgrundel & Co. – Fremde Fische in Flüssen und Seen. *Biologie in unserer Zeit* 6 (44): 392-399.
61. Hirsch, P.E., Schillinger, S., Weigt, H., **Burkhardt-Holm, P.** 2014. A hydro-economic model for water level fluctuations: Combining limnology with economics for sustainable development of hydropower. *PLOS ONE* 9 (12): 1-26.
62. Schubert, S., Peter, A., Schönenberger, R., Suter, M. J.-F., Segner, H., **Burkhardt-Holm, P.** 2014. Transient exposure to environmental estrogen affects embryonic development of brown trout (*Salmo trutta fario*). *Aquatic Toxicology* 157: 141-149.
63. Berli, B.I., Gilbert, M.J.H., Ralph, A.L., Tierney, K. B., **Burkhardt-Holm, P.** 2014. Acute exposure to a common suspended sediment affects the swimming performance and physiology of juvenile salmonids. *Comparative Biochemistry and Physiology, Part A: Molecular and Integrative Physiology* 176: 1-10.
64. Pietsch, C., Noser, J., Wettstein, F.E., **Burkhardt-Holm, P.** 2014. Unravelling the mechanisms involved in zearalenone-mediated toxicity in permanent fish cell cultures. *Toxicol* 88: 44-61.
65. Pietsch, C., Hollender, J., Dorusch, F., **Burkhardt-Holm, P.** 2014. Cytotoxic effects of pentachlorophenol (PCP) and its metabolite tetrachlorohydroquinone (TCHQ) on liver cells are modulated by antioxidants. *Cell Biology and Toxicology* 30 (4): 233-252.
66. Michel, C., Herzog, S., de Capitani, C., **Burkhardt-Holm, P.**, Pietsch, C. 2014. Natural mineral particles are cytotoxic to rainbow trout gill epithelial cells in vitro. *PLOS ONE* 9 (7): 1-11.

67. Pietsch, C., Michel, C., Kersten, S., Valenta, H., Dänicke, S., Schulz, C., Kloas, W., **Burkhardt-Holm, P.** 2014. In vivo effects of deoxynivalenol (DON) on innate immune responses of carp (*Cyprinus carpio* L.). *Food and Chemical Toxicology* 68: 44-52.
68. Michel, C., Schindler Wildhaber, Y., Epting, J., Thorpe, K., Huggenberger, P., Alewell, C. & **Burkhardt-Holm, P.** 2014. Artificial steps mitigate the effect of fine sediment on the survival of brown trout embryos in a heavily modified river. *Freshwater Biology* 59: 544-556.
69. Pietsch, C., Schulz, C., Rovira, P., Kloas, W., **Burkhardt-Holm, P.** 2014. Organ damage and hepatic lipid accumulation in carp (*Cyprinus carpio* L.) after feed-borne exposure to the mycotoxin, Deoxynivalenol (DON). *Toxins* 6: 756-778.
70. Pereira, M.L.A.M., Eppler, E., Thorpe, K.L., Wheeler, J.R., **Burkhardt-Holm, P.** 2014. Molecular and cellular effects of chemicals disrupting steroidogenesis during early ovarian development of brown trout (*Salmo trutta fario*). *Environmental Toxicology* 29 (2): 199-206.
71. Schindler Wildhaber, Y., Michel C., Epting J., Wildhaber, R.A., Huber, E., Huggenberger, P., **Burkhardt-Holm, P.**, Alewell, C. 2014. Effects of river morphology, hydraulic gradients, and sediment deposition on water exchange and oxygen dynamics in salmonid redds. *Science of the Total Environment* 470-471: 488-500.
72. Schwartz, P., Bucheli T. D., Wettstein, F.E., **Burkhardt-Holm, P.** 2013. Life-cycle exposure to the estrogenic mycotoxin zearalenone affects zebrafish (*Danio rerio*) development and reproduction. *Environmental Toxicology* 28 (5): 276-289.
73. Michel, C., Schmidt-Posthaus, H., **Burkhardt-Holm, P.** 2013. Suspended sediment pulse effects in rainbow trout (*Oncorhynchus mykiss*) – relating apical and systemic responses. *Canadian Journal of Fisheries and Aquatic Sciences* 70 (4): 630-641.
74. Burki, R., Krasnov, A., Bettge, K., Rexroad III, C.E., Afanasyev, S., Antikainen, M., **Burkhardt-Holm, P.**, Wahli, T., Segner, H. 2013. Molecular crosstalks between a chemical and a biological stressor and consequences on disease manifestation in rainbow trout. *Aquatic Toxicology* 127: 2-8.
75. Pietsch, C., Kersten, S., **Burkhardt-Holm, P.**, Valenta, H., Dänicke, S. 2013. Occurrence of deoxynivalenol and zearalenone in commercial fish feed: An initial study. *Toxins* 5: 184-192.

76. **Holm, P.**, Schulz, G., Athanasopulu, K. 2013. Meeresverschmutzung der neuen Art: Mikroplastik –ein unsichtbarer Störenfried, *Biologie in unserer Zeit* 1 (43): 27-33.
77. Kalchhauser, I., Mutzner, P., Hirsch, P., **Burkhardt-Holm, P.** 2013. Arrival of round goby *Neogobius melanostomus* (Pallas, 1814) and bighead goby *Ponticola kessleri* (Günther, 1861) in the Upper Rhine (Switzerland). *BioInvasions Records* 2 (1): 79-83.
78. Ralph, A.L., Berli, B.I., **Burkhardt-Holm, P.**, Tierney, L.B. 2012. Variability in swimming performance and underlying physiology in rainbow trout (*Oncorhynchus mykiss*) and brown trout (*Salmo trutta*). *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology* 163 (3-4): 350-356.
79. Von Moos, N., **Burkhardt-Holm, P.**, Köhler, A. 2012. Uptake and effects of microplastics on cells and tissue of the blue mussel *Mytilus edulis* L. after an experimental exposure. *Environmental Science and Technology* 46: 11327-11335.
80. Burki, R., Krasnov, A., Bettge, K., Rexroad III, C.E., Afanasyev, S., Antikainen, M., Wahli, T., **Burkhardt-Holm, P.**, Segner, H. 2012. Pathogenic infections confound induction of the estrogenic biomarker vitellogenin in rainbow trout. *Environmental Toxicology and Chemistry* 31 (10): 2318-2323.
81. Segner, H., Wahli, T., **Burkhardt-Holm, P.** 2012. Combined effects of parasites, climate and pollution on brown trout, *Salmo trutta*, in Swiss rivers. *Comparative Biochemistry and Physiology A: Molecular and Integrative Physiology* 163 (1) – Supplement S: 40.
82. **Burkhardt-Holm, P.**, Segner, H., Schmid, P. 2012. Discover the cold: Are Antarctic fish capable of coping with anthropogenic chemicals. *Reports on Polar and Marine Research* 652: 21-25.
83. Schindler Wildhaber, Y., Michel, C., **Burkhardt-Holm, P.**, Bänninger, D., Alewell, C. 2012. Measurement of spatial and temporal fine sediment dynamics in a small river. *Hydrology and Earth System Sciences* 16 (5):1501-1515.
84. Thorpe, K.L., Pereira, M.L.A.M., Schiffer, H., **Burkhardt-Holm, P.**, Weber, K., Wheeler, J.R. 2011. Mode of sexual differentiation and its influence on the relative sensitivity of the fathead minnow and zebrafish in the fish sexual development test. *Aquatic Toxicology* 105: 412-420.
85. Pietsch, C., Bucheli, T., Wettstein, F., **Burkhardt-Holm, P.** 2011. Frequent biphasic cellular responses of permanent fish cell cultures to deoxynivalenol (DON). *Toxicology and Applied Pharmacology* 256: 24-34.

86. Häfeli, N., Schwartz, P., **Burkhardt-Holm, P.** 2011. Embryotoxic and genotoxic potential of biofilm and sediment in the catchment area of a sewage treatment plant in Switzerland. *Ecotoxicology and Environmental Safety* 74: 1271-1279.
87. Pereira M.L.A.M., Wheeler, J.R., Thorpe, K.L., **Burkhardt-Holm, P.** 2011. Development of an ex vivo brown trout (*Salmo trutta fario*) gonad culture for assessing chemical effects on steroidogenesis. *Aquatic Toxicology* 101: 500-511.
88. Schwartz, P., Thorpe, K.L., Bucheli, Th.D., Wettstein, F.E., **Burkhardt-Holm, P.** 2010. Short-term exposure to the environmentally relevant estrogenic mycotoxin zearalenone impairs reproduction in fish. *Science of the Total Environment* 409: 326-333.
89. Burki, R., Wahli, T., Segner, H., **Burkhardt-Holm, P.**, Rexroad, C.E., Afanasyev, S., Antikainen, M., Krasnov, A. 2010. Pathogenic infection attenuates the response of the estrogenic biomarker, vitellogenin, in rainbow trout. *Comparative Biochemistry and Physiology A: Molecular and Integrative Physiology* 157 (1): 23.
90. **Burkhardt-Holm, P.** 2010. Endocrine disruptors and water quality: A state-of-the-art review. *International Journal of Water Resources Development* 26 (3): 477-493.
91. **Burkhardt-Holm, P.** 2009. Klimawandel und Bachforellennrückgang - gibt es einen Zusammenhang? Resultate in der Schweiz. *Umweltwissenschaften und Schadstoff Forschung* 21: 177-185.
92. Scheurer, K., Alewell, C., Bänninger, D., **Burkhardt-Holm, P.** 2009. Climate and land-use changes affecting river sediment and brown trout in alpine countries – A review. *Environmental Science and Pollution Research* 16: 232-242.
93. Körner, O., Kohno, S., Schönenberger, R., Suter, M.J.F., Knauer, K., Guillette, L.J., **Burkhardt-Holm, P.** 2008. Water temperature and concomitant waterborne ethinylestradiol exposure affects the vitellogenin expression in juvenile brown trout (*Salmo trutta*). *Aquatic Toxicology* 90: 188-196.
94. Schubert, S., Peter, A., Burki, R., Schönenberger, R., Suter, M.J.F., Segner, H., **Burkhardt-Holm, P.** 2008. Sensitivity of brown trout reproduction to long-term estrogenic exposure. *Aquatic Toxicology* 90: 65-72.
95. **Burkhardt-Holm, P.** 2008. Decline of brown trout (*Salmo trutta*) in Switzerland – How to assess potential causes in a multi-factorial cause-effect relationship. *Marine Environmental Research* 66 (1): 181-182.

96. **Burkhardt-Holm, P.**, Segner, H., Burki, R., Peter, A., Schubert, S. 2008. Estrogenic Endocrine Disruption in Switzerland. Assessment of Fish Exposure and Effects, *Chimia* 62: 376-382.
97. **Burkhardt-Holm, P.**, Chebbi, C. 2008. Master's degree in sustainable development in Switzerland, the first master course comprising three faculties. *Environmental Science and Pollution Research* 15 (2): 136-142
98. Zimmerli, S., Bernet, D., **Burkhardt-Holm, P.**, Schmidt-Posthaus, H., Vonlanthen, P., Wahli, T., Segner, H. 2007. Assessment of fish health status in four Swiss rivers showing a decline of brown trout catches. *Aquatic Science* 69 (1): 11-25.
99. Schager, E., Peter, A., **Burkhardt-Holm, P.** 2007. Status of young-of-the-year brown trout (*Salmo trutta fario*) in Swiss streams: factors influencing YOY trout recruitment. *Aquatic Sciences* 69 (1): 41-50.
100. Körner, O., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2007. Reproductive health of brown trout inhabiting Swiss rivers with declining fish catch. *Aquatic Sciences* 69 (1): 26-40.
101. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2007. Occurrence of polybrominated diphenyl ethers (PBDEs) in brown trout bile and liver from Swiss rivers. *Environmental Pollution* 146: 107-113.
102. **Burkhardt-Holm, P.** 2007. Project Fischnetz: Decline of fish catch in Switzerland. *Aquatic Sciences* 69 (1): 1-2.
103. **Burkhardt-Holm, P.**, Scheurer, K. 2007. Application of the weight-of-evidence approach to assess the decline of brown trout (*Salmo trutta*) in Swiss rivers. *Aquatic Sciences* 69 (1): 51-70.
104. Vermeirssen, E.L.M., Suter, M J-F., **Burkhardt-Holm, P.** 2006. Estrogenicity patterns in the Swiss midland river Lützelalmurg in relation to treated domestic sewage effluent discharges and hydrology. *Environmental Toxicology and Chemistry* 25: 2413-2422.
105. Suter, M.J.-F., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2006. Pouvoir féminisant des rivières du Plateau suisse. *Lémaniques* 62: 6.
106. Hari, R.E., Livingstone, D.M., Siber, R., **Burkhardt-Holm, P.**, Güttinger, H. 2006. Consequences of climatic change for water temperature and brown trout populations in Alpine rivers and streams. *Global Change Biology* 12: 10-26.

107. Burki, R., Vermeirssen, E.L.M., Körner, O., Joris, C., **Burkhardt-Holm, P.**, Segner, H. 2006. Assessment of estrogenic exposure in brown trout (*Salmo trutta*) in a Swiss midland river: Integrated analysis of passive samplers, wild and caged fish, and vitellogenin mRNA and protein. *Environmental Toxicology and Chemistry* 25: 2077-2086.
108. Borsuk, M.E., Reichert P., Peter, A., Schager, E., **Burkhardt-Holm, P.** 2006. Assessing the decline of brown trout (*Salmo trutta*) in Swiss rivers using a Bayesian probability network. *Ecological Modelling* 192: 224-244.
109. Vermeirssen, E.L.M., Körner, O., Schönenberger, R., Suter, M.J.F., **Burkhardt-Holm, P.** 2005. Characterisation of environmental estrogens in river water using a three pronged approach: Active and passive water sampling and the analysis of accumulated estrogens in the bile of caged fish. *Environmental Science and Technology* 39: 8191-8198.
110. Vermeirssen, E.L.M., Burki, R. Joris, C., Peter, A., Segner, H., Suter, M.J.-F., **Burkhardt-Holm, P.** 2005. Characterisation of the estrogenicity of Swiss midland rivers using a recombinant yeast bioassay and plasma vitellogenin concentrations in feral male brown trout. *Environmental Toxicology and Chemistry* 24: 2226 - 2233.
111. Körner, O., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2005. Intersex in feral brown trout from Swiss midland rivers. *Journal of Fish Biology* 67: 1734-1740.
112. **Burkhardt-Holm, P.**, Giger, W., Güttinger, H., Ochsenbein, U. Peter, A., Scheurer, K., Segner, H., Staub, E., Suter, M.E. 2005. Where have all the fish gone? The reasons why the fish catches in Swiss rivers are declining. *Environmental Science and Technology* 39: 441A- 447A.
113. Eggen, R.I.L., Behra, R., **Burkhardt-Holm, P.**, Escher, B. I., Schweigert, N. 2004. Challenges in Ecotoxicology. *Environmental Science and Technology* 38: 59A-64A.
114. Bernet, D., Schmidt-Posthaus, H., Wahli, T., **Burkhardt-Holm, P.** 2004. Evaluation of two monitoring approaches to assess effects of waste water disposal on histological alterations in fish. *Hydrobiologia* 524: 53-66.
115. Faller, P., Kobler, B., Peter, A., Sumpter, J. P., **Burkhardt-Holm, P.** 2003. Stress status of gudgeon (*Gobio gobio*) from rivers in Switzerland with and without input of sewage treatment plant effluent. *Environmental Toxicology and Chemistry* 22: 2063-2072.

116. Wahli, T., Knuesel, R., Bernet, D., Segner, H., Pugovkin, D., **Burkhardt-Holm, P.**, Escher, M., Schmidt-Posthaus, H. 2002. Proliferative kidney disease in Switzerland: Current state of knowledge. *Journal of Fish Diseases* 25: 491-500.
117. Schweigert, N., Eggen, R. I. L., Escher, B., **Burkhardt-Holm, P.**, Behra, R. 2002. Ecotoxicological assessment of surface waters: A modular approach integrating in vitro methods. *ALTEX* 19: 30-37.
118. **Burkhardt-Holm, P.**, Peter, A., Segner, H. 2002. Decline of fish catch in Switzerland. Project Fishnet: A balance between analysis and synthesis. *Aquatic Sciences* 64: 36-54.
119. **Burkhardt-Holm, P.** 2002. Proliferative kidney disease: Why is it of interest for the Swiss project "fishnet"? *Journal of Fish Diseases* 25: 441-442.
120. Schmidt-Posthaus, H., Bernet, D., Wahli, T., **Burkhardt-Holm, P.** 2001. Morphological organ alterations and infectious diseases in brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*) exposed to polluted river water. *Diseases of Aquatic Organisms* 44: 161-170.
121. Bernet, D., Schmidt, H., Wahli, T., **Burkhardt-Holm, P.** 2001. Effluent from a sewage treatment works causes changes in serum chemistry of brown trout (*Salmo trutta* L.). *Ecotoxicology and Environmental Safety* 48: 140-147.
122. Bernet, D., Schmidt, H., Wahli, T., **Burkhardt-Holm, P.** 2001. Auswirkung von geklärtem Abwasser auf infektiöse Krankheiten bei der Bachforelle (*Salmo trutta* L.). *Fischökologie* 12: 1-16.
123. **Burkhardt-Holm, P.** 2001. Der Fisch – wie lässt er sich als Indikator für die Qualität seiner Umwelt einsetzen? *Gaia* 10: 6-15.
124. Stoffel, M. H., Wahli, T., Friess, A. E., **Burkhardt-Holm, P.** 2000. Exposure of rainbow trout (*Oncorhynchus mykiss*) to nonylphenol is associated with an increased chloride cell fractional surface area. *Schweizer Archiv für Tierheilkunde* 142: 263-267.
125. Lamche, G., **Burkhardt-Holm, P.** 2000. Nonylphenol provokes a vesiculation of the Golgi apparatus in three fish epidermis cultures. *Ecotoxicology and Environmental Safety* 47: 137-148.
126. Lamche, G., **Burkhardt-Holm, P.** 2000. Changes in apoptotic rate and cell viability in three fish epidermis cultures after exposure to nonylphenol and to a waste water sample containing low concentrations of nonylphenol. *Biomarkers* 5: 205-218.
127. **Burkhardt-Holm, P.**, Wahli, T., Meier, W. 2000. Nonylphenol affects the granulation pattern of epidermal mucous cells in rainbow trout, *Oncorhynchus mykiss*. *Ecotoxicology and Environmental Safety* 46: 34-40.

128. Bernet, D., Schmidt, H., Wahli, T., **Burkhardt-Holm, P.** 2000. Effects of waste water on fish health: An integrated approach to biomarker responses in brown trout (*Salmo trutta* L.). *Journal of Aquatic Ecosystem and Stress Recovery* 8: 143-151.
129. Schmidt, H., Bernet, D., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1999. Active biomonitoring with brown trout and rainbow trout in diluted sewage plant effluents. *Journal of Fish Biology* 54: 585-596.
130. Escher, M., Wahli, T., Büttner, S., Meier, W., **Burkhardt-Holm, P.** 1999. The effect of sewage plant effluent on brown trout (*Salmo trutta fario*): A cage experiment. *Aquatic Sciences* 61: 93-110.
131. **Burkhardt-Holm, P.**, Bernet, D., Hogstrand, C. 1999. Increase of metallothionein-immunopositive chloride cells in the gills of brown trout and rainbow trout after exposure to sewage treatment plant effluents. *Journal of Histochemistry and Cytochemistry* 31: 339-346.
132. **Burkhardt-Holm, P.**, Oulmi, Y., Schroeder, A., Storch, V., Braunbeck, T. 1999. Toxicity of 4-chloroaniline in early life-stages of zebrafish (*Danio rerio*): II. Cytopathology and regeneration of liver and gills after prolonged exposure to waterborne 4-chloroaniline. *Archives of Environmental Contamination Toxicology* 37: 85-102.
133. Bernet, D., Schmidt, H., Meier, W., **Burkhardt-Holm, P.**, Wahli, T. 1999. Histopathology in fish: Proposal for a protocol to assess aquatic pollution. *Journal of Fish Disease* 22: 25-34.
134. Wahli, T., Meier, W., Segner, H., **Burkhardt-Holm, P.** 1998. Immunohistochemical detection of vitellogenin in male brown trout from Swiss rivers. *Journal of Histochemistry and Cytochemistry* 30: 753-758.
135. Schmidt, H., Posthaus, H., Busato, A., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1998. Transient increase in chloride cell number and heat shock protein expression (hsp70) in brown trout (*Salmo trutta fario*) exposed to sudden temperature elevation. *Biological Chemistry* 379: 1227-1233.
136. Paulsen, H., Poulsen, N. E., Iglesias, J., Olmedo, M., Korsgaard, B., Lavens, P., **Burkhardt-Holm, P.** 1998. Indicators of nutritional status of turbot *Scophthalmus maximus* (L., 1758) larvae. *Boletín del Instituto Español de Oceanografía* 14: 5-18.
137. Lamche, G., Meier, W., Suter, M., **Burkhardt-Holm, P.** 1998. Primary culture of dispersed skin epidermal cells of rainbow trout *Oncorhynchus mykiss* Walbaum. *Cellular and Molecular Life Sciences* 54: 1042-1051.

138. **Burkhardt-Holm, P.**, Schmidt, H., Meier, W. 1998. Heat shock protein (hsp70) in brown trout epidermis after sudden temperature rise. *Comparative Biochemistry and Physiology A* 120: 35-41.
139. **Burkhardt-Holm, P.**, Escher, M., Meier, W. 1997. Waste water management plant effluents cause cellular alterations in the skin of brown trout. *Journal of Fish Biology* 50: 744-758.
140. **Burkhardt-Holm, P.** 1997. Lectin-histochemistry of rainbow trout (*Oncorhynchus mykiss*) gill and skin. *Journal of Histochemistry and Cytochemistry* 29: 893-899.
141. **Burkhardt-Holm, P.** 1997. Gesucht: Indikatoren für die Qualität von Fließgewässern. Ein Beispiel zur Schaffung von Synergien zwischen Forschung und Lehre. *Gaia* 6: 311-315.
142. **Burkhardt-Holm, P.**, Kafitz, K. W., Güttinger, H. R., Schachner, M. 1996. Testosterone elevates expression of tenascin-R and oligomannosidic carbohydrates in developing male zebra finches. *Journal Neuroscience Research* 46: 385-392.
143. **Burkhardt-Holm, P.**, Kafitz, K. W., Güttinger, H. R., Schachner, M. 1995. Exogenous testosterone alters expression pattern of cell recognition molecules in brains of juvenal zebra finches. *NeuroReport* 6 (3): 433-436.
144. **Burkhardt-Holm, P.**, R. Kaufmann-Hayoz, 1995. Naturschutz in der Lehre der Allgemeinen Ökologie an der University of Bern. *Der Ornithologische Beobachter* 92: 395-398.
145. Braunbeck, T., **Burkhardt-Holm, P.**, Görge, P.G., Nagel, R., Negele, R.D., Storch, V. 1992. Regenbogenforelle und Zebraabärbling, zwei Modelle für verlängerte Toxizitätstests: Relative Empfindlichkeit, Art- und Organspezifität in der cytopathologischen Reaktion von Leber und Darm auf Atrazin. *Schriftenreihe des Vereins für Wasser, Boden und Lufthygiene* 89: 109-145.
146. **Burkhardt-Holm, P.**, Holmgren, S. 1992. A study of the alimentary canal of the brachyopterygian fish *Polypterus senegalus* with electron microscopy and immunohistochemistry. *Acta Zoologica* 73: 85-94.
147. **Burkhardt-Holm, P.**, Schumacher, U., Welsch, U., Storch, V. 1989. Carbohydrate histochemistry of the intestine of teleosts with different dietary habits. *Zeitschrift für mikroskopisch-anatomische Forschung* 103: 476-494.
148. **Burkhardt-Holm, P.**, Eckmann, R., Storch, V. 1989. Schädigung des Darmepithels von Coregonenlarven (*Coregonus fera*) durch Artemia-Fütterung: Eine bakterielle Infektion. *Journal of Applied Ichthyology* 1: 2-11.

149. **Burkhardt-Holm, P.**, Holmgren, S. 1989. A comparative study of neuropeptides in the intestine of two stomachless teleosts (*Poecilia reticulata*, *Leuciscus idus melanotus*) under conditions of feeding and starvation. *Cell and Tissue Research* 255: 245-254.
150. Storch, V., **Holm, P.**, Ruhberg, H. 1988. Ultrastructure and histochemistry of the alimentary tract in some onychophora - Zur Ultrastruktur und Histochemie des Darmkanals verschiedener Onychophora. *Zoologischer Anzeiger* 221: 281-294.
151. Segner, H., **Burkhardt, P.**, Avila, E.M., Storch, V., Juario, J.V. 1987. Effects of Chlorella-feeding on larval milkfish, *Chanos chanos*, as evidenced by histological monitoring. *Aquaculture* 67: 113-116.
152. Segner, H., **Burkhardt, P.**, Avila, E.M., Juario, J.V., Storch, V. 1987. Nutrition-related histopathology of the intestine of milkfish *Chanos chanos* fry. *Diseases of Aquatic Organisms* 2: 99-107.
153. **Burkhardt, P.**, Schumacher, U., Welsch, U., Storch, V. 1987. Lectin-histochemistry of the teleost intestine and liver under normal and starved conditions. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 101: 301-317.
154. **Burkhardt, P.** 1987. Electronmicroscopical Studies on the Intestine of *Leuciscus idus melanotus* und *Poecilia reticulata*. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 101: 507-522.
155. Storch, V., **Burkhardt, P.** 1986. Die Reaktion der Mitteldarmdrüse des Süßwasserstrandfloh *Orchestia cavimana* auf verschiedene Nahrung. *Carolinea* 44: 149-152.
156. Strus, J., **Burkhardt, P.**, Storch, V. 1985. The ultrastructure of the midgut glands in *Ligia italica* (Isopoda) under different nutritional conditions. *Helgoländer Meeresuntersuchungen* 39 (4): 367-374.
157. Storch, V., **Burkhardt, P.** 1984. Influence of nutritional stress on the hepatopancreas of *Talitrus saltator* (Peracarida, Amphipoda). *Helgoländer Meeresuntersuchungen* 38 (1): 65-73.

REPORTS AND OTHER PUBLICATIONS
(EXCLUDING ANNUAL AND FINAL REPORTS OF RESEARCH PROJECTS)

1. Bussmann, K., **Holm, P.**, 2022. "Schwarzmeergrundeln Schweiz": Strategie, Massnahmen und Umsetzung - eine Bilanz. Zeitschrift Aqua Viva, 04/2022: 22-25.
2. IWC Report of the Scientific Committee, 2022. **Burkhardt-Holm, P.**, (contribution). International Whaling Commission Cambridge, Virtual meeting, 25.04. – 13.05.2022
3. UNEP Report, 2021. **Burkhardt-Holm, P.**, (contribution). From Pollution to Solution, A global assessment of marine litter and plastic pollution. Nairobi, 2021. ISBN: 978-92-807-3881-0
4. **Burkhardt-Holm, P.**, 2021. Cumulative Effects and Multiple Stressors. Report of the Pollution 2025 Workshop. Paper SC/68D/REP/02. International Whaling Commission, 01.-04.11. 2021. IWC.ALL.418.
5. **Burkhardt-Holm, P.**, Mani, T., Kalberer, A. 2019. Mikroplastik - Zivilisationsmüll im und um den Rhein herum. Regio Basiliensis 60, 121-129.
6. **Burkhardt-Holm, P.**; Leistenschneider, C.; Segner, H.; Amaral-Zettler, L.; Gerdt, G. 2019. Occurrence of microplastics in the antarctic seas. . The Expedition PSI 17 of the Research Vessel POLARSTERN to the Weddell Sea in 2018/2019, 120-131.
7. **Burkhardt-Holm, P.**, Hall, A., 2019. Potential mitigation measures for reducing exposure of cetaceans to persistent organic pollutants (POPs). Paper SC/68A/E/03. International Whaling Commission, Cambridge, United Kingdom.
8. **Burkhardt-Holm, P.**, N’Guyen, A. 2018. Microplastics in the food web of Cetaceans – A review. Paper SC/678/E/11. International Whaling Commission, Cambridge, United Kingdom.
9. Mani, T., **Burkhardt-Holm, P.**, Segner, H., Zennegg, M., Amaral-Zettler, L. 2018. Microplastics – A potential threat to the remote and pristine ecosystems of the Antarctic Seas? The Expedition of the Research Vessel “Polarstern” to the Antarctic in 2017/18 (PS-111). In: Schröder, M. 2018. The Expedition PS111 of the Research Vessel POLARSTERN to the southern Weddell Sea in 2018. Berichte zur Polar- und Meeresforschung - Reports on Polar and Marine Research, 2018, Vol 717, 123-133.
10. Selling, J., Herr, H., Heyer, K., Siebert, U., **Burkhardt-Holm, P.** 2016. Epidermal conditions, lesions and malformations in cetaceans of the Strait of Gibraltar. Paper SC/66b/E/13. International Whaling Commission, Cambridge, United Kingdom.

11. Ritter, F., Asmutis-Silvia, R., **Burkhardt-Holm, P.**, Kaufman, G. 2016. Approach to a definition of near misses. Paper SC/66b/HIM/03. International Whaling Commission, Cambridge, United Kingdom.
12. Herr, H., Ritter, F., **Holm, P.**, Stachowitsch, M., Tiedemann R. 2016. Recommendations for conservation of Baltic harbour porpoises with special regard to the critically endangered Baltic Proper harbour porpoise subpopulation. Working Paper, International Whaling Commission, scientific committee, Cambridge, United Kingdom, 05/2016.
13. Mark, F.C., Koschnick, N., Scheuffele, H., Strobel, A., **Burkhardt-Holm, P.**, Segner, H., Papetti, C., Lucassen, M., Riginella, E., Mazzoldi, C., La Mesa, M. 2015. Cold adaptation vs. sensitivity to climate change and pollution in Antarctic Notothenioids: Physiological plasticity, genetic regulation, immunology and reproductive traits. Expedition Program PS96 Polarstern 06.12.2015-14.02.2016 Cape Town – Punta Arenas: 16-18.
14. **Holm, P.** 2013. Cetaceans and Climate change. Working Paper, International Whaling Commission, scientific committee, Cambridge, United Kingdom, 08.06.2016.
15. Lucassen, M., Rentsch, H., Kock, K.-H., Busch, M., Elsheimer, A., Emde, S., Jones, C., Klimpel, S., Kuhn, T., Siegel, V., Wolske, J., **Burkhardt-Holm, P.**, Segner, H., Schmid, P., Koschnick, N., et al. 2012. The Expedition of the Research Vessel “Polarstern” to the Antarctic in 2012 (ANT-XXVIII/4). Berichte zur Polar- und Meeresforschung 652: 3-89.
16. **Burkhardt-Holm, P.**, Segner, H., Schmid, P. 2011. Fish as bioindicators: Condition and health of ground fish species around Elephant Island, the South Shetland Islands and at the tip of the Antarctic Peninsula, Expedition Program PS88 Polarstern: 89-90.
17. **Burkhardt-Holm, P.** 2011. Linking Water Quality to Human Health and Environment: The Fate of Micropollutants. Working Paper Series, No. IWP/WP/3/2011. National University of Singapore.
18. Schmid, P., Zennegg, M., **Holm, P.**, Pietsch, C. 2010. Ökotoxikologische Beurteilung von PCB in Gewässern der Schweiz: Polychlorierte Biphenyle (PCB) in Gewässern der Schweiz, Publikation Bundesamt für Umwelt BAFU, Bern, Switzerland, 60-71.
19. **Burkhardt-Holm, P.** 2010. Contribution to the Report “A risk assessment modeling and chemical prioritization workshop for cetaceans: Pollution in the 21st Century”. International Whaling Commission's Pollution 2000+ steering committee workshop, Marine Mammal Center, Sausalito, Canada, 22-24.
20. Dollenmeier, P., Renz, H., Giger, W., Güttinger, H., **Holm, P.**, Ochsenbein, U. 2004. Fischnetz. Dem Fischrückgang auf der Spur: fischnetz, Kurzbericht des Projekts “Netzwerk Fischrückgang Schweiz”.

21. Dollenmeier, P., Renz, H., Giger, W., Güttinger, H., **Holm, P.**, Ochsenbein, U. 2004. Fischnetz. Dem Fischrückgang auf der Spur: Schlussbericht des Projekts "Netzwerk Fischrückgang Schweiz".
22. **Holm, P.** 2000. Book review: Oehlmann, J., Markert, B. (eds.): Ökotoxikologie: Ökosystemare Ansätze und Methoden (Ecotoxicology: Ecosystemic approaches and methods), ecomed Verlagsgesellschaft, Landsberg 1999. Basic and Applied Ecology 1, 95.
23. Wahli, T., **Burkhardt-Holm, P.** 1998. Willy Meier, 1946-1998. Memorandum. Schweizerisches Archiv für Tierheilkunde 88, 523-524.
24. **Burkhardt-Holm, P.**, Wahli, T., Ochsenbein, A. 1998. Untersuchung von männlichen Fischen auf das Vorhandensein von Vitellogenin (östrogensensitive Reaktion) in Bachforellen sowie von histologischen Veränderungen in der Leber von Fischen. Zentrum für Fisch- und Wildtiermedizin.

BOOKS AND BOOK CHAPTERS

1. Ruesch Schweizer, C., Di Giulio, A., **Burkhardt-Holm, P.** 2018. Qualifikationsziele von Lehrangeboten zu Nachhaltigkeit. Ein Blick in die Hochschulpraxis in Deutschland und der Schweiz. In: Leal Filho, W. (Hrsg.) Nachhaltigkeit in der Lehre. Eine Herausforderung für Hochschulen. Berlin: Springer, 257-275.
2. Merrill, M.Y., **Burkhardt-Holm, P.**, Chang, C.H., Islam, M.I., Chang, Y., (eds.) 2017. Education and Sustainability: Paradigms, Policies and Practices in Asia, Routledge. 377pp.
3. **Holm, P.**, Holm J. 2014. Warum werden Wale gejagt? In: Zoss, H., **Holm, P.**, von Gunten, F. (eds.) Jahrring 2014. Ehrfurcht vor dem Leben. Rubmedia Verlag, Bern, 11-33.
4. **Holm, P.** 2010. Kinder und Karriere - ein Spagat, der zu meistern ist. In: Piechulla, B. (ed.) Professorin und Mutter - wie geht das? Spektrum Akademischer Verlag, Heidelberg, 48-55.
5. Burger, P., **Burkhardt-Holm, P.**, Krysiak, F.C. 2010. Educating Experts for Sustainable Development, The Master's Degree in Sustainable Development at the University of Basel. In: Darbellay, F., Paulsen, Th. (eds.) Im Spiegel der Disziplinen - Gedanken über inter- und transdisziplinäre Forschungs- und Lehrpraktiken. Verlag Peter Lang, Bern, 133-153.
6. **Holm, P.** 2010. Faszinierende Fische, Haupt-Verlag, Bern, 208 pp.

7. **Burkhardt-Holm, P.** 2009. Bioindikatoren - wie uns Pflanzen und Tiere helfen können. In: Renneberg, R., Bioanalytik für Einsteiger. Spektrum Akademischer Verlag, Heidelberg, 138-139.
8. **Burkhardt-Holm, P.** 2008. Fischnetz: Involving anglers, authorities, scientists and the chemical industry to understand declining fish yields. In: G. Hirsch Hadorn, H. Hoffmann-Riem, S. Biber-Klemm, W. Grossenbacher, D. Joye, C. Pohl, U. Wiesmann, E. Zemp (eds.) Handbook of Transdisciplinary Research, Springer, 127-142.
9. **Burkhardt-Holm, P.,** Segner, H. 2007. Lebenswissenschaften und Allgemeine Ökologie. Gemeinsamkeiten, Unterschiede und gegenseitige Beeinflussung. In: Di Giulio, A., Defila, R., Hammer, T., Bruppacher, S. (eds.) Allgemeine Ökologie. Innovationen in Wissenschaft und Gesellschaft. Festschrift für Ruth Kaufmann-Hayoz, Haupt Verlag, Bern, 103-125.
10. **Holm, P.** 2006. Was ist mit unseren Fischen los? Gewässersituation heute. In: H. Hüster Plogmann (ed.) Fische und Fischer aus zwei Jahrtausenden. Eine fischereiwirtschaftliche Zeitreise durch die Nordwestschweiz. Forschungen in Augst 39, 79-87.
11. Adomßent, M., Altner, G., Becker, E., Beckervordersandforth, C., Dehler, J., Fischer, H., Grunewald, A., Grupp, H., **Holm, P.**, Jastorff, B., Kreibich, R., Kruse, L., Michelsen, G., Neuweiler G., Simonis, U.E. 2004. Hochschule neu denken. Neuorientierung im Horizont der Nachhaltigkeit. Ein Memorandum. Verlag für akademische Schriften, Frankfurt, 43.
12. **Burkhardt-Holm, P.,** Hacker, H.-J., Segner, H., Storch, V. 1993. Enzyme histochemistry of the intestine and liver of golden ide (I). In: T. Braunbeck, W. Hanke, and H. Segner (eds.) Fish - Ecotoxicology and Ecophysiology. VCH, Weinheim, 239-256.
13. Braunbeck, T., Arnold, H., **Burkhardt-Holm, P.** 1992. Subletale Veränderungen bei Fischen durch Pestizide. In: H. Weidmann and H. Meder (eds.) Sandoz-Rheinfonds. Verhandlungen des Symposiums vom 3.-4. September 1992. Sandoz International AG, Basel, 60-67.
14. **Burkhardt-Holm, P.,** Braunbeck, T., Storch, V. 1990. Auswirkung der beim Sandoz-Unfall im November 1986 in den Rhein gelangten Chemikalien auf die Ultrastruktur des Darms von Aalen. In: R. Kinzelbach and G. Friedrich (eds.) Biologie des Rheins. Gustav Fischer Verlag, Stuttgart/New York, 393-404.
15. **Burkhardt, P.,** Storch, V. 1989. Ultrastructural observations on the intestine of golden ide (*Leuciscus idus melanotus* L.) under different nutritional conditions. In: N. De Pauw, E. Jaspers, H. Ackefors, and N. Wilkins (eds.) Aquaculture – a biotechnology in progress. European Aquaculture Society, Bredene, Belgium, 807-812.

PROCEEDINGS

1. **Holm, P.** 2023. Invasion der Schwarzmeergrundeln im Oberrhein und Auswirkungen auf das Gewässerökosystem. In: Gefährdung und Schutz von Oberflächengewässern. 2023. Rundgespräche Forum Ökologie, Band 49. Bayerische Akademie der Wissenschaften (Hrsg.): Pfeil, München - ISBN 978-3-89937-285-4.
2. **Burkhardt-Holm, P.** 2016. Concurrent Session 201: Earth Science: Water. Summary of Science and Technology in Society Forum. Kyoto, STS, 13th Annual Meeting: 135-142.
3. **Holm, P.,** Zehnder, A.J.B. (2016). Fischrückgang in der Schweiz. Wo stehen wir heute? In: Aqua Viva. Zeitschrift für Gewässerschutz 58 (2):4-8.
4. **Holm, P.,** 2012. Faszinierende Fische: Biologie, Bedeutung und Zukunft. Zusammenfassung des Vortrags vom 15. März 2011. Mitteilungen. Jubiläumsband zum 225-jährigen Bestehen der Naturforschenden Gesellschaft in Bern. NGB Neue Folge Band 69: 31-32.
5. **Burkhardt-Holm, P.** 2011. How hormonally active substances in our environment affect humans and wildlife - What do we know and what can be done? Lundqvist, J. (ed.) On the Water Front: Selections from the 2010 World Water Week in Stockholm. Stockholm International Water Institute (SIWI), Stockholm: 50-63.
6. Knauer, K., Hitzfeld, B., Hollert, H., Kubiak, R., Becker van Slooten, K., Daniel, O., Escher, B., Scheringer, M., Segner, H., Ahlers, J., **Holm, P.** 2005. Tagungsbericht »Prozesse verstehen – Risiken bewerten«. 10. Annual Meeting SETAC-GLB am 28.–30.09.2005 in Basel. Umweltwissenschaften und Schadstoff-Forschung 17: 256-257.
7. **Burkhardt-Holm, P.** 2004. Biologie, Lebensraumsprüche und Gefährdungsursachen der Bachforelle. Internationale Fachtagung »Lebensraum Bach«, Blieskastel, Germany, 20.11.2004.
8. Borsuk M.E., Reichert, P., **Burkhardt-Holm P.** 2004. A Bayesian belief network for modelling brown trout (*Salmo trutta*) populations in Switzerland. The International Environmental Modelling and Software Society Conference Complexity and Integrated Resources Management. Osnabrück, Germany, 14-17.06.2004.
9. **Burkhardt-Holm, P.** 2004. Fischnetz: Welche Konsequenzen hat das 5-jährige Projekt für den Gewässerschutz in der Schweiz? Verband Schweizer Abwasser- und Gewässerschutzfachleute (VSA), 60. Hauptmitgliederversammlung, Olten, Switzerland, 02.04.2004.

10. **Burkhardt-Holm, P.** 2003. Approach to identify the role of contaminants in the decline of brown trout in Switzerland. American Fisheries Society Annual Meeting, Volume 133. Quebec, Canada.
11. **Burkhardt-Holm, P.** 2002. Decline in fish catches in Switzerland: The project Fishnet evaluate the causes. In: Challenges in Environmental Risk Assessment and Modelling: Linking Basic and Applied Research. Society of Environmental Toxicology and Chemistry (SETAC), Vienna, Austria, 59.
12. Suter, M.J.-F., Aerni, H.R., Kobler, B., Faller, P., Rutishauser, B.V., Wettstein, F.E., **Burkhardt-Holm, P.**, Fischer, R., Giger, W., Hungerbühler, A., Peter, A., Schönenberger, R., Eggen, R. I. L. 2002. The combination of biological and chemical analysis for the determination of estrogenicity in Swiss waste- water treatment plant effluents. Jahresbericht 2001 Kompetenzzentrums Analytische Chemie (CEAC).
13. Borsuk, M. E., **Burkhardt-Holm, P.**, Reichert, P. 2002. A Bayesian network for investigating the decline in fish catch in Switzerland. In: Rizzoli, A. E., Jakeman, A. J. (eds.) Integrated assessment and decision support. Proceedings of the 1st biennial meeting of the International Environmental Modelling and Software Society, Lugano, Switzerland, 108-113.
14. Faller, P., Kobler, B., Peter, A., **Burkhardt-Holm, P.** 2001. Effects of effluents from a Swiss sewage treatment plant on health parameters in gudgeon (*Gobio gobio*). In: European Association of Fish Pathologists (ed.) Proc. 10th internat. conference on diseases in fish and shellfish, Dublin, Ireland, 36.
15. Schmidt-Posthaus, H., **Burkhardt-Holm, P.**, Knüsel, R., Wahli, T., Segner, H. 2001. Investigation of distribution and prevalence of PKD in Swiss feral and farmed brown trout. In: European Association of Fish Pathologists (ed.). Proc. 10th internat. conference on diseases in fish and shellfish, Dublin. Ireland.
16. Schweigert, N., Behra, R., Escher, B., **Burkhardt-Holm, P.**, Eggen, R. I. L. 2001. Entwicklung einer zellulären Testbatterie für einen routinemässigen Einsatz in der aquatischen Ökotoxikologie. - In: ZET Zentrum für Ersatz- und Ergänzungsmethoden zu Tierversuchen (ed.) Proc. 10. Kongress über Alternativen zu Tierversuchen, Linz, Austria.
17. **Holm, P.** 2001. Das Projekt "Fischrückgang Schweiz": mögliche Ursachen und Massnahmen gegen den Fischrückgang. Natur und Mensch 1, 21-27.

18. Lamche, G., Meier, W., **Burkhardt-Holm, P.** 2000. Die Fischepidermis als Modell für ökotoxikologische Studien. In: H. Schöffl, H. Spielmann, F. P. Gruber, A. H., F. Harrer, W. Pfaller, and H. A. Tritthart (eds.) 6., 7., 8. Österreichischer internationaler Kongress über Ersatz- und Ergänzungsmethoden zu Tierversuchen in der biomedizinischen Forschung. Springer Verlag, Linz, Austria, 221-227.
19. **Burkhardt-Holm, P.**, Bloesch, J. 2000. Fish as bioindicators for pollutants in the Danube river: An approach. - In: Horvatic, J. (ed.) Proc. 33. Conference of the Int. Association for Danube research, Osijek, Croatia. Josip Juraj Strossmayer University of Osijek and Croatian Ecological Society, 375-382.
20. **Burkhardt-Holm, P.**, Wahli, T. 1999. Liver of several male brown trout caught in Swiss rivers express vitellogenin and show histological alterations. International Scientific Conference Ascona. Ascona, Switzerland.
21. **Burkhardt-Holm, P.**, Lamche, G., Meier, W. 1998. Die Fischepidermis als Modell für ökotoxikologische Studien. ALTEX 15: 51.
22. **Burkhardt-Holm, P.**, Wahli, T., Negele, R. D., Meier, W. 1997. Effects of nonylphenol on trout surface epithelia. Annual Meeting of the Society for Experimental Biology University of Kent, Canterbury, Great Britain, A5.15.
23. Schmidt, H., Escher, M., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1996. Belastung von Fließgewässern und Auswirkungen auf die Fischpopulation am Beispiel der Langeten. - Tagung der Fachgruppe "Fischkrankheiten" in Verbindung mit der EAFF/deutsche Sektion, DE-Königswartha, 24.-26.9.1996. Verlag der deutschen Veterinärmedizinischen Gesellschaft e.V., 155-160.
24. Escher, M., Schmidt, H., Büttner, S., Wahli, T., Meier, W., **Burkhardt-Holm, P.** 1996. Gesundheitsgefährdung von Bachforellen unterhalb einer Kläranlage. Tagung der Fachgruppe "Fischkrankheiten" in Verbindung mit der EAFF/deutsche Sektion, DE-Königswartha, 24.- 26.09.1996. Verlag der deutschen Veterinärmedizinischen Gesellschaft e.V., 161-166.
25. **Burkhardt-Holm, P.**, Braunbeck, T., Storch, V. 1994. Histo- und cytopathologische Effekte von 4- Chloranilin in den Kiemen embryonaler Zebraabärblinge (*Brachydanio rerio*). Tagung der Deutschen Sektion der EAFF, Wolfegg, Baden-Württemberg, Germany, 14./15.09.1994, 104-107.

Abstracts and Posters (SELECTION)

1. Wiegleb, J., Hirsch Ph.E., Seidel, F, Rauter, G, **Burkhardt-Holm, P.** 2022. Swimming competition! Who beats the flow in a hydraulic barrier for invasive fish? INTECOL Geneva, 28.08.-02.09.2022.
2. Leistenschneider, C., Primpke, S., Taubner, H., **Burkhardt-Holm, P.**, Gerdts, G. 2022. Microplastics and ship paint particles in the Weddell Sea, Southern Ocean: A forensic investigation. MICRO 2022, Lanzarote, 14.-18.11.2022.
3. Leistenschneider, C., **Burkhardt-Holm, P.**, Mani, Th., Primpke, S., Taubner, H., Gerdts, G. 2022. Paint Particles in the Weddell Sea (Antarctica): A Forensic Investigation. SETAC annual meeting, Copenhagen, 15.-19.05.2022.
4. Leistenschneider, C., Primpke, S., **Burkhardt-Holm, P.**, Gerdts, G. 2020. Microplastics and ship paint in the Weddell Sea, Antarctica. MICRO- Fate and Impacts of Microplastics, Lanzarote, 23.-27.11.2020.
5. Bussmann, K., **Burkhardt-Holm, P.** 2019. Stowaways on my boat? Engaging boat owners with aquatic invasive species using citizen science. ICYMARE, Bremen, 24.-29.09.2019.
6. **Holm, P.** 2018. Microplastics in Rhine Riverbed Sediments. MICRO 2018, Lanzarote, 19.11. 2018.
7. Mani, T., Frehland, S. , Kalberer, A., **Burkhardt-Holm, P.** 2018. MOSeS: Microplastics Oil Separation Standard for Surface, Soil and Sediment Samples, Monte Verità, 30.10.2018.
8. Bussmann, K., **Burkhardt-Holm, P.** 2018. Round goby eggs and leisure boats – the search for the missing link (a proposal). Goby meeting, Chioggia, Venice Italy. 07.-09.03.2018.
9. Wiegleb, J., Hirsch, P.E., **Burkhardt-Holm, P.** 2018. Do round gobies overcome strong currents in fish passes? -Application of 3D-printed fish. Goby meeting, Chioggia, Venice Italy. 07.-09.03.2018.
10. Hirsch, P.E., Schillinger, M., **Burkhardt-Holm, P.** Weigt, H. 2017. Integrating Economic and Ecological Benchmarking for a Sustainable Development of Hydropower. Abstract NTNU Sustainability Science Conference, Trondheim Norway. 18.-20.10.2017.

11. Adrian-Kalchhauser, I., Walser, J.C., Schwaiger, M., **Burkhardt-Holm, P.** 2017. Maternal mRNA is able to transmit temperature information across generations in wild fish. Abstract. ESEB, Groningen, Netherlands, 20.-25.8.2017.
12. Adrian-Kalchhauser, I., Walser, J.C., **Burkhardt-Holm, P.** 2017. Maternal mRNA is able to transmit temperature information across generations in wild fish. Abstract. Biology17, Bern, Switzerland, 02.-03.02.2017.
13. Somerville, V., Walser, J.C., **Burkhardt-Holm, P.**, Adrian-Kalchhauser, I. 2017. Methylome wide association study of two reproductive phenotypes in the round goby. Abstract. Biology17, Bern, Switzerland, 02-03.02.2017.
14. Strobel, A., Segner, H., Zennegg, M., Schmid, P., **Burkhardt-Holm, P.** 2016. Are Antarctic fish capable of coping with anthropogenic chemicals? Swiss Canadian Polar Research Symposium. 21-22.11.2016.
15. Hirsch, P.E., Schillinger, M., Apolloni, K., Weigt, H., **Burkhardt-Holm, P.** 2016. Combining ecological and economic benchmarks towards a sustainable development of hydropower. Societas Internationalis Limnologia, DGL, SIL Austria meeting. Vienna, Austria, 28.-30.09.2016.
16. Strobel, A., Segner, H., **Burkhardt-Holm, P.** 2016. Effects of environmental pollutants and changing temperature on the hepatic energy budget of High-Antarctic fish. Abstract SCAR Open Science Conference, Kuala Lumpur, Malaysia, 20.-30.08.2016.
17. Adrian-Kalchhauser, I., Hirsch, P.E., Behrmann-Godel, J., N'Guyen, A., Watzlawczyk, S., Gertzen, S., Borchering, J., **Burkhardt-Holm, P.** 2016. Genetic evidence for the translocation of invasive bighead goby along rivers by commercial vessels. Poster. Neobiota, Vianden, Luxembourg, 14.-16.09.2016.
18. Adrian-Kalchhauser, I., Somerville, V., Walser, J.C., **Burkhardt-Holm, P.** 2016. Epigenetic mechanisms and the success of invasive vertebrates. Poster. Neobiota, Vianden, Luxembourg, 14.-16.09.2016.
19. Strobel, A., Segner, H., **Burkhardt-Holm, P.** 2016. How efficient and thermally flexible is the toxicant metabolism of Antarctic notothenioid fish? Poster. SCAR Open Science Conference, Kuala Lumpur, Malaysia, 20.-30.08.2016.
20. Adrian-Kalchhauser, I., Walser, J.C., Pippel, M., Schloissnig, S., **Burkhardt-Holm, P.** 2016. Transgenerational adaptation mechanisms in wild populations of *Neogobius melanostomus*. Abstract. EMBO Symposium New Models for Linking Evolution and Ecology, Heidelberg, Germany, 08.-11.05.2016.

21. Kalchhauser, I., Hirsch, P.E., N'Guyen, A., Watzlawczyk, S., Gertzen, S., Borcharding, J., **Burkhardt-Holm, P.** 2015. Adaptation and selection processes at the invasion front of a globally expanding vertebrate. Poster. Congress of the European Society for Evolutionary Biology, 09.-14.08.2015.
22. Hirsch, P.E., Thorlacius, M., Rüegg, A., Indermaur, A., Brodin, T., **Burkhardt-Holm, P.** 2015. In water, on land, and in the air - transporting experimental fish across Europe. Poster. Fishbase Symposium, Stockholm, Sweden, 19.10.2015.
23. Kalchhauser, I., Burkhardt-Holm P. 2015. Ponto-Caspian gobies. How bighead goby population genetics relate to shipping. Abstract. CeMEB Meeting, Tjärnö, Sweden. April 2015.
24. Kalchhauser, I., Borcharding, J., **Burkhardt-Holm, P.** 2015. European bighead goby display large scale genetic homogeneity and small scale genetic differentiation in correlation with shipping patterns. European Goby Meeting, Umea, Sweden. 24.-27.02.2015.
25. Kalchhauser, I., Hirsch, P.E., N'Guyen, A., **Holm P.** 2015. Kooperation von Forschung und Gesellschaft für ein erfolgreiches Management von invasiven Arten. Poster. Swiss Forum on Conservation Biology SWIFCOB 15, Biodiversität und Politik: Vielfalt bewegt, 16.01.2015.
26. Hirsch, P.E., Eckmann, R., Weigt, H., **Burkhardt-Holm, P.** 2014. Water-level fluctuations and habitat mismatch affect phenotypes of perch (*Perca fluviatilis*). Abstract. EcoFil, České Budějovice, Czech Republic, 08.-11.09.2014.
27. Strobel, A., **Holm, P.**, Segner, H. 2014. How efficient are the xenobiotica biotransformation capacities in antarctic notothenioid fish compared to temperate species? Poster. ICBF Conference, Edinburgh, United Kingdom, 03.10.2014.
28. Kalchhauser, I., Burkhardt-Holm P. 2014. Schwarzmeergrundeln in der Schweiz. Abstract. AGIN Symposium, Olten, Switzerland, 23.01.2014.
29. Kalchhauser, I., N'Guyen, A., Hirsch, P.E., **Burkhardt-Holm, P.** 2013. Ponto-Caspian gobies in Switzerland – Science meets Management. Abstract. European Vertebrate Pest Management Conference, Turku, Finland, 24.09.2013.
30. Kalchhauser, I., Mutzner, P., Hirsch, P.E., N'Guyen A., **Burkhardt-Holm, P.** 2013. Invasion genetics of goby species in European freshwaters. Poster. Freshwater Invasives – Networking for Strategy, Galway, Ireland, 08.-11.04.2013.

31. Kalchhauser, I., Mutzner, P., **Burkhardt-Holm P.** 2012. Invasion genetics of bighead and round goby in European freshwaters. Poster. Evolutionary ecology and management of aquatic ecosystems, Eawag, Dübendorf, 22.-23.11.2012.
32. Kalchhauser, I., Mutzner, P., **Burkhardt-Holm, P.** 2012. Tracing provenience and dispersal mode of gobies invading Switzerland by microsatellite analysis. Poster. NEOBIOTA 2012, Pontevedra, Spain, 11.09.2012.
33. Berli B., **Burkhardt-Holm P.**, Tierney K.B. 2011. Sediment alters the swimming performance of individual and schooling salmonids. Abstract. Annual meeting of the Canadian Society of Zoologists, Ottawa, Canada, 16.-20.05.2011.
34. Michel C., **Burkhardt-Holm P.** 2011. Suspended mineral particles affect rainbow trout *Oncorhynchus mykiss*. Histopathology workshop on lymphoid organs (including musculoskeletal/ nervous system pathology). Abstract. 15th International conference on diseases of fish and shell fish of the European Association of Fish Pathologists (EAFP), Split, Croatia, 12.-16.09.2011.
35. Schindler Y., Michel C., **Burkhardt-Holm P.**, Thorpe K., Alewell C. 2010. The spatial and temporal dynamic of fine sediment input in a small Swiss river in the foothills of the Alps, Poster. Swiss- Korean Science Days, Seoul, South Korea, 09.-10.09.2010.
36. Schindler, Y., Michel, C., **Burkhardt-Holm, P.**, Thorpe, K., Alewell, C. 2010. The abiotic environment of the interstitial of a small Swiss river in the foothills of the Alps and its influence on gravel spawning brown trout (*Salmo trutta L.*). Poster. European Geosciences Union General Assembly, Vienna, Austria, 02.-07.05.2010.
37. A Marca-Pereira, M., Thorpe, K.L., **Burkhardt-Holm, P.** 2007. Abstract and poster: Development of an in vitro gonad culture to quantify the effects of aromatase inhibitors in brown trout. NRP50 meeting, Magglingen, Switzerland, 09.-11.09.2007.
38. A Marca-Pereira, M., Thorpe, K.L., **Burkhardt-Holm, P.** 2007. Abstract and poster. Development of an in vitro gonad culture to quantify the effects of aromatase inhibitors in brown trout. 8th International Symposium on Reproductive Physiology of Fish, Saint Malo, France, 03.-08.06.2007.
39. **Burkhardt-Holm, P.** 2007. Decline of brown trout (*Salmo trutta*) in Switzerland - How to assess potential causes in a multi-factorial cause-effect relationship. Abstract. 14th International Symposium PRiMO (Pollutant Responses in Marine Organisms), Florianópolis, Santa Catarina, Brazil, 6.- 9.05.2007.

40. Körner, O., Kohno, S., Schönenberger, R., Suter, M.J.F., Knauer, K., Guillet, L.J., **Burkhardt-Holm, P.** 2006. Effect of water temperature on vitellogenin expression in juvenile brown trout after exposure to ethinylestradiol, Poster. NFP 50 Annual Meeting, Giessbach, Brienz, Switzerland, 15.–17.10.2006.
41. Burki, R., Vermeirssen, E.L.M., Körner, O., Joris, C., **Burkhardt-Holm, P.**, Segner, H. 2006. Combined effect of estrogenic exposure and the proliferative kidney disease in rainbow trout, spoken presentation. Abstract. ESCPB 2006 congress, Antwerpen, Belgium, 17.-20.09.2006.
42. Abicht, H., Knauert, S., **Burkhardt-Holm, P.**, Knauer, K. 2006. Bestimmung der Toxizität von Kupfer für die permanente Fischzelllinie Rtgill: Oxidativer Stress und DNS-Schäden. Abstract. 11th Annual Meeting of SETAC-GLB, Landau, Germany, 03.-05.09.2006.
43. Leimgruber, A., Knauert, S., **Burkhardt-Holm, P.**, Knauer, K. 2006. Co-Toleranz von Phytoplanktongemeinschaften gegenüber PS-II Inhibitoren. Abstract. 11th Annual Meeting of SETAC-GLB, Landau, Germany, 03.-05.09.2006.
44. **Burkhardt-Holm, P.** 2006. Wenn die Angler klagen. Forschung und offene Fragen zum Fischrückgang in der Schweiz. Abstract. IGB, Berlin, Germany, 16.11.2006.
45. Schwartz, P., Hartmann, N., Bucheli, T.D., **Burkhardt-Holm, P.** 2006. General toxicity and endocrine disruption - Effects of zearalenone on early life stages of Zebrafish (*Danio rerio*), Poster. NFP 50 Annual Meeting, Giessbach, Brienz, Switzerland, 15.–17.10.2006.
46. **Burkhardt-Holm, P.**, Burki, R., Segner, H., Peter, A., Schubert, S., Suter, M.J.-F., Schönenberger, R., Borsuk, M. 2006. Estrogenic endocrine disruption in Switzerland: Assessment of fish exposure and modeling of effects on the population level (SAFE). Poster. Gordon Research Conference, Il Ciocco, Barga, Italy, 04.-09.06.2006.
47. **Burkhardt-Holm, P.**, Segner, H., Burki, R., Peter A., Borsuk M. 2005. Endocrine disruption in Switzerland: Assessment of fish exposure and effects – SAFE. Abstract. Workshop NRP 50 Endocrine Disruptors, Cadro, Lugano, Switzerland, 02.-04.10.2005.
48. Vermeirssen, E.L.M., Körner, O., Joris, C., **Holm, P.**, Segner, H. 2005. Assessment of estrogenic exposure in brown trout (*Salmo trutta*). Poster. Workshop NRP 50 Endocrine Disruptors, Cadro, Switzerland, 02.-04.10.2005.
49. Bopp, S., **Holm, P.**, Knauer, K. 2005. Ist die Detektion reaktiver Sauerstoffspezies (ROS) ein geeigneter unspezifischer Biomarker für Mikroverunreinigungen? In: Books of Abstracts of 10th Annual Meeting of SETAC-GLB, Basel, Switzerland, 28.-30.09.2005.

50. Körner, O., Knauer, K., Thoma, G., **Holm, P.** 2005. Wie geeignet ist Vitellogenin als Biomarker einer östrogenen Belastung im Freiland? In: Books of Abstracts of 10th Annual Meeting of SETAC-GLB, Basel, Switzerland, 28.-30.09.2005.
51. Körner, O., Vermeirssen, E.L.M., **Burkhardt-Holm, P.** 2005. Survey of plasma vitellogenin and intersex in brown trout from Swiss rivers with reported catch decline. Poster. 15th SETAC Europe Annual Meeting, Lille, France, 22.-26.05.2005.
52. Suter, M.J.F., Strehler, A., Schönenberger, R., Vermeirssen, E.L.M., Eggen, R.I.L., **Burkhardt-Holm, P.** 2004. How estrogenic are Swiss rivers? A comparative approach using chemical analysis, bioassays and model predictions. Abstract. Portland, Oregon, USA, 14.-18.11.2004.
53. Vermeirssen, E.L.M., Burki, R., Joris, C., Peter, A., Segner, H., Suter, M.J.F., **Burkhardt-Holm, P.** 2004. Characterisation of the estrogenicity of Swiss Midland rivers using a recombinant yeast bioassay and plasma vitellogenin concentrations in feral male brown trout. Abstract. 5th International Symposium on Fish Endocrinology, Castellon, Spain, 05.-9.09.2004.
54. Körner, O., Zimmerli, S., Vermeirssen, E.L.M., Segner, H., **Burkhardt-Holm, P.** 2004. Catch decline in Swiss trout (*Salmo trutta*): are reproductive parameters impaired? Abstract. 5th International Symposium on Fish Endocrinology, Castellon, Spain, 05.-09.09.2004.
55. Vermeirssen, E.L.M., Körner, O., **Burkhardt-Holm, P.** 2004. Mini caging of brown trout and passive water sampling methods for assessing environmental estrogens in Swiss Midland rivers. Abstract. CREDO cluster workshop on the ecological relevance of chemically induced endocrine disruption in wildlife. University of Exeter, Exeter, Great Britain, 5.-7.07.2004.
56. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2002. Polybrominated Diphenyl Ether Flame Retardants in Fish Bile and Livers from Swiss Rivers. Abstract. European Meeting on Environmental Chemistry, Geneva, Switzerland, 12/2002.
57. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2002. Polybrominated Diphenyl Ether Flame Retardants: Methods and First Assessment in Fish from Swiss Rivers. Abstract. Workshop on the Analysis of Brominated Flame Retardants in Environmental Samples. CSIC, Barcelona, Spain, 10/2002.
58. Hartmann, P.C., **Burkhardt-Holm, P.**, Giger, W. 2002. Polybrominated Diphenyl Ether Flame Retardants: Methods and First Assessment in Fish from Swiss Rivers. Abstract. Fall Meeting of the Swiss Chemical Society, Basel, Switzerland, 10/2002.

59. Schweigert, N., Behra, R., Escher, B., **Burkhardt-Holm, P.**, Eggen, R. I. L. 2001. Ecotoxicology as a part of the Swiss modular concept in the evaluation of surface waters. Abstract. 6th International Conference of the Aquatic Ecosystem, Amsterdam, Netherlands.
60. von Tschärner, C., Wyder, M., Nicolet, J., **Burkhardt-Holm, P.**, Suter, M. M. 1998. Is *Malassezia pachydermatitis* phagocytized by activated keratinocytes in culture? Abstract. 14th AAVD/ACVD meeting, San Antonio, USA.
61. Wahli, T., **Burkhardt-Holm, P.**, Schneeberger, U., Meier, W. 1995. Investigation of the decrease in fish populations in two Swiss river systems. Abstract. EAFP conference, Palma de Mallorca, Spain.

 INVITED ORAL PRESENTATIONS

1. **Holm, P.** 2022. Invasion der Schwarzmeergrundeln im Oberrhein und Auswirkungen auf das Gewässerökosystem. Forum Ökologie, Rundgespräch, Bayerische Akademie der Wissenschaften, München. 25.05.2022.
2. **Holm, P.** 2021. Cumulative Effects – Multiple Stressors in Cetacean Research – a brief summary on the Pollution 2025 workshop – IWC, SC, Climate Change workshop, online. 30.11. – 03.12.2021.
3. **Holm, P.** 2021. Expedition with the Ice Breaker "Polarstern" in the Antarctica. Sustainable Future Research Lunch, Basel. 29.05.2021
4. **Holm, P.** 2020. Microplastics – Basel Sustainability Forum, Basel, 30.09.2020.
5. **Holm, P.** 2019. Mikroplastik-Vorkommen in Gewässern der Schweiz und international. EDA - Contribution of Switzerland to International Maritime Activities, Basel, 21.10.2019.
6. **Holm, P.** 2019. Potential mitigation measures for reducing exposure of cetaceans to persistent organic pollutants (POPs), IWC Scientific Advisory Committee, Nairobi, Kenya, 13.05.2019.
7. **Holm, P.** 2018. Microplastics in Rhine Riverbed Sediments. MICRO 2018, Lanzarote, 19.11. 2018.
8. Mani, T., Frehland, S. , Kalberer, A., **Burkhardt-Holm, P.** 2018. MOSeS: Microplastics Oil Separation Standard for Surface, Soil and Sediment Samples, Monte Verità, 30.10.2018.
9. **Holm, P.** 2018. Pollution in the Southern Ocean - POP's, Microplastic. SKPH-Meeting: "Science Highlight", Bern, 20.04.2018.
10. **Holm, P.** 2017. Invasive Grundeln aus dem Schwarzen Meer in heimischen Gewässern – welche Konsequenzen sind zu erwarten? SVNF-Veranstaltung, Invasive Neozoen in Schweizer Gewässern, Basel, 08.11.2017.
11. **Holm, P.;** 2017. Forschung in aquatischer Ökologie bei MGU (Mensch-Gesellschaft-Umwelt), Institute for Terrestrial and Aquatic Wildlife Research (ITAW), Büsum, 09.01.2017
12. **Holm, P.,** 2016. "Is this Biology?" To solve real-world problems scientists are provoked to think out-of-the-box. University of Cologne. Institute of Zoology, Cologne, Germany, 09.11.2016.

13. **Burkhardt-Holm, P.**, 2016. Mikroplastik im Rhein. Bund/Länder Gespräch zu Mikroplastik in Binnengewässern. Bayrisches Landesamt für Umwelt, Wielenbach, 10.03.2016.
14. **Holm, P.**, 2016. Chair Session Earth Science, Water, Science and Technology in Society forum. Kyoto, Japan, 03.10.2016.
15. **Holm, P.**, 2016. RACC in Switzerland. River Restoration. Science and Technology in Society forum. Regional Action on Climate Change (RACC). Building Consensus for Action on Climate Threats. Preventing new risk, reducing, existing risk and strengthening resilience. Kyoto, Japan, 01.10.2016.
16. **Burkhardt-Holm, P.** 2016. An interdisciplinary course on Sustainable Development on Bachelor Level at University of Basel, Switzerland – what can we learn for other courses in higher education? Community of Practice for More Effective Implementation of Higher Education for Sustainability in Asia. Nanyang Technological University, Singapore, 22.04.2016.
17. **Burkhardt-Holm, P.** 2016. Fischnetz -Entstehung, Ergebnisse und Auswirkungen. Vortrag im FIBER- Seminar “Fischrückgang in der Schweiz – wo stehen wir heute?” Kongresszentrum Olten, Switzerland, 27.02.2016
18. **Holm, P.**, Strobel, A., Segner, H., Mark, F., Koschnik, N., Scheuffele, H., Riginella, E., Christiansen, H., 2015. Ecology, toxicology, physiology and reproductive investment of Antarctic fish. MS Polarstern, Weddellsee, 29.12.2015.
19. **Holm, P.**, Hirsch, P.E., Adrian-Kalchhauser, I., N'Guyen, A. 2015. Gobies as a model for invasion biology, evolutionary ecology, and reproductive strategies. The goby meeting, Umea, Sweden, 26.02.2015.
20. **Burkhardt-Holm, P.** 2015. Where has all the plastic gone? Microplastics in the River Rhine and effects on a freshwater invertebrate. Ecology and Evolution Seminar (Bio 631), University of Alberta, Canada, 02.10.2015.
21. Mani, T.A., **Burkhardt-Holm, P.** 2015. Microplastics in the Rhine river between Basel (CH) and Rotterdam (NL). Aquatic Sciences Meeting, Granada, Spain, 27.02.2015.
22. **Burkhardt-Holm, P.** 2015. To initiate policy changes and sustainable management of invasive goby species collaboration with external stakeholders is a need. The Goby Meeting 2015, Umea, Sweden, 25.02.2015.
23. **Holm, P.** 2014. Nicht-heimische Grundeln in der Schweiz – Massnahmen zur Eindämmung und Schadensminimierung. Bundesanstalt für Wasserbau, Karlsruhe, Germany, 07.04.2014.

24. **Burkhardt-Holm, P.** 2014. Non-native gobies arriving in new river systems – what do we need to know to mitigate the problem? Ökologische Station Grietherbusch, Germany, 17.01.2014.
25. Hofer, C., **Holm, P.**, Roos, G., Graber, A., Graf, M. 2014. Podiumsdiskussion “Wer ernährt die Schweiz im Jahre 2050”, Konferenz Academia Engelberg “Nahrungssicherheit – Wissenschaft und Vertrauen”, Engelberg, Switzerland, 15.10.2014.
26. **Burkhardt-Holm, P.** 2014. Brown trout decline in the Alps: fish under multiple pressure of climate change, land use change, temperature-related disease and pollution. Conférence spéciale GRIL-RIVE- CRC Ecologie des eaux douces, Université du Québec à Trois-Rivières, Québec, Canada, 02.10.2014.
27. **Burkhardt-Holm, P.** 2014. Spreading of round goby in Europe and spawning trap as an approach to reduce propagule pressure. Special Seminar M149 Biological Sciences, Department of Biological Sciences, University of Alberta, Edmonton, Canada, 09.07.2014.
28. **Holm, P.** 2014. Higher education in sustainability – Experiences with a curriculum and critical reflection after running a master course in sustainable development for 8 years. Sustainability in Education, Pedagogical Themes and Practices in Asian Countries, Nanyang Executive Center, Nanyang Technological University, Singapore, 28.02.2014.
29. **Holm, P.** 2013. Microplastics in our rivers and lakes: do they pose a risk for aquatic food web? 2013 XeRR Research Idea Workshop on “Water”, University of Zurich, Switzerland, 27.11.2013.
30. **Burkhardt-Holm, P.** 2013. Non-native gobies arriving in new river systems – what do we need to know to mitigate the problem? Ecology and Evolution Seminar, University of Alberta, Edmonton, Canada, 08.11.2013.
31. **Burkhardt-Holm, P.** 2013. An inter-transdisciplinary project to cope with the challenge of invasive gobies arriving in the Rhine. IRES Seminar, UBC Vancouver, Canada, 05.11.2013.
32. **Burkhardt-Holm, P.** 2013. Biodiversity treatment by pollution. STS forum 10th Annual Meeting, Session of “Biodiversity”, Kyoto, Japan, 07.10.2013.
33. **Burkhardt-Holm, P.**, Kalchhauser, I., Hirsch, P., N`Guyen, A. 2013. Applied research as a basis for a sustainable management of non-native gobies. European Vertebrate Pest Management Conference, Turku, Finland, 24.09.2013.
34. **Holm, P.** 2013. What is an endocrine disruptor and why do we have to study these compounds? University of Alberta, Edmonton, Canada, 05.04.2013.

35. **Holm, P.** 2013. Importance of fine sediments for brown trout – how to assess their impact. University of Alberta, Edmonton, Biological Sciences Departmental Seminar (Biology 631 Series), Canada. 05.04.2013.
36. **Burkhardt-Holm, P.,** Segner H. 2012. Fish research in Switzerland. Polarstern Cruise ANT-XXVIII/4, Southern Ocean off Elephant Island 61° 34,07'S – 55° 1,42'W, 18.03.2012.
37. **Holm, P.** 2012. Microplastic – an emerging problem for aquatic life. Swissnex Singapore Events, hosted by NUS Environmental Research Institute, National University of Singapore, 11.12.2012.
38. **Burkhardt-Holm, P.** 2012. Successful knowledge-action-networks in European coastal cities. Regional Climate Change Conference (RCC4), Adjunct Session to The Ninth Annual Meeting of the Science and Technology in Society forum, “Adaptation to Natural and Social Impacts of Regional Climate Change”, Kyoto, Japan, 06.10.2012.
39. **Burkhardt-Holm, P.,** Zosso, M., Menn, C., Giehler, T., Rinkler P. 2012. What to do with expired drugs? A study on consumer behaviour with suggestions how to reduce urban water pollution. Singapore, International Water Week, Singapore, 03.07.2012.
40. **Burkhardt-Holm, P.** 2011. Knowledge Action Networks and Regional Climate Change Adaptation, RCC3 Workshop, Presentation on Europe. Science and Technology in Society forum. Kyoto, Japan, 01.10.2011.
41. **Holm, P.** 2011. Linking water quality issues to human health and environment: The fate of micro- pollutants. LKY School Lunchtime Talk, Lee Kuan Yew School of Public Policy, Singapore, 13.07.2011.
42. **Burkhardt-Holm, P.,** Götz, K. 2011. Environmental hormones: risk, fate and potential measures to reduce their entry into the water cycle (poster IWA-6501). Water Convention Conference, 4th Singapore International Water Week, Singapore, 04.-08.07.2011.
43. **Holm, P.** 2011. Estrogenic endocrine disruption in fish: extrapolation from organism to population. Biol631 - Biological Sciences Departmental Seminar, University of Alberta, Department of Biological Sciences, Edmonton, Canada, 21.01.2011.
44. **Holm, P.** 2011. Gonad organ culture of juvenile brown trout and effects of an aromatase inhibitor. Biol631 - Biological Sciences Departmental Seminar, University of Alberta, Department of Biological Sciences, Edmonton, Canada, 21.01.2011.
45. **Burkhardt-Holm, P.** 2010. Endocrine Disruptors-Micropollutants interfering with the health of man and wildlife. Facts, risks, and possible solutions on an emerging issue. Swiss Science Days, Seoul, South Korea, 10.09.2010.

46. **Burkhardt-Holm, P.** 2010. Brown trout decline in the Alps: fish under multiple pressure of climate change, land use change, temperature-related disease and pollution. NUS-Seminar, National University of Singapore, Faculty of Science, Singapore, 08.11.2010.
47. **Burkhardt-Holm, P.** 2010. Invasive fish species in the Swiss River Rhine catchment - origin, pathways and consequences. NUS-Seminar, National University of Singapore, Biological Sciences, Singapore, 08.11.2010.
48. **Burkhardt-Holm, P.** 2010. Participatory processes to meet the challenges of fish catch decline in Switzerland. NUS-Seminar, National University of Singapore, Institute of Water Policy, Lee Kuan Yew School of Public Policy, Singapore, 03.11.2010.
49. **Burkhardt-Holm, P.** 2010. Hormonally active substances in our environment affecting reproduction of man and wildlife. What do we know and what can be done? World Water Week Stockholm, Stockholm, Sweden, 5.-11.09.2010.
50. **Burkhardt-Holm, P.** 2010. Brown trout decline in the Alps: fish under multiple pressure of climate change, land use change, temperature-related disease and pollution», Ecology Seminar Series, Department of Biological Sciences, University of Alberta, Edmonton, Canada, 05.01.2010.
51. **Burkhardt-Holm, P.** 2009. Lessons learned: How to approach the multi-factorial problem of fish catch decline? Final Symposium of the EU project Modelkey, UFZ Leipzig, Leipzig, Germany, 30.11.- 2.12.2009.
52. **Burkhardt-Holm, P.** 2009. Health and water quality management: The case of endocrine disruptors, III. International Experts Meeting “Water Quality Management: Challenges and Expectations”, International Centre for Water and Environment (CIAMA), Zaragoza, Spain, 09.-11.11.2009.
53. **Burkhardt-Holm, P.** 2009. Climate Change in the Alps: Brown Trout under Pressure. Research Seminar IMARPE, Lima, Peru, 27.06.2009.
54. **Burkhardt-Holm, P.** 2009. How to involve stakeholders in projects on fisheries - a case study from Switzerland, Scientific Progress Seminar. Universidad Nacional Agraria La Molina, Lima, Peru, 25.06.2009.
55. **Burkhardt-Holm, P.** 2009. Fish catch decline in alpine rivers - What are the causes? Scientific Progress Seminar, Universidad Nacional Agraria La Molina, Lima, Peru, 25.06.2009.
56. **Burkhardt-Holm, P.** 2009. Climate change in the Alps: Brown trout under pressure. University of Victoria, Victoria, Canada, 12.02.2009.

57. **Burkhardt-Holm, P.** 2009. Climate change and disease – a multifactorial story on brown trout decline in Switzerland. University of British Columbia, Vancouver, Canada, 11.02.2009.
58. **Burkhardt-Holm, P.** 2009. The Swiss project on fish catch decline ‚Fischnetz‘: Hands on! Everybody’s help is needed! An inter- and transdisciplinary project on the decline of fish catch in Swiss rivers. Integrated Watershed Management, University of British Columbia, Vancouver, Canada, 11.02.2009.
59. **Burkhardt-Holm, P.** 2008. Epigenetic effects in zebrafish. Are they sensitive to estrogenic endocrine disruptors? Friedrich Miescher Institute, Epigenetic Internal Progress Report series, Basel, Switzerland, 04.06.2008.
60. **Burkhardt-Holm, P.** 2008. Östrogene Stoffe in Schweizer Gewässern: Abschätzung von Exposition und Modellierung der Effekte bei Fischen bis zur Populationsebene. BAFU/NFP Tagung: Umsetzung und Ergebnisse aus dem Nationalen Forschungsprogramm 50 “Hormonaktive Stoffe: Bedeutung für Menschen, Tiere und Ökosysteme.”, Bern, Switzerland, 01.09.2008.
61. **Burkhardt-Holm, P.** 2008. Climate change in the Alps - a problem for brown trout. University of Alberta, Edmonton, Canada, 12.08.2008.
62. **Burkhardt-Holm, P.** 2008. Estrogenic Endocrine Disruptor Effects in Fish: Extrapolation from Organism to Population. Waterville Valley Resort, Gordon Research Conference on Environmental Endocrine Disruptors, New Hampshire, USA, 12.06.2008.
63. **Burkhardt-Holm, P.** 2008. Endocrine Disruption in Switzerland: Assessment of Brown Trout Exposure and Effects. University of Zurich, Seminar über aktuelle Probleme der morphologischen Forschung, Zurich, Switzerland, 06.05.2008.
64. **Burkhardt-Holm, P.** 2008. Endocrine Disruption in Switzerland: Are fish populations at risk? University of Zurich, SAFE, SIE Seminar, Zurich, Switzerland, 18.04.2008.
65. **Burkhardt-Holm, P.** 2008. Project SAFE & Master Course on Sustainable Development. University Konstanz, Mini-Symposium with Limnological Institute, Konstanz, Germany, 09.04.2008.
66. **Burkhardt-Holm, P.** 2007. Estrogenic endocrine disruption in Switzerland: Assessment of fish exposure and modeling of effects on the population. University San Carlos, Cebu, Philippines, 06.11.2007.

67. **Burkhardt-Holm, P.** 2007: Master's Degree in Sustainable Development in Switzerland – a balance between three pillars, faculties and various interests. University of the Philippines Visayas Cebu College, Central Visayas Studies Center, Cebu, Philippines, 06.11.2007.
68. **Burkhardt-Holm, P.** 2007. Research on fish at MGU. Kolloquium Department Environmental Sciences, University of Basel, Basel, Switzerland, 25.09.2007.
69. **Burkhardt-Holm, P.** 2007. Endocrine Disruption in Switzerland: Assessment of Fish Exposure and Effects. Final Meeting NRP50, Magglingen, Switzerland, 04.-11.09.2007.
70. **Burkhardt-Holm, P.** 2006. Sustainable use of water - a challenge for man, Syngenta Jealott's Hill, London, United Kingdom, 23.10.2006.
71. **Burkhardt-Holm, P.** Endocrine Disruption in Switzerland: Assessment of Fish Exposure and Effects, NRP 50 Annual Meeting, Brienz, Switzerland, 15.–17.10.2006.
72. **Burkhardt-Holm, P.** 2006. Master Degree in Sustainable Development an der Uni Basel, 3. FH-Tagung Nachhaltige Entwicklung, Luzern, Switzerland, 03.03.2006.
73. **Holm, P.** 2003. 5 Jahre Projekt Fischnetz. Achte deutschsprachige SETAC-Tagung, Heidelberg, Germany, 21.-23.09.2003.
74. **Holm, P.** 2003. Casual attribution of aquatic ecosystem degradation: a case study in assessment of fish catch decline in Switzerland. IWMC (International Water Management Course), Eawag, Kastanienbaum, Switzerland, 10.07.2003.
75. **Holm, P.** 2000. Fishnet - a transdisciplinary project on the decline of fish populations in Swiss river systems. Int. Transdisciplinarity Conference, ETH Zurich, Switzerland, 27.02.-01.03.2000.
76. **Burkhardt-Holm, P.** 1999. The use of specific biomarkers to detect disorders in wild fish. EAFP Ninth International Conference on Diseases of Fish and Shellfish, Rhodes, Greece, 20.-23.09.1999.
77. **Holm, P.** T. Wahli, W. Meier. 1997. Die Forelle als Spiegel belasteter Vorfluter. 31. Tagung der kantonalen Gewässerschutzlimnologen und -chemiker, Fribourg, Switzerland, 27.02.1997.

PUBLIC OUTREACH (SELECTION)

POPULAR ARTICLES, ORAL CONTRIBUTIONS & PUBLIC RELATIONS

Selection of over 140 public contributions:

1. **Holm, P.** 2022. Mikroplastik im Rhein. Vortrag "Territories of Waste", Tinguely Museum Basel. 01.12.2022.
2. **Holm, P.** 2022. Invasion der Schwarzmeergrundeln - Massnahmen zum Schutz des Rheins und anderer Gewässer. Forschungsprojekte in der Region. Uni am Markt 24.09.-16.11.2022.
3. **Holm, P.** 2022. Invasive Fische - unerwünschte Nebenfolge unserer globalen Mobilität. Zukunftsdialog Nachhaltigkeit, Sustainable Future Network, Basel, 16.09.2022.
4. **Holm, P.** 2022. Klimawandel – eine Herausforderung für die Fische und Gewässer. Rotary Clubs, Sissach & Gelterkinden, 05.10.2022.
5. **Holm, P.** 2022. Neozoen und ausgestorbene Arten - unsere Herausforderungen, unsere Verantwortung, unsere Handlungsmöglichkeiten. Podiumsdiskussion "Artenvielfalt Hochrhein", ARGE Hochrhein, Bad Zurzach, 27.08.2022.
6. **Holm, P.** 2022. Der Sound der Unterwassertiere, Radio SRF, Wissenschaftsmagazin, 19.02.2022. <https://www.srf.ch/audio/wissenschaftsmagazin/muaaah-boong-oder-gragrag-was-wassertiere-sich-erzaehlen?id=12143129>
7. **Holm, P.** 2022. Wo Eisfische brüten, Eisberge entstehen, und Mikroplastik wandert – eine besondere Antarktisexpedition, firmm-Annual Meeting, Aarau, 19.02.2022
8. **Holm, P.** 2021. Mikroplastikforschung in der Antarktis, Rector's Dinner, Basel. 28.10.2021
9. **Holm, P.** 2021. Wo Eisfische brüten, Eisberge entstehen, und Mikroplastik wandert – eine besondere Antarktisexpedition, Naturforschende Gesellschaft in Basel, NGIB, 16.09.2021.
10. **Holm, P.** 2021. Die Spur aus Plastik. Meeresforschung in der Schweiz, Radio SRF 2, Kontext-Sendung, 29.07.2021. <https://www.srf.ch/audio/kontext/die-spur-aus-plastik?partId=12028899>
11. **Holm, P.** 2021. Tiere sind dem Plastik ausgeliefert. SRF4, News aktuell, 01.06.2021. <https://www.srf.ch/news/panorama/schiff-verliert-tonnen-plastik-vor-sri-lanka-bahnt-sich-eine-umweltkatastrophe-an>

12. **Holm, P.** 2019. Mikroplastik – selbst in der entlegenen Antarktis nachweisbar? Ricola Foundation, Laufen, 20.11.2019.
13. **Holm, P.** 2019. Mikroplastik. Naturwissenschaftliche Gesellschaft Winterthur, Winterthur, 08.11.2019.
14. **Holm, P.** 2019. Sustainable Development: Einblicke in die Forschung zur nachhaltigen Bewirtschaftung der Ressourcen. Förderverein Universität Basel, Kollegienhaus Universität Basel, 06.06.2019.
15. **Holm, P.** 2019. Von Walen und Menschen. Inner Wheel Club Berner Oberland, Thun, 10.04.2019.
16. **Holm, P.** 2019. Antarktis – Wie Tiere Grenzräume des Lebens meistern. Geographische Gesellschaft Basel, 21.03.2019.
17. **Holm, P.** 2018. Wale und Walfang – und die Arbeit in der IWC. Studienstiftler – Lunch, Basel, 13.11.2018.
18. **Holm, P.** 2017. Umweltprobleme in der Antarktis. Schweizerische Greina-Stiftung zur Erhaltung der alpinen Fließgewässer (SGS). 31. Stiftungsratversammlung, Schwyz, 23.06.2016.
19. **Holm, P.,** 2017. Microplastics in Rhine River. Brown Bag Talk and Lab Experience. Denk-weiter- Wochen, Tatort Nachhaltigkeit, Universität Basel, 25.04.2017
20. **Holm, P.,** 2017. Unterwasser. Wie geht's der Lebewelt im Rhein? AUE-Forum, Basel, 24.04.2017
21. **Holm, P.,** 2017. "Invasive Fische im Rhein", Studienstiftler-Lunch, Universität Basel, 12.04.2017
22. **Holm, P.,** 2017. Microplastics in Rhine River. Media conference, eco.naturkongress & prix eco.ch Museum Kleines Klingental, Basel, Switzerland, 15.03.2017
23. **Holm, P.,** 2017. Schwarzmundgrundeln im Rhein, Motor-Segelsportclub Hochrhein, D-Wehr-Brennet, 05.03.2017
24. **Holm P.;** 2017. talk 1`Mit dem Eisbrecher Polarstern auf Forschungsreise in der Antarktis, talk 2 "Die firmm-Forschung erfährt internationale Resonanz bei der Walfangkommission IWC", firmm-Annual Meeting, 25.02.2017
25. **Holm, P.** 2017. Raubfische breiten sich in Schweizer Gewässern aus. NZZ am Sonntag, 22.07.2017. <https://nzzas.nzz.ch/wissen/grundeln-bereit-fuer-die-invasion-raubfisch-id.1307251>
26. **Holm, P.** 2017. Noch stoppt das Rheinkraftwerk Rheinfelden die Schwarzmeergrundeln. SRF Regionaljournal Aargau / Solothurn, 17.07.2017.

- <https://www.srf.ch/news/regional/aargau-solothurn/noch-stoppt-das-rheinkraftwerk-rheinfeld-die-schwarzmeergrundel>
27. **Holm, P.**, Mani, T., Hübner, M., Straub, S., 2016. Microplastics Meeting WWF/ MGU Uni Basel in Zürich. WWF, Zurich, Switzerland, 01.11.2016.
 28. **Holm, P.** 2016. Erlebnisbericht einer Antarktisreise. Schweizerische Greina-Stiftung zur Erhaltung der alpinen Fliessgewässer (SGS). 30. Stiftungsratversammlung, 30.05.2016.
 29. **Holm, P.**, N'Guyen, A. 2015. Sportbootstransporte und Verarbeitung aquatischer Neozoen (Schwarzmeergrundeln, Quagga-Muscheln). AGIN-D-Besprechung, Basel/Rheinfeld, Switzerland, 11.08.2015.
 30. **Holm, P.** 2015. Verschleppung aquatischer Neozoen am Beispiel der Schwarzmeergrundeln. Beitrag zur Tagung. 4. AGIN – Tagung, Olten, Switzerland, 06/2015.
 31. **Holm, P.** 2015. Invasion der Schwarzmeergrundeln – neueste Erkenntnisse. Dialog. Delegiertenversammlung Aargauer Fischereiverband (AFV), Lupfig, Switzerland, 03/2015.
 32. **Holm, P.** 2015. Is this biology? IBM Research GmbH, Rüschlikon, Switzerland, 03/2015.
 33. **Holm, P.** 2015. Vom Walfang zum Walschutz. firmm-Annual Meeting, Aarau, Switzerland, 21.02.2015.
 34. **Holm, P.**, Hirsch, P.E., Adrian-Kalchhauser, I., N'Guyen, A. 2014. Grundel-Stakeholder Workshop, University of Basel, Switzerland, 27.11.2014.
 35. **Holm, P.** 2014. Von Walfang und Walbeobachtung. Umweltkommission Starrkirch-Wil, Switzerland, 19.11.2014.
 36. **Holm, P.** 2014. Schwarzmeergrundel-Projekt: Übersicht und Empfehlungen. Fischereiaufseherkurs, Pontresina, Switzerland, 22.08.2014.
 37. **Holm, P.** 2014. Schwarzmeergrundeln im Rhein bei Basel – betrifft das die Berufsfischerei in der Schweiz? 89. Ordentliche Generalversammlung des Schweizerischen Berufsfischerverbandes SBFV, Ramada Hotel La Palma au Lac, Locarno, Switzerland, 16.03.2014.
 38. **Holm, P.** 2014. Grundeln im Hochrhein. Sitzung FISH (I)14, Internationale Kommission zum Schutz des Rheins, Koblenz, Germany, 05.02.2014.
 39. **Holm, P.** 2013. Invasive Neozoen. Informationsabend Aargauischer Fischereiverband, Lupfig, Switzerland, 19.09.2013.
 40. **Holm, P.** 2013. Von lebenden Fossilien und modernen Alleskönnern – Die Vielfalt der Fische. Bündner Naturmuseum, Chur, Switzerland, 20.08.2013.

41. **Holm, P.** 2013. Neozoen – welche Arten erobern derzeit die Schweiz? Invasive Grundeln im Hochrhein. BAFU, Fischerei-Infotag, Monitoring Fisch- und Krebsbestände Schweiz, Olten, Switzerland, 04.07.2013.
42. **Holm, P.** 2013. Invasive Grundeln im Rhein. ZONTA Club Liestal, Switzerland, 19.06.2013.
43. **Holm, P.** 2013. Was halten die Fische von “Urban Farming”? Grand Opening Urban Farmers Basel –UF001 LokDepot, Basel, 25.05.2013.
44. **Holm, P.** 2013. Invasive Fische aus dem Schwarzen Meer erobern die Schweiz – Problematik und Möglichkeiten der Abwehr. Naturforschende Gesellschaft, Basel, Switzerland, 15.05.2013
45. **Holm, P.** 2013. Die Überfischung der Meere – gibt es befriedigende Lösungen? Rotary Club Wynen- Surental, Switzerland, 01.05.2013.
46. **Holm, P.** 2013. Wie ein Fisch im Wasser – wie wohl fühlen sich unsere Fische in hohen Lagen? Auditorium der Academia Engadina, Samedan, Switzerland, 14.03.2013.
47. **Holm, P.** 2012. Von lebenden Fossilien und modernen Alleskönnern – die Vielfalt der Fische. Vortragsreihe “Natur am Sibni”, Naturmuseum St. Gallen, Switzerland. 14.11.2012.
48. **Holm, P.** 2012. Fremde Fische in unseren Gewässern. Umweltkommission Starrkirch-Wil, Starrkirch-Wil, Switzerland, 07.11.2012.
49. **Holm, P.** 2012. Invasive Fische im Rhein bei Basel. NZZ, 03.10.2012.
50. **Burkhardt-Holm, P.** 2012. Feeding the world – the role of fisheries and aquaculture. 8th World Demographic and Ageing Forum, University of St. Gallen, Switzerland, 29.08.2012.
51. **Holm, P.** 2012. Der Mensch und das Meer. Lions Club Bern, Switzerland, 16.07.2012.
52. **Holm, P.** 2011. Hormone in unseren Gewässern: Gibt es bald nur noch Weibchen? Lions Club Bern, Berne, Switzerland, 17.10.2011.
53. **Burkhardt-Holm, P.** 2011. Limnische Systeme der Zukunft - Mainstreaming von Biodiversitätsschutz und Klimaanpassung/-schutz in der Gewässerbewirtschaftung. Klimawandel - Auswirkungen auf Diversität und Gesundheit der Fische unserer Gewässer. Stakeholder-Dialog, Institut für Sozialökologische Forschung (ISOE), Frankfurt am Main, Germany, 15.06.2011.
54. **Holm, P.** 2011. How to involve stakeholders in projects on fisheries - A case study from Switzerland. cewas - international centre for water management services. Training Module I “SSWM”, Willisau, Switzerland, 19.05.2011.

55. **Holm, P.** 2011. Faszinierende Fische - Biologie, Bedeutung und Zukunft. BPW - Business & Professional Women, Aarhof Olten, Olten, Switzerland, 07.05.2011.
56. **Holm, P.** 2011. Faszinierende Fische - Biologie, Bedeutung und Zukunft. Veranstaltungen Dozentenverein University of Basel, Vesalianum, Basel, Switzerland, 23.03.2011.
57. **Holm, P.** 2011. Faszinierende Fische - Biologie, Bedeutung und Zukunft. 225-Jahre-Jubiläum Naturforschende Gesellschaft Bern (NGB), Bern, Switzerland, 15.03.2011
58. **Holm, P.** 2011. Klimawandel - welche Konsequenzen sind für die Wale und Delfine in der Strasse von Gibraltar zu erwarten? firmm-Annual Meeting, Aarau, 19.02.2011.
59. **Burkhardt-Holm, P.** 2010. Esst mehr Fisch! Ein Nahrungsmittel im Spannungsfeld zwischen Konsum und Klimawandel. Berner Umweltforschungstag, Berne, Switzerland, 04.05.2010.
60. **Holm, P.** 2010. Fische: Jäger und Gejagte. 550 Jahr-Jubiläum University of Basel, Liestal, Switzerland, 17.04.2010.
61. **Holm, P.** 2010. Die internationale Walfangkommission IWC: Kann sie firmm helfen? 12. firmm-Annual Meeting, Aarau, Switzerland, 27.02.2010.
62. **Holm, P.** 2009. firmm - ihr Beitrag in der studentischen Ausbildung der University of Basel. firmm-Annual Meeting, Aarau, 24.01.2009.
63. **Burkhardt-Holm, P.** 2009. Taking up the challenge of delivering water and basic sanitation to more than one billion deprived people. Panel on: WATER IN THE CITY, Biovision, Lyon, France, 09.- 11.03.2009.
64. **Burkhardt-Holm, P.** 2008. Das Element Wasser als Lebensraum für Fische und andere Lebewesen. Museum Laufenburg, Laufenburg, Switzerland, 16.11.2008.
65. **Burkhardt-Holm, P.** 2008. Fischnetz - An inter- and transdisciplinary project on the decline of fish catch in Swiss rivers. Water Research Institute, Alberta Ingenuity Fund, Edmonton, Canada, 11.08.2008.
66. **Burkhardt-Holm, P.** 2008. Mikroverunreinigungen - die neue Bedrohung? Abschluss Symposium Fischnetz+, Olten, Switzerland, 16.02.2008.
67. **Burkhardt-Holm, P.** 2006. Hormone im Wasser - Belasten sie unsere Bachforellen? Wissenschaftstag Bundesamt für Umwelt BAFU, Berne, Switzerland, 19.06.2006.
68. **Holm, P.** 2004. Fischnetz final report and short reports. EAWAG, Dübendorf.
69. **Holm, P.** 2004. Sur la trace du déclin ichthyologique. Tracés: débits de poissons 4: 12-14.
70. **Holm, P.** 2003. Fischnetz "Netzwerk Fischrückgang Schweiz". In: Bachforellen sterben in Bayern. Schriftenreihe des Landesfischereiverbandes Bayern 9: 43-50.

71. Hari, R.E., Livingstone, D.M., Siber, R., **Burkhardt-Holm, P.**, Güttinger, H. 2003. EAWAG Jahresbericht 2003: 56-57.
72. Güttinger, H., **Holm, P.**, Peter, A., Suter, M. 2003. Fischnetz: Chronologie eines nationalen Projektes. EAWAG Jahresbericht 2003: 9-14.
73. **Holm, P.** 2002. Fische in Not. Detektivarbeit im Projekt Fischnetz. Hotspot 6/2002, 11p.
74. Güttinger, H., **Holm, P.**, Baumann, P. 2002. Die Entwicklung des Fischnährtierbestandes in schweizerischen Fliessgewässern zwischen 1980 und 2000. fischnetz-info 10: 5-7.
75. **Holm, P.** 2002. "Fischnetz"-Projekte und Prioritäten im letzten Drittel. fischnetz-info 9: 20-21.
76. **Holm, P.** 2001. Das Projekt Fischnetz – Netzwerk Fischrückgang Schweiz. Besuch der Bundesrätin Ruth Dreifuss an der EAWAG, Switzerland, 18.10.2001.
77. Schweigert, N., Behra, R., Eggen, R., Escher, B., **Holm, P.** 2001. Wie können Schadstoffeinflüsse in Fliessgewässern nachgewiesen werden? EAWAG-News 51: 10-12.
78. Schweigert, N., Eggen, R. I. L., Escher, B. I., **Burkhardt-Holm, P.**, Behra, R. 2001. Wie kann Ökotoxikologie einen Beitrag zum Fischnetz liefern? fischnetz-info 8: 9-11.
79. **Holm, P.** 2001. Umgang mit komplexen Problemen. fischnetz-info 8: 11-13.
80. **Holm, P.** 2001. PKD - die proliferative Nierenkrankheit der Forelle: Ergebnisse des Workshops in Kastanienbaum. fischnetz-info 8: 5-7.
81. **Holm, P.** 2001. Fortschritte im "Fischnetz": Die prioritären Untersuchungsfragen in diesem Jahr. fischnetz-info 7: 15-17.
82. **Holm, P.** 2001. Das Projekt "Netzwerk Fischrückgang Schweiz": Ziele, Chancen und Hindernisse. Mitteilungen zur Fischerei 68: 121-130.
83. **Holm, P.** 2001. Fische - Indikatoren und Gewinner. EAWAG-News 51: 23-25.
84. Faller, P., Kobler, B., Peter, A., **Holm, P.** 2001. Auswirkungen des Auslaufes der ARA Surental auf Gründlinge (*Gobio gobio*). fischnetz-info 7: 9-10.
85. Escher, M., **Holm, P.**, Staub, E., Wahli, T. 2001. Die proliferative Nierenkrankheit (PKD): Erste Ergebnisse der gesamtschweizerischen Erhebung. fischnetz-info 6: 10-12.
86. **Burkhardt-Holm, P.** 2001. Vorwort. Gas Wasser Abwasser 3: 141-143.
87. **Holm, P.** 2000. Der Fischrückgang in den schweizerischen Fliessgewässern. Auslöser des Projektes "Fischnetz" und Konsequenzen für die Forschung. Festschrift "100 Jahre Sportfischer-Verein Bern": 109-113.
88. **Holm, P.** 2000. Wie weiter mit den Hypothesen zum Fischnetz. fischnetz-info 5: 17-19.
89. **Holm, P.** 2000. Wirkung ausgewählter Pestizide auf Fische. fischnetz-info 4: 6-7.

90. **Burkhardt-Holm, P.**, Studer, C. 2000. Hormonaktive Stoffe im Abwasser. Sind Fische und andere wasserlebende Tiere bedroht? Gas Wasser Abwasser 7: 504-509.
91. Peter, A., **Holm, P.** 1999. "Fischnetz" - Erforschung des Fischrückganges in schweizerischen Fliessgewässern. Bulletin Schweizerischer Verband der Umweltfachleute SVU-ASEP-ASAP 5: 4-6.
92. Peter, A., **Holm, P.**, Ochsenbein, U., Staub, E. 1999. Erste Synthese zum Problem Fischrückgang Schweiz. fischnetz-info 2: 10-11.
93. **Holm, P.** 1999. Der Einbezug von Teilprojekten. fischnetz-info 3: 6-7.
94. **Holm, P.** 1999. Projektorganisation: Aufgaben und Verantwortlichkeiten. fischnetz-info 3: 5-6.
95. **Holm, P.** 1999. Vitellogenin in Fischen. fischnetz-info 2: 5.
96. **Holm, P.** 1999. Editorial: Kraftvoll und zielstrebig an der Sache bleiben - doch sich gelegentlich zurücklehnen: für ein Vorwärtskommen ist beides nötig! fischnetz-info 2, 1.
97. Zürcher, M., Schumann, P., **Burkhardt-Holm, P.** 1998. Vorfluter unter die Lupe genommen: Beispiel Alte Aare. Wasser Energie Luft 90: 121-124.
98. **Holm, P.** 1998. Das Leuchten der Kiemenzellen - Umweltforschung auf der Suche nach neuen Werkzeugen. Unipress, University of Bern.
99. Frick, E., Nowak, D., Reust, C., **Burkhardt-Holm, P.** 1998. Der Fischrückgang in den schweizerischen Fliessgewässern. Gas Wasser Abwasser 4: 261-264.
100. **Burkhardt-Holm, P.** 1998. Fische als Indikatoren für Umweltbelastungen. VGL Information 3.
101. **Holm, P.** 1997. Schadstoffe - auch ein Forschungsthema der Allgemeinen Ökologie. Unipress, University of Bern.
102. **Holm, P.** 1996. Projektarbeiten in Allgemeiner Ökologie. Unipress, University of Bern.

COMMITMENT TO THE PROMOTION OF YOUNG TALENTS

1. **Holm, P.** 2022. Wo Eisberge wandern und Pinguine ins Schwitzen kommen: Bericht einer Antarktis-Expedition. National Future Day. Basel. 10.11.2022
2. **Holm, P.** 2021. Mikroplastik - sind wir umgeben von Mini-Müll. Kinder-Uni Basel. April 2021.
3. **Holm, P.** 2019. Hochrheinkommission, Deutsch-Schweiz. Jugendforum Hochrhein, Experthearing. 30. 03. 2019.

4. **Holm, P.** 2018. Mikroplastik: Sind wir umgeben von Mini-Müll? Tec-Day Kantonsschule Olten. 29.11.2018
5. **Holm, P.** 2014. Wieso ertrinken Fische nicht? Oder: Ein Tag im Leben von 'Nemo. Kinder-Uni Basel. Juni 2014.
6. **Holm, P.** 2012. Sauberes Wasser und gesunde Gewässer für unsere Fische. Tec-Day Kantonsschule Olten. 08.11.2012
7. **Holm, P.** 2008. Water Cycle and Global Water Situation. Water and Sustainability in Developing Countries. ETH Sustainability, YES Course. Braunwald, Switzerland. 16.08.2008.

INTERVIEWS AND APPEARANCES ABOUT RESEARCH

Contributed in many outreach events, e.g. Netzwerkanlass beider Basel 2020. «Die Exzellenz der Hochschullandschaft Region Basel». 24.08.2020, FHNW Muttenz. Swiss Polar Class 2020 (Swiss Polar Institute), Interview zur Sonderausstellung 'Erde am Limit' 2020 (Naturhistorisches Museum Basel).

Participated in over 35 interviews and contributed to over 305 newspaper articles and other media appearances on own research in the popular media, including SRF, ZDF, SNF, Beobachter Natur, DRS, Schweizer Familie, Politische Ökologie, UniNova, Basler Zeitung, NZZ, GEO, NZZ Campus, European Commission Environmental News, Galway-Mayo Institute of Technology GMIT.