PD Dr. David R. Johnson
Head of Department and Group Leader
Microbial Community Assembly Group
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MAIN APPOINTMENTS (current only)

Head of Department	Dept. Environmental Microbiology, Eawag, Dübendorf, Switzerland	2025-present
Lecturer	Institute of Ecology and Evolution, University of Bern, Bern, Switzerland	2022-present
Group Leader	Microbial Community Assembly Group, Eawag, Dübendorf, Switzerland	2014-present

EDITORIAL AND SOCIETY APPOINTMENTS (current only)

Editorial Board	*Biofilm*	2024-present
Senior Editor	*The ISME Journal*	2023-present
Editorial Board	*Current Opinion in Biotechnology*	2021-present
SSM Delegate	Swiss Coordination Committee for Biotechnology (SCCB)	2024-present
Swiss Ambassador	International Society for Microbial Ecology (ISME)	2023-present
Swiss Ambassador	International Union of Microbiological Societies (IUMS)	2022-present
Commission Member	Lay Communication Section of the Swiss Society for Microbiology	2022-present
Regional Board	European Federation of Biotechnology (Environmental Biotechnology Division)	2020-present
Elected Head	Microbial Ecology Section of the Swiss Society for Microbiology	2017-present

EDUCATION AND TRAINING

PD (Privatdozent)	Microbial Ecology and Evolution, University of Bern, Bern, Switzerland	2025
Ph.D.	Environmental Engineering, University of California, Berkeley, CA, USA	2007
M.S.E.	Environmental Engineering, University of Michigan, Ann Arbor, MI, USA	2002
B.S.	Civil Engineering, Iowa State University, Ames, IA, USA	2000

AWARDS AND JOURNAL COVERS

PIFI Distinguished Scientist of the CAS President's International Fellowship Initiative	2026
Faculty of Science Teaching Award, University of Bern	2025
ALL Award: Recognition of Excellence in Teaching, University of Bern	2024
Outstanding Editorial Board Member Award, *The ISME Journal*	2023
Golden Owl Award, VSETH, Swiss Federal Institute of Technology (ETHZ)	2020
Journal Image Cover (issue 9), *mSystems*	2026
Journal Image Cover (issue 9), *Trends in Microbiology*	2026
Journal Image Cover (volume 19), *The ISME Journal*	2025
Journal Image Cover (18 November), *Communications Biology*	2020
Journal Image Cover (issue 1798), *Philosophical Transactions of the Royal Society B*	2020
Journal Image Cover (volume 10), *The ISME Journal*	2016

TEACHING (current only)

Introduction to Microbial Ecology and Evolution (B.Sc./M.Sc.; sole lecturer, 28h)	2022-present
Institute of Ecology and Evolution, University of Bern, Bern, Switzerland	
Systems Biology (M.Sc.; guest lecturer, 2h)	2024-present
Institute of Cell Biology, University of Bern, Bern, Switzerland	

PUBLICATIONS

1. Ruan C, Xiong B, Vinod DP, Kan A, Wu J, Thakur MP, Johnson DR (2026) Biosurfactants direct the evolutionary dynamics of surface-associated microbial systems. ***Science Advances*** 12: eaeh8127
2. Ramoneda J, Vinod DP, Ma Y, Ruan C, Schmidt J, Manhart M, Angst DC, Johnson DR (2026) Spatial constraints determine the spread of plasmid-encoded antibiotic resistance between bacterial colonies. ***mSystems*** 11: e00531-26
3. Gu W, Richter XYL, Johnson DR (2026) Managing microbial interactions in environmental biotechnology: can we scale interaction principles? ***Trends in Microbiology*** 34: 943-955
4. Lyou ES, Yoo SH, Rhee KJ, Johnson DR, Lee TK (2026) Bacterial and fungal co-colonization alters *Malassezia restricta* metabolism and host proteolytic activity in reconstructed human epidermis. ***Frontiers in Microbiology*** 17: 1927213
5. Qian L, Su R, Wang W, Yan B, Qin L, Zhao Z, Yang X, Li Y, Ding C, Hu R, Yu X, Yan Q, Niu M, Wu K, He Q, Yang Y, Johnson DR, Lawson CE, Aharoni A, Nikoloski Z, Zhou J, He J, He Z (2026) Synthetic ecology of coastal ecosystems. ***Cell Reports*** 45: 117665
6. Xiao D, Johnson DR, Zhang W, Xu Z, Hu P, Sun M, Zhao J, Chen H, Wang K (2026) Bedrock-soil geochemistry dominates free-living nitrogen fixation in soils but not in litter via interspecific microbial interactions. ***Communications Earth & Environment*** 7: 466
7. Wang L, Ruan C, Huang D, Johnson DR, Yu P (2026) Carrier bacteria motility determines efficacy of hitchhiking bacteriophages to control biofilm. ***Chemical Engineering Journal*** 536: 175902
8. Xiao D, Zhang W, Johnson DR, Hu P, Xu L, Sun M, Tang L, He X, Zhao J, Liao X, Peng W, Chen H, Wang K (2026) Increased soil carbon and nitrogen stocks associate with stronger calcium-microbial and multi-trophic interactions under warming. ***Global Change Biology*** 32: e70826
9. Takahashi K, Ohara K, Higuchi K, Ohmura T, Okabe S, Johnson DR, Oshiki M (2026) Horizontal and vertical gene transfer jointly shape the realized plasmid host range in surface-associated microbial systems. ***iScience*** 29: 115299
10. Majumdar A, Johnson DR, Moulick D (2026) Managing environmental antimicrobial resistance (AMR) under climate change: current gaps and future needs. ***Integrated Environmental Assessment and Management*** 22: 329-330
11. Tandler P, Johnson DR, Gogia G (2026) Sensitivity of microbial spatial self-organization to surface friction depends on metabolic interactions. ***The ISME Journal*** 20: wrag35
12. Dai J, Chen C, Zhai ZQ, Gao AX, Johnson DR, Kopittke PM, Zhao FJ, Wang P (2025) The balance between microbial arsenic methylation and demethylation in paddy soils underpins global arsenic risk and straighthead disease in rice. ***Proceedings of the National Academy of Sciences USA*** 122: e2508311122
13. Han M, Ruan C, Wang G, Johnson DR (2025) Fungal hyphae promote bacterial contact-dependent killing during surface-associated growth. ***The ISME Journal*** 19: wraf135
14. Ruan C, Vinod DP, Johnson DR (2025) Phage-mediated peripheral kill-the-winner facilitates the maintenance of costly antibiotic resistance. ***Nature Communications*** 16: 5839
15. Sam SB, Smith SK, Niederdorfer R, Scheidegger A, Ward BJ, Tembo JM, Kabika J, Johnson DR, Bürgmann H, Morgenroth E, Strande L (2025) Microbial community composition reflects water usage and storage conditions in a city-wide study of non-sewered wastewater (fecal sludge). ***PLOS Water*** 4: e0000386
16. Zhu C, Wu L, Ning D, Tian R, Gao S, Zhang B, Zhau J, Zhang Y, Xiao N, Wang Y, Brown MR, Tu Q, Global Water Microbiome Consortium, Ju F, Wells GF, Guo J, He Z, Nielsen PH, Wang A, Zhang Y, Chen T, He Q, Criddle CS, Wagner M, Tiedje JM, Curtis TP, Wen X, Yang Y, Alvarez-Cohen L, Stahl DA, Alvarez PJJ, Rittmann BE, Zhou J (2025) Global diversity and distribution of antibiotic resistance genes in human wastewater treatment systems. ***Nature Communications*** 16: 4006
17. Han M, Ruan C, Wang G, Johnson DR (2025) Evaporation controls contact-dependent bacterial killing during surface-associated growth**.** ***ISME Communications*** 5: ycaf034
18. Ma Y, Kan A, Johnson DR (2024) Metabolic interactions control the transfer and proliferation of plasmid-encoded antibiotic resistance during surface-associated microbial growth. ***Cell Reports*** 43: 114653
19. Gogia G, Johnson DR (2024) Bacteria spiral into control. ***Nature Physics*** 20: 897-898
20. Ruan C, Ramoneda J, Kan A, Rudge TJ, Wang G, Johnson DR (2024) Phage predation accelerates the spread of plasmid-encoded antibiotic resistance. ***Nature Communications*** 15: 5397
21. Takahashi K, Oshiki M, Ruan C, Morinaga K, Toyofuku M, Nomura N, Johnson DR (2024) Denitrification in low oxic environments increases the accumulation of nitrogen oxide intermediates and modulates the evolutionary potential of microbial populations. ***Environmental Microbiology Reports*** 16: e13221
22. Ma Y, Ramoneda J, Johnson DR (2023) Timing of antibiotic administration determines the spread of plasmid-encoded antibiotic resistance during microbial range expansion. ***Nature Communications*** 14: 3530
23. Karakurt-Fischer S, Johnson DR, Fenner K, Hafner J (2023) Making Waves: Enhancing pollutant biodegradation via rational engineering of microbial consortia. ***Water Research*** 247: 120756

24. Ge ZB, Zhai ZQ, Xie WY, Dai J, Huang K, Johnson DR, Zhao FJ, Wang P (2023) Two-tiered mutualism improves survival and competitiveness of cross-feeding bacteria in soil. ***The ISME Journal*** 17: 2090-2102
25. Ruan C, Borer B, Ramoneda J, Wang G, Johnson DR (2023) Evaporation-induced hydrodynamics control plasmid transfer during surface-associated microbial growth. ***npj Biofilms and Microbiomes*** 9: 58
26. Chen G, Hu Z, Ebrahimi A, Johnson DR, Wu F, Sun Y, Shen R, Liu L, Wang G (2023) Chemotactic movement and zeta potential dominate *Chlamydomonas microsphaera* attachment and biocathode development. ***Environmental Technology*** 44: 1838-1849
27. Ruan C, Ramoneda J, Gogia G, Wang G, Johnson DR (2022) Fungal hyphae regulate bacterial diversity and promote plasmid-mediated functional novelty during range expansion. ***Current Biology*** 32: 5285-5299e4
28. Dolinšek J, Ramoneda J, Johnson DR (2022) Initial community composition determines the long-term dynamics of a microbial cross-feeding interaction by modulating niche availability. ***ISME Communications*** 2: 77
29. Ciccarese D, Micali G, Borer B, Ruan C, Or D, Johnson DR (2022) Rare and localized events stabilize microbial community composition and patterns of spatial self-organization in a fluctuating environment. ***The ISME Journal*** 16: 1453-1463
30. Wang M, Chen X, Ma Y, Tang YQ, Johnson DR, Nie Y, Wu XL (2022) Type IV pilus shapes a 'bubble-burst' pattern opposing spatial intermixing of two interacting bacterial populations. ***Microbiology Spectrum*** 10: e01944-21
31. Chen G, Hu Z, Ebrahimi A, Johnson DR, Wu F, Sun Y, Shen R, Liu L, Wang G (2022) Electrotaxis-mediated cell motility and nutrient availability determine *Chlamydomonas microsphaera*-surface interactions in bioelectrochemical systems. ***Bioelectrochemistry*** 143: 107989
32. Ruan C, Ramoneda J, Chen G, Johnson DR, Wang G (2021) Evaporation-induced hydrodynamics promote conjugation-mediated plasmid transfer in microbial populations. ***ISME Communications*** 1: 54
33. Goldschmidt F, Caduff L, Johnson DR (2021) Causes and consequences of pattern diversification in a spatially self-organizing microbial community. ***The ISME Journal*** 15: 2415-2426
34. Dubey M, Hadadi N, Pelet S, Carraro N, Johnson DR, van der Meer JR (2021) Environmental connectivity controls diversity in soil microbial communities. ***Communications Biology*** 4: 492
35. Borer B, Ciccarese D, Johnson D, Or D (2020) Spatial organization in microbial range expansion emerges from trophic dependencies and successful lineages. ***Communications Biology*** 3: 685
36. Johnson DR, Pomati F (2020) A brief guide for the measurement and interpretation of microbial functional diversity. ***Environmental Microbiology*** 22: 3039-3048
37. Ciccarese D, Zuidema A, Merlo V, Johnson DR (2020) Interaction-dependent effects of surface structure on microbial spatial self-organization. ***Philosophical Transactions of the Royal Society B*** 375: 20190246
38. Johnson DR, Noack S (2020) Editorial overview: Causes and biotechnological application of microbial metabolic specialization. ***Current Opinion in Biotechnology*** 62: iii-vi
39. Achermann S, Mansfeldt CB, Müller M, Johnson DR, Fenner K (2020) Relating metatranscriptomic profiles to the micropollutant biotransformation potential of complex microbial communities. ***Environmental Science & Technology*** 54: 235-244
40. Wu L, Ning D, Zhang B, Li Y, Zhang P, Shan X, Zhang Q, Brown MR, Li Z, Van Nostrand JD, Ling F, Xiao N, Zhang Y, Vierheilig J, Wells GF, Yang Y, Deng Y, Tu Q, Wang A, Global Water Microbiome Consortium, Zhang T, He Z, Keller J, Nielsen PH, Alvarez PJJ, Criddle CS, Wagner M, Tiedje JM, He Q, Curtis TP, Stahl DA, Alvarez-Cohen L, Rittmann BE, Wen X, Zhou J (2019) Global diversity and biogeography of bacterial communities in wastewater treatment plants. ***Nature Microbiology*** 4: 1183-1195
41. Mansfeldt C, Achermann S, Men Y, Walser JC, Villez K, Joss A, Johnson DR, Fenner K (2019) Microbial residence time is a controlling parameter of the taxonomic composition and functional profile of microbial communities. ***The ISME Journal*** 13: 1589-1601
42. Ju F, Beck K, Yin X, Maccagnan A, McArdell CS, Singer H, Johnson DR, Zhang T, Bürgmann H (2019) Wastewater treatment plant resistomes are shaped by bacterial composition, genetic exchange, and upregulated expression in the effluent microbiomes. ***The ISME Journal*** 13: 346-360
43. Lilja EE, Johnson DR (2019) Substrate cross-feeding affects the speed and trajectory of molecular evolution within a synthetic microbial assemblage. ***BMC Evolutionary Biology*** 19: 129
44. Tecon R, Mitri S, Ciccarese D, Or D, van der Meer JR, Johnson DR (2019) Bridging the holistic-reductionist divide in microbial ecology. ***mSystems*** 4: e00265-18
45. Ciccarese D, Johnson DR (2019) Functional microbial landscapes. *In* **Comprehensive Biotechnology 3rd ed.** *Ed.* Moo-Young M. Elsevier: Pergamon
46. Patsch D, van Vliet S, Marcantini LG, Johnson DR (2018) Generality of associations between biological richness and the rates of metabolic processes across microbial communities. ***Environmental Microbiology*** 20: 4356-4368

47. Goldschmidt F, Regoes R, Johnson DR (2018) Metabolite toxicity slows local diversity loss during expansion of a microbial cross-feeding community. ***The ISME Journal*** 12: 136-144
48. Wells GF, Shi YJ, Laureni M, Weissbrodt DG, Joss A, Bürgmann H, Johnson DR, Morgenroth E (2017) Comparing the resistance, resilience, and stability of replicate moving bed biofilm and suspended growth combined nitritation-anammox reactors. ***Environmental Science & Technology*** 51: 5108-5117
49. Goldschmidt F, Regoes R, Johnson DR (2017) Successive range expansion promotes diversity and accelerates evolution in spatially structured microbial populations. ***The ISME Journal*** 11: 2112-2123
50. Marchal M, Selina Derksen, Sven Panke, Ackermann M, Johnson DR (2017) A passive mutualistic interaction promotes the evolution of spatial structure within microbial populations. ***BMC Evolutionary Biology*** 17: 106
51. Lilja EE, Johnson DR (2017) Metabolite toxicity determines the pace of molecular evolution within microbial populations. ***BMC Evolutionary Biology*** 17: 52
52. Men Y, Achermann S, Helbling DE, Johnson DR, Fenner K (2017) Relative contribution of ammonia oxidizing bacteria and other members of nitrifying activated sludge communities to micropollutant biotransformation. ***Water Research*** 109: 217-226
53. Men Y, Han P, Helbling DE, Jehmlich N, Herbold C, Guide R, Onnis-Hayden A, Gu AZ, Johnson DR, Wagner M, Fenner K. (2016) Biotransformation of two pharmaceuticals by the ammonia-oxidizing archaeon *Nitrososphaera gargensis*. ***Environmental Science & Technology*** 50: 4682-4692
54. Filippidou S, Bueche M, Wunderlin T, Junier T, Roussel-Delif L, Jeanneret N, Dorador C, Molina V, Ioannidou A, Vargemezis G, Johnson DR, Junier P (2016) A combination of extreme environmental conditions favor the prevalence of endospore-forming firmicutes. ***Frontiers in Microbiology*** 7: 1707
55. Dolinšek J, Goldschmidt F, Johnson DR (2016) Synthetic microbial ecology and the dynamic interplay between microbial genotypes. ***FEMS Microbiology Reviews*** 40: 961-979
56. Kinnunen M, Dechesne A, Proctor C, Hammes F, Johnson DR, Quintela-Baluja M, Graham D, Daffonchio D, Fodelianakis S, Hahn N, Boon N, Smets BF (2016) A conceptual framework for invasion in microbial communities. ***The ISME Journal*** 10: 2773-2775
57. Widder S, Allen R, Pfeiffer T, Curtis TP, Wiuf C, Sloan WT, Cordero OX, Brown SP, Momeni B, Shou W, Kettle H, Flint HJ, Haas AF, Laroche B, Kreft JU, Rainey PB, Freilich S, Schuster S, Milferstedt K, van der Meer JR, Grosskopf T, Huisman J, Free A, Picioreanu C, Quince C, Klapper I, Labarthe S, Smets BF, Wang H, Isaac Newton Institute Fellows, Soyer OS (2016) Challenges in microbial ecology: building predictive understanding of community function and dynamics. ***The ISME Journal*** 10: 2557-2568
58. Lindemann SR, Bernstein HC, Song HS, Fredrickson JK, Fields MW, Shou W, Johnson DR, Beliaev AS (2016) Engineering microbial consortia for controllable outputs. ***The ISME Journal*** 10: 2077-2084
59. Lilja EE, Johnson DR (2016) Segregating metabolic processes into different microbial cells accelerates the consumption of inhibitory substrates. ***The ISME Journal*** 10: 1568-1578
60. Johnson DR, Lee TK, Park J, Fenner K, Helbling DE (2015) The functional and taxonomic richness of wastewater treatment plant microbial communities are associated with each other and with ambient nitrogen and carbon availability. ***Environmental Microbiology*** 17: 4851-4860
61. Johnson DR, Helbling DE, Men Y, Fenner K (2015) Can meta-omics help to establish causality between contaminant biotransformations and genes or gene products? ***Environmental Science: Water Research & Technology*** 1: 272-278
62. Johnson DR, Helbling DE, Lee TK, Park J, Fenner K, Kohler HPE, Ackermann M (2015) Association of biodiversity with the rates of micropollutant biotransformations among full-scale wastewater treatment plant communities. ***Applied and Environmental Microbiology*** 81: 666-675
63. Helbling DE, Johnson DR, Lee TK, Scheidegger A, Fenner K (2015) A framework for establishing predictive relationships between specific bacterial 16S rRNA sequence abundances and biotransformation rates. ***Water Research*** 70: 471-484
64. West KA, Lee PKH, Johnson DR, Zinder SH, Alvarez-Cohen L (2013) Global gene expression of *Dehalococcoides* within a robust dynamic TCE-dechlorinating community under conditions of periodic substrate supply. ***Biotechnology and Bioengineering*** 110: 1333-1341
65. Coronado E, Roggo C, Johnson DR, van der Meer JR (2012) Genome-wide analysis of salicylate and dibenzofuran metabolism in *Sphingomonas wittichii* RW1. ***Frontiers in Microbiology*** 3: 300
66. Fida TT, Breugelmans P, Lavigne R, Coronado E, Johnson DR, van der Meer JR, Mayer AP, Heipieper HJ, Hofkens J, Springael D (2012) Exposure to solute stress affects genome-wide expression but not the polycyclic aromatic hydrocarbon-degrading activity of *Sphingomonas* sp. LH128 in biofilms. ***Applied and Environmental Microbiology*** 78: 8311-8320
67. Helbling DE, Ackermann M, Fenner K, Kohler HPE, Johnson DR (2012) The activity level of a microbial community function can be predicted from its metatranscriptome. ***The ISME Journal*** 6: 902-904

68. Helbling DE, Johnson DR, Honti M, Fenner K (2012) Micropollutant biotransformation kinetics associate with WWTP process parameters and microbial community characteristics. ***Environmental Science & Technology*** 46: 10579-10588
69. Johnson DR, Goldschmidt F, Lilja EE, Ackermann M (2012) Metabolic specialization and the assembly of microbial communities. ***The ISME Journal*** 6: 1985-1991
70. Men Y, Feil H, VerBerkmoes NC, Shah MB, Johnson DR, Lee PK, West KA, Zinder SH, Andersen GL, Alvarez-Cohen L (2012) Sustainable syntrophic growth of *Dehalococcoides ethenogenes* strain 195 with *Desulfovibrio vulgaris* Hildenborough and *Methanobacterium congolense*: global transcriptomic and proteomic analysis. ***The ISME Journal*** 6: 410-421
71. Johnson DR, Coronado E, Moreno-Forero SK, Heipieper HJ, van der Meer JR (2011) Transcriptome and membrane fatty acid analyses reveal different strategies for responding to permeating and non-permeating solutes in the bacterium *Sphingomonas wittichii*. ***BMC Microbiology*** 11: 250
72. Müller S, Johnson DR (2011) Application of cytomics to separate natural microbial communities by their physiological properties. *In* **Handbook of Molecular Microbial Ecology Vol I: Metagenomics and Complementary Approaches.** *Ed.* de Bruijn FJ. Wiley-Blackwell
73. Gaillard M, Pradervand N, Minoia M, Sentchilo V, Johnson DR, van der Meer JR (2010) Transcriptome analysis of the mobile genome ICE*clc* in *Pseudomonas knackmussii* B13. ***BMC Microbiology*** 10: 153
74. Johnson DR, Czechowska K, Chèvre N, van der Meer JR (2009) Toxicity of triclosan, penconazole, and metalaxyl on *Caulobacter crescentus* and a freshwater microbial community as assessed by flow cytometry. ***Environmental Microbiology*** 11: 1682-1691
75. Johnson DR, Nemir A, Andersen GL, Zinder SH, Alvarez-Cohen L (2009) Transcriptomic microarray analysis of corrinoid responsive genes in *Dehalococcoides ethenogenes* strain 195. ***FEMS Microbiology Letters*** 294: 198-206
76. Johnson DR (2009) Transcriptome analysis using high-density oligonucleotide microarrays. *In* **Handbook of Hydrocarbon and Lipid Microbiology Vol 5: Experimental Protocols and Appendices.** *Eds.* Timmis KN, McGenity T, van der Meer JR, de Lorenzo V. Springer
77. Czechowska K, Johnson DR, van der Meer JR (2008) Use of flow cytometric methods for single-cell analysis in environmental microbiology. ***Current Opinion in Microbiology*** 11: 205-212
78. Johnson DR, Brodie EL, Hubbard AE, Andersen GL, Zinder SH, Alvarez-Cohen L (2008) Temporal transcriptomic microarray analysis of "*Dehalococcoides ethenogenes"* strain 195 during the transition into stationary phase. ***Applied and Environmental Microbiology*** 74: 2864-2872
79. West KA, Johnson DR, Hu P, DeSantis TZ, Brodie EL, Lee PKH, Feil H, Andersen GL, Zinder SH, Alvarez-Cohen L (2008) Comparative genomics of "*Dehalococcoides ethenogenes"* 195 and an enrichment culture containing unsequenced "*Dehalococcoides"* strains. ***Applied and Environmental Microbiology*** 74: 3490-3496
80. Johnson DR, Park J, Kukor JJ, Abriola LM (2006) Effect of carbon starvation on toluene degradation activity by toluene monooxygenase-expressing bacteria. ***Biodegradation*** 17: 437-445
81. Lee PKH, Johnson DR, Holmes VF, He J, Alvarez-Cohen L (2006) Reductive dehalogenase gene expression as a biomarker for physiological activity of *Dehalococcoides* spp. ***Applied and Environmental Microbiology*** 72: 6161-6168
82. Pecson BM, Barrios JA, Johnson DR, Nelson KL (2006) A real-time PCR method for quantifying viable *Ascaris* eggs using the first internally-transcribed spacer region of rRNA. ***Applied and Environmental Microbiology*** 72: 7864-7872
83. Johnson DR, Lee PKH, Holmes VF, Alvarez-Cohen L (2005) An internal reference technique for accurately quantifying specific mRNAs by real-time PCR with application to the *tceA* reductive dehalogenase gene. ***Applied and Environmental Microbiology*** 71: 3866-3871
84. Johnson DR, Lee PKH, Holmes VF, Fortin AC, Alvarez-Cohen L (2005) Transcriptional expression of the *tceA* gene in a *Dehalococcoides*-containing microbial enrichment. ***Applied and Environmental Microbiology*** 71: 7145-7151

INVITED ORAL PRESENTATIONS AND SEMINARS

1. (2027) Phage predation, pattern formation, and the spread of antibiotic resistance. *Recent Progress in Infection Biology, Biozentrum – The Center for Molecular Life Sciences, University of Basel, Basel, Switzerland*
2. (2027) Phage predation, pattern formation, and the spread of antibiotic resistance. *10th Swiss Microbial Ecology Meeting, Sion, Switzerland*
3. (2026) Spatial self-organization and the ecology and evolution of microbial systems. *Institute of Subtropical Agriculture, Chinese Academy of Sciences, Changsha, China*
4. (2026) Spatial self-organization and the ecology and evolution of microbial systems. *College of Ocean and Earth Sciences, Xiamen University, Xiamen, China*
5. (2026) Spatial self-organization and the ecology and evolution of microbial systems. *Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, China*

6. (2026) Causes and consequences of microbial spatial self-organization. *Department of Ecology and Complexity, Center of Advanced Studies of Blanes, Blanes, Spain*
7. (2026) Microbial spatial self-organization and the spread of antibiotic resistance. *Department of Civil and Environmental Engineering, Yonsei University, Seoul, Republic of Korea*
8. (2026) Microbial spatial self-organization and the spread of antibiotic resistance. *ENRICH Multiscale Imaging in Health and Disease, Paul Scherrer Institute, Villigen, Switzerland*
9. (2026) Microbial spatial self-organization and the spread of antibiotic resistance. *Behavior, Ecology, Environment and Evolution Seminar (BEES), University of Zürich, Zürich, Switzerland*
10. (2025) Phage predation, pattern formation, and the spread of antibiotic resistance. *Department of Infectious Diseases and Pathology, University of Bern, Bern, Switzerland*
11. (2025) Phage predation, pattern formation, and the spread of costly traits. *Microbial Communities: Energetics and Dynamics Across Space and Time, National Institute for Theory and Mathematics in Biology, Chicago, IL, USA*
12. (2025) Causes and consequences of microbial spatial self-organization. *LS^2 Swiss Systems Biology Symposium 2025, Bern, Switzerland*
13. (2025) Phage predation, pattern formation, and the spread of antibiotic resistance. *Department of Biology, University of Konstanz, Germany*
14. (2025) Drivers and consequences of spatial self-organization in microbial systems (Habilitation lecture). *Faculty of Science, University of Bern, Bern, Switzerland*
15. (2025) Bacterial-phage interactions as drivers of the spread of antibiotic resistance. *College of Resources and Environmental Sciences, Nanjing Agricultural University, Nanjing, China*
16. (2024) Phage predation, pattern formation, and the spread of antibiotic resistance. *Division of Environmental Engineering, Hokkaido University, Sapporo, Japan*
17. (2024) Phage predation, pattern formation, and the spread of antibiotic resistance. *Unit of Molecular Genetics, Genomics and Microbiology, University of Strasbourg, Strasbourg, France*
18. (2024) Phage predation, pattern formation, and the spread of antibiotic resistance. *Section for Microbial and Chemical Ecology, Technical University of Denmark, Lyngby, Denmark*
19. (2024) Pattern formation, phage predation, and the spread of antibiotic resistance. *Biocomplexity Seminar Series, Niels Bohr Institute, University of Copenhagen, Copenhagen, Denmark*
20. (2024) Pattern formation, phage predation, and the spread of antibiotic resistance. *Department of Microbiology and Molecular Medicine, University of Geneva, Geneva, Switzerland*
21. (2023) Pattern formation, phage predation, and the spread of antibiotic resistance. *Institute of Cell Biology, University of Bern, Bern, Switzerland*
22. (2023) The importance of space for the acquisition and spread of new microbial functions. *College of Resources and Environmental Sciences, Nanjing Agricultural University, Nanjing, China*
23. (2023) The importance of space for the acquisition and spread of new microbial functions. *Department of Soil and Water Sciences, China Agricultural University, Beijing, China*
24. (2023) The importance of space for the horizontal spread of new microbial functions. *Workshop on Biological Interactions and Spatial Dynamics: Linking Experiments and Theory, University of Neuchâtel, Neuchâtel, Switzerland*
25. (2023) How is microbial diversity maintained during range expansion (and why should we care)? *Department of Aquatic Ecology, Swiss Federal Institute of Aquatic Science and Technology (Eawag), Dübendorf, Switzerland*
26. (2022) Causes and consequences of microbial range expansion. *International Forum on Soil, Fertilizer, Crop and Environment (SFCE 2022), Northwest A&F University, Xianyang, China*
27. (2022) How is microbial diversity maintained during range expansion and why should we care? *Earth-Surface Ecosystems Sciences Lecture, China Agricultural University, Beijing, and Zhejiang University, Hangzhou, China*
28. (2022) Microbial spatial self-organization and the spread of plasmid-encoded functional novelty. *Microbial Communities: Current Approaches and Open Challenges. Isaac Newton Institute for Mathematical Sciences, Cambridge, England, UK*
29. (2022) Consequences of shoving, sliding, and swimming on microbial range expansion. *2022 Annual Assembly of the Swiss Society for Microbiology, Lausanne, Switzerland*
30. (2022) Consequences of small-scale hydrodynamics on microbial spatial self-organization and the spread of plasmid-encoded antibiotic resistance. *18th International Symposium on Microbial Ecology (ISME18), Lausanne, Switzerland*
31. (2022) Microbial spatial self-organization and the fate of plasmid-encoded antibiotic resistance. *Division of Theoretical Ecology and Evolution, Institute of Ecology and Evolution, University of Bern, Bern, Switzerland*
32. (2022) Causes and consequences of microbial spatial self-organization (and why we should care). *Center for Applied Geoscience, University of Tübingen, Tübingen, Germany*

33. (2022) How is microbial diversity maintained during range expansion (and why should we care)? *Institute of Ecology and Evolution, University of Bern, Bern, Switzerland*
34. (2021) Microbial range expansion and the spread of antibiotic resistance. *Department of Civil and Environmental Engineering, Cornell University, Ithaca, NY, USA*
35. (2021) Microbial spatial self-organization in a dynamic environment. *International Workshop on Understanding Soil Microbiome for Agricultural Sustainability, Peking University, Beijing, China*
36. (2020) Bifurcations and the creation of pattern diversity during microbial spatial self-organization. *Discussion Meeting on Conflict and Cooperation in Cellular Populations, National Centre for Biological Sciences, Bangalore, India*
37. (2019) Spatial chaos and the self-organization of microbial communities. *Department of Biosciences, University of Exeter, Penryn, England, UK*
38. (2019) Spatial chaos and the self-organization of microbial communities. *Evolution of Microbial Sociality Group, Department of Environmental Systems Science, Swiss Federal Institute of Technology, Zürich, Switzerland*
39. (2018) The ecological and evolutionary consequences of microbial range expansions. *Department of Biology, University of Fribourg, Fribourg, Switzerland*
40. (2018) Metabolic specialization and the causes of diversity in microbial ecosystems. *European Water Tech Week Leeuwarden 2018, Leeuwarden, Netherlands*
41. (2018) The ecological and evolutionary consequences of microbial range expansions. *Department of Microbiology and Molecular Medicine, University of Geneva, Geneva, Switzerland*
42. (2018) The ecological and evolutionary consequences of microbial range expansions. *Microbiology Society Annual Conference 2018, Birmingham, England, UK*
43. (2017) Is biodiversity important for the functional performance of engineered systems? *Bundesanstalt für Materialforchung und –prüfung, Berlin, Germany*
44. (2017) Is biodiversity important for the functional performance of engineered systems? *2017 ESA Annual Meeting, Portland, OR, USA*
45. (2017) Why does cross-feeding occur within microbial communities? *Scientific Spring Meeting KNVM & NVMM 2017, Arnhem, Netherlands*
46. (2016) Successive range expansions promote diversity in a microbial cross-feeding community. *Division of Population Genetics, Institute of Ecology and Evolution, University of Bern, Bern, Switzerland*
47. (2016) The causes and consequences of metabolic specialization. *Department of Microbiology and Immunology, University of Michigan, Ann Arbor, MI, USA*
48. (2016) The causes and consequences of metabolic specialization. *Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI, USA*
49. (2016) The causes and consequences of metabolic specialization. *Department of Civil and Environmental Engineering, University of Illinois, Urbana, Il, USA*
50. (2016) The causes and consequences of metabolic specialization. *Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, Cambridge, MA, USA*
51. (2016) The causes and consequences of metabolic specialization. *FAS Center for Systems Biology, Harvard University, Cambridge, MA, USA*
52. (2016) The causes and consequences of metabolic specialization. *Department of Aquatic Chemistry, Federal Institute of Hydrology, Koblenz, Germany*
53. (2016) The causes and consequences of metabolic specialization. *Department of Environmental Engineering, Technical University of Denmark, Lyngby, Denmark*
54. (2015) The causes and consequences of metabolic specialization. *6th Swiss Microbial Ecology Meeting, Ascona, Switzerland*
55. (2015) The evolution of spatial self-organization in expanding populations of microorganisms. *2015 Annual Assembly of the Swiss Society for Microbiology, Lugano, Switzerland*
56. (2014) The causes and consequences of metabolic specialization. *Infrastructure and Environment Division, University of Glasgow, Glasgow, Scotland, UK*
57. (2014) The causes and consequences of metabolic specialization. *Institute of Biology, University of Neuchâtel, Neuchâtel, Switzerland*
58. (2014) Why are there so many microbial species? *Environmental Biotechnology Group, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI, USA*
59. (2014) The causes and consequences of metabolic specialization. *Understanding Microbial Communities; Function, Structure and Dynamics. Isaac Newton Institute for Mathematical Sciences, Cambridge, England, UK*

60. (2014) When does metabolic specialization lead to more rapid substrate consumption? Roundtable discussion on Microbial Consortia for Controllable Outputs. *15th International Symposium on Microbial Ecology (ISME15), Seoul, Republic of Korea*
61. (2013) The causes and consequences of biodiversity in experimental populations of microorganisms. *Department of Fish Ecology, Swiss Federal Institute of Aquatic Science and Technology, Kastanienbaum, Switzerland*
62. (2013) Metabolic specialization and the causes of diversity in microbial ecosystems. *Department of Civil, Environmental, and Architectural Engineering, University of Colorado, Boulder, CO, USA*
63. (2013) Metabolic specialization and the causes of diversity in microbial ecosystems. *Department of Environmental Science and Engineering, Colorado School of Mines, Golden, CO, USA*
64. (2013) Metabolic specialization and the causes of diversity in microbial ecosystems. *School of Civil and Environmental Engineering, Yonsei University, Seoul, Republic of Korea*
65. (2013) Metabolic incompatibilities promote diversification in microbial populations. *Department of Aquatic Ecology, Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland*
66. (2012) Is diversity important for the functional performance of microbial communities? *Department of Environmental Microbiology, Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland*
67. (2011) Metabolic specialization and the assembly of microbial communities. *Workshop for the UM Biodegradation/Biocatalysis Database and Pathway Prediction System, Eawag, Dübendorf, Switzerland*
68. (2011) Predicting activity levels of functions from metatranscriptomics datasets. *Minisymposium in Metagenomics – A Joint Workshop with CUSO, University of Neuchâtel, Neuchâtel, Switzerland*
69. (2011) Cross-feeding and the assembly of microbial communities. *Joint Workshop of the Departments of Environmental Toxicology and Environmental Microbiology, Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland*
70. (2010) Why does cross-feeding occur within microbial communities? *Salmonella Pathogenesis Group, Institute of Microbiology, Swiss Federal Institute of Technology, Zürich, Switzerland*
71. (2009) Stressed out! A functional genomics approach for improving our understanding of bioremediation processes. *Swiss Federal Institute of Aquatic Science and Technology, Kastanienbaum, Switzerland*
72. (2009) Stressed out! A functional genomics approach for improving our understanding of bioremediation processes. *Department of Civil Engineering, University of Minnesota, Minneapolis, MN, USA*
73. (2009) Stressed out! A functional genomics approach for improving our understanding of bioremediation processes. *Department of Civil and Environmental Engineering, University of Iowa, Iowa City, IA, USA*
74. (2009) Toxicity of fungicides on freshwater microorganisms. *Swiss Federal Office for the Environment (FOEN/BAFU), Bern, Switzerland*
75. (2009) Stressed out! A functional genomics approach for improving our understanding of bioremediation processes. *Department of Environmental Microbiology, Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland*
76. (2008) A functional genomics approach to improve chlorinated organic bioremediation processes. *Department of Civil and Environmental Engineering, Northwestern University, Evanston, IL, USA*
77. (2007) A functional genomics approach to improve chlorinated organic bioremediation processes. *Joint Seminar to the Departments of Civil and Environmental Engineering and Biological Sciences, University of Southern California, Los Angeles, CA, USA*
78. (2007) Characterizing stress responses in *Dehalococcoides* bacteria to improve bioremediation processes. *Max Planck Institute for Terrestrial Microbiology, Marburg, Germany*
79. (2007) Characterizing stress responses in *Dehalococcoides* bacteria to improve bioremediation processes. *Department of Fundamental Microbiology, University of Lausanne, Lausanne, Switzerland*

PROJECT MANAGEMENT / RESEARCH GRANTS

2027-2030 Swiss National Science Foundation, Division 3 | *Consequences of phage predation on the diversity and evolution of antibiotic resistance-encoding plasmids* | Role: sole PI | Award: 730'958 CHF | To MCA group: 730'958 CHF

2024-2027 Korean-Swiss Science and Technology Program; Joint Research Project SNSF-NRF | *Incorporating µm-scale spatial organization into our systems-level understanding of the functioning and dynamics of microbial communities* | Role: co-PI | Award: 423'726 CHF | To MCA group: 227'738 CHF

2022-2026 Swiss National Science Foundation, Division 3 | *Spatial self-organization and the fate of plasmids during microbial range expansion* | Role: sole PI | Award: 568'368 CHF | To MCA group: 568'368 CHF

2022-2026 Swiss National Science Foundation, Sinergia | *Why do toxic cyanobacteria bloom? A gene to ecosystem approach* | Role: co-PI | Award: CHF 1'781'682 | To MCA group: 363'125 CHF
2022-2024 Eawag Discretionary Funds | *Elucidating the role of metabolite-mediated interactions on the diversity and productivity of phytoplankton communities* | Role: co-PI | Award: 234'034 CHF | To MCA group: 0 CHF
2020-2021 Eawag Discretionary Funds | *Microbial invasion demographics: A general chromosomal barcoding method to monitor invasive microbial populations* | Role: lead PI | Award: 121'572 CHF | To MCA group: 121'572 CHF
2018-2021 Swiss National Science Foundation, Division 3 | *The evolutionary and ecological consequences of microbial range expansions* | Role: sole PI | Award: 426'776 CHF | To MCA group: 426'776 CHF
2015-2018 SystemsX.ch Program of the Swiss National Science Foundation | *Design and systems biology of functional microbial landscapes (MicroScapesX.ch)* | Role: co-PI | Award: 2'530'587 CHF | To MCA group: 381'300 CHF
2014-2017 Swiss National Science Foundation, Division 3 | *Metabolic specialization and the causes of diversity in microbial ecosystems* | Role: sole PI | Award: 447'101 CHF | To MCA group: 447'101 CHF
2014-2017 Marie Curie Actions - Initial Training Network | *Microbial resource management and engineering in the urban water cycle (MERMAID)* | Role: co-PI | Award: 4'062'590 CHF | To MCA group: 330'332 CHF
2015-2016 Eawag Discretionary Funds | *Understanding resistance gene flow during passage of wastewater treatment (RESIST-Flow)* | Role: co-PI | Award: 170'687 CHF | To MCA group: 0 CHF
2013-2016 Swiss National Science Foundation, Interdisciplinary | *Can community transcription profiles be used to predict environmental biotransformation of organic contaminants?* | Role: co-PI | Award: 265'116 CHF | To MCA group: 0 CHF
2013-2014 Eawag Discretionary Funds | *The evolution and stabilization of mutualistic interactions in microbial ecosystems* | Role: lead PI | Award: 127'578 CHF | To MCA group: 127'578 CHF
2011-2014 Swiss National Science Foundation, Division 3 | *Cross-feeding and the maintenance of diversity in microbial ecosystems* | Role: sole PI | Award: 288'000 CHF | To MCA group: 288'000 CHF
2012-2013 Korean-Swiss Science and Technology Cooperation | *Predicting the biotransformation capacities of microbial communities from their taxonomic composition* | Role: lead PI | Award: 33'000 CHF | To MCA group: 33'000 CHF
2011-2013 SystemsX.ch Program of the Swiss National Science Foundation | *Predicting the metabolic profile of cells from the topology of the universal metabolic network* | Role: lead PI | Award: 116'000 CHF | To MCA group: 116'000 CHF
2010-2011 Eawag Discretionary Funds | *Can the biotransformation capacities of microbial communities be predicted?* | Role: co-PI | Award: 122'820 CHF | To MCA group: 0 CHF

REVIEWING (*ad hoc*)

Scientific Journals

Too many to list, but includes *Science, Nature*, *Nature Microbiology, Nature Ecology & Evolution, Nature Communications, Proceedings of the National Academy of Sciences USA* and *The ISME Journal.*

Grant Proposals

Swiss National Science Foundation (SNSF), ETH Zürich Research Commission, Graduate Women in Science (GWIS), Human Frontier Science Program (HFSP), The Welcome Trust, Austrian Science Fund (FWF), British Research Council (EPSRC), Dutch Research Council (NWO), French National Agency for Research (ANR), German Research Foundation (DFG), Israeli Science Foundation (ISF)

CONFERENCE ORGANIZING

1. Member of the organizing committee for the Satellite Symposium of the Annual Assembly of the Swiss Society for Microbiology, Montreux, Switzerland (2026)
2. Member of the organizing committee for the 9th Swiss Microbial Ecology Meeting, Zürich, Switzerland (2025)
3. Panel member of the roundtable discussion entitled "Synthetic Microbial Ecology for Theory Testing and Applications" at the 19th International Symposium on Microbial Ecology (ISME15), Cape Town, South Africa (2024)
4. Member of the organizing committee for the Annual Assembly of the Swiss Society for Microbiology, Bern, Switzerland (2024)
5. Session organizer of the session entitled "What Mechanisms Drive Toxic Algal Blooms?" at the ASLO Aquatic Sciences Meeting 2023, Palma de Mallorca, Spain (2023)
6. Member of the local organizing committee for the 18th International Symposium on Microbial Ecology (ISME18), Lausanne, Switzerland (2022)

7. President of the organizing committee for the Annual Assembly of the Swiss Society for Microbiology, Virtual (2021)
8. Member of the scientific committee for the 11th International Conference on Environmental Engineering and Management, Muttenz, Switzerland (2021)
9. Member of the organizing committee for the Annual Assembly of the Swiss Society for Microbiology, Zürich, Switzerland (2019)
10. Member of the organizing committee for the Annual Assembly of the Swiss Society for Microbiology, Lausanne, Switzerland (2018)
11. Panel member of the roundtable discussion entitled "Microbial Consortia for Controllable Outputs" at the 15th International Symposium on Microbial Ecology (ISME15), Seoul, Republic of Korea (2016)
12. Member of the organizing committee for the 6th Swiss Microbial Ecology Meeting, Ascona, Switzerland (2015)
13. Member of the organizing committee for the 5th Swiss Microbial Ecology Meeting, Neuchâtel, Switzerland (2013)

SUPERVISION

Postdoctoral researchers

Dr. Kohei Takahashi | Role: lead supervisor	2026-present
Dr. Tess E. Brewer | Role: lead supervisor	2025-present
Dr. Ana-Hermina Ghenu | Role: secondary supervisor | Subsequent position: Postdoc at Univ Ljubljana, Slovenia	2024-2026
Dr. Chujin Ruan | Role: lead supervisor | Subsequent position: Asst Prof. at Xiamen Univ., China	2022-2026
Dr. Sema Karakurt-Fischer | Role: lead supervisor | Subsequent position: Postdoc at Eawag, Switzerland	2022-2024
Dr. Josep Ramoneda | Role: lead supervisor | Subsequent position: Postdoc at Univ. Colorado, USA	2020-2022
Dr. Jan Dolinšek | Role: lead supervisor | Subsequent position: Kompetenzzentrum Holz, Austria	2015-2018
Dr. Feng Ju | Role: co-supervisor | Subsequent position: Assist. Prof. at Westlake Univ., China	2015-2018
Dr. Yujie Men | Role: co-supervisor | Subsequent position: Assist. Prof. at Univ. Illinois, USA	2014-2015
Dr. Marie Marchal | Role: lead supervisor	2012-2014
Dr. George F. Wells | Role: co-supervisor | Subsequent position: Assist. Prof. at Northwestern Univ., USA	2011-2013
Dr. Damian E. Helbing | Role: co-supervisor | Subsequent position: Assist. Prof. at Cornell Univ., USA	2010-2011

Doctoral students

Anna Sassara | tbd | Role: lead supervisor	2026-present
Basil Vogelsanger | ETHZ, Switzerland | Role: secondary supervisor	2025-present
Xiaoqing Zhang | University of Bern, Switzerland | Role: lead supervisor	2025-present
Thu Trang Nguyen | University of Bern, Switzerland | Role: lead supervisor	2025-present
Deepthi P. Vinod | ETHZ, Switzerland | Role: lead supervisor	2022-present
Dr. Agustina Ziliani | ETHZ, Switzerland | Role: lead supervisor	2022-2026
Dr. Yinyin Ma | ETHZ, Switzerland | Role: lead supervisor | Subsequent position : Digit Soil, Switzerland	2018-2022
Dr. Davide Ciccarese | ETHZ, Switzerland | Role: lead supervisor | Subsequent position: Postdoc. at MIT, USA	2016-2020
Dr. Deborah Patsch | ETHZ, Switzerland | Role: co-supervisor | Subsequent position: Microsynth AG, Switzerland	2014-2017
Dr. Felix Goldschmidt | ETHZ, Switzerland | Role: lead supervisor | Subsequent position: Janssen Schweiz, Switzerland	2011-2015
Dr. Elin E. Lilja | ETHZ, Switzerland | Role: lead supervisor | Subsequent position: Postdoc. at Univ. Edinburgh, UK	2011-2015

M.Sc. and B.Sc. students

Ronja Flück (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2025-2026
Helena Moser (B.Sc.) | University of Bern, Switzerland | Role: lead supervisor	2024-2025
Sahil Oza (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2024-2025
Janis Steiner (B.Sc.) | University of Bern, Switzerland | Role: lead supervisor	2024
Jelena Bitterli (B.Sc.) | University of Bern, Switzerland | Role: lead supervisor	2024
Anna Sassara (B.Sc.) | University of Bern, Switzerland | Role: lead supervisor	2023
Gaétane Sallard (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2022-2023
Philipp Tandler (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2021-2023
Deepthi P. Vinod (M.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2020-2022

Ella Flükiger (B.Sc.) | University of Applied Sciences and Arts NW, Switzerland | Role: lead supervisor	2021
Julian Schmidt (B.Sc.) | University of Applied Forest Sciences, Germany | Role: lead supervisor	2021
Zi Shan Kow (B.Sc.) | Nanyang Technological University, Singapore | Role: lead supervisor	2019-2020
Leon Nissen (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2019
Valeria Merlo (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2018-2019
Florian Rothenbühler (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2018
Anita Zuidema (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2017-2018
Claudia Keller (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2013
Samuel Bickel (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2013
Johanna Otto (M.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2012-2013
Sofia van Moorsel (M.Sc.) | University of Zürich, Switzerland | Role: lead supervisor	2012-2013
Benedict Borer (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2011-2012
Anja Bernet (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2010-2011
Selina Müller (B.Sc.) | ETHZ, Switzerland | Role: lead supervisor	2010

Scientific research staff

Sarah Daker | Role: lead supervisor	2025-present
Lea Caduff | Role: co-lead supervisor	2015-2025
Severin Stierli | Role: lead supervisor	2021-2022
Teresa Colangelo Failla | Role: lead supervisor	2012-2022
Oliver Roos | Role: lead supervisor	2013-2014
Lara Pfister | Role: lead supervisor	2010-2011

Visiting Doctoral students

Jing Wu | University of Science and Technology of China, China | Role: main host	2025-2026
Dr. Miao Han | China Agricultural University, China | Role: main host | Subsequent position: Postdoc at the University of Konstanz, Germany	2024-2025
Dr. Mireia Coronado | University of Copenhagen, Denmark | Role: main host	2024
Dr. Soo Bin Kim | Yonsei University, Republic of Korea | Role: main host | Subsequent position: Postdoc at Yonsei University, Republic of Korea	2023
Dr. Eun Sun Lyou | Yonsei University, Republic of Korea | Role: main host | Subsequent position: Postdoc at Yonsei University, Republic of Korea	2023
Dr. Kohei Takahashi | Tsukuba University, Japan | Role: main host | Subsequent position: Postdoc at Hokkaido University, Japan	2022-2023
Dr. Chujin Ruan | China Agricultural University, China | Role: main host | Subsequent position: Postdoc at Eawag, Switzerland	2021-2022
Dr. Tae Kwon Lee | Yonsei University, Republic of Korea | Role: main host | Subsequent position: Postdoc at the University of Vienna, Austria	2012

Visiting scientists / faculty

Dr. Miao Han | University of Konstanz, Germany | Role: main host	2026
Prof. Dr. Joonhong Park | Yonsei University, Republic of Korea | Role: main host	2026
Ciaran Cole | Fullbright Fellow / Swiss Government Excellence Scholar | Role: main host	2025-2026
Prof. Dr. Dan Xiao | Institute of Subtropical Agriculture, Chinese Acad Sciences, China | Role: main host	2025-2026
Prof. Dr. Ming-Ming Chen | Nanjing Agricultural University, China | Role: main host	2024
Prof. Dr. Ramesh Goel | University of Utah, USA | Role: main host	2023
Prof. Dr. Say Kee Ong | Iowa State University, USA | Role: main host	2020
Dr. Eva Figuerola | National Scientific and Technical Research Council, Argentina | Role: main host	2018-2019
Dr. Brian Rahm | Cornell University, USA | Role: main host	2017
Prof. Dr. Ramesh Goel | University of Utah, USA | Role: secondary host	2014
Prof. Dr. Ruth E. Richardson | Cornell University, USA | Role: main host	2010