



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

SCHOOL OF LIFE SCIENCES
Global Health Institute
Laboratory of Molecular Microbiology

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CURRICULUM VITAE

Melanie Blokesch



PROFESSIONAL EXPERIENCE AND EDUCATION

- June 2016-** **Associate Professor** (tenured), Global Health Institute, School of Life Sciences, Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland
- 2009-2016** **Tenure-track Assistant Professor**, Global Health Institute, School of Life Sciences, Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland
- 2005-2009** **Postdoctoral Fellow**, Division of Infectious Diseases and Geographic Medicine, Department of Microbiology & Immunology, Stanford University, CA, USA
Mentor: Prof. Dr. Gary Schoolnik
- 2000-2004** **PhD in Biology (doctoral degree/Dr. rer. nat.)**; *summa cum laude*; with highest distinction
Department Biology I, Microbiology, Ludwig-Maximilians-University, Munich, Germany
Thesis advisor: Prof. Dr. Dr. h.c. August Böck
Doctoral thesis title: [NiFe]-Hydrogenases of *Escherichia coli*: Functions of Proteins involved in Metal Center Assembly.
- 1995-2000** **Diploma in Biology**, Microbiology (major), Genetics, Medical Microbiology, Immunology (minors), Ludwig-Maximilians-University, Munich, Germany; Diploma thesis at the Institute of Genetics and Microbiology

AWARDS, HONORS, AND NAMED LECTURESHIPS

- 2017** **Howard Hughes Medical Institute (HHMI)** International Research Scholarship (2017-2022)
- 2015** **Research Award**, Association for General and Applied Microbiology (VAAM), Germany
The Research Award is an annual prize awarded to young group leaders for outstanding research in the field of microbiology. This was the first time that a researcher working outside of Germany has been granted the award.
- 2015** **EPFL teaching award “Polysphère”** by the student association AGEPoly for best teacher in the School of Life Sciences
- 2015** **The Emmanuelle Caron lecture** at Imperial College London, UK (May 2015)
- 2015** **Best oral presentation award**, BacNet 2015 in San Feliu de Guixols, Spain

- 2012** **Teaching award**, teaching section School of Life Sciences, EPFL (best teaching evaluation for three consecutive years, 2010-2012).
- 2007** Nominated by the German Research foundation (DFG) for participation in the 57th Meeting of Nobel Laureates in Lindau, Germany.
- 2005** **Leopoldina Prize for Junior Scientists**, German National Academy of Sciences Leopoldina
The German National Academy of Sciences Leopoldina is one of the oldest academies of science worldwide. The prize for junior scientists is awarded every two years to researchers under the age of 30 “who have produced exceptional scientific work in one of the fields represented by the Leopoldina”.
- 2005** **Thesis Award**, Association for General and Applied Microbiology (VAAM), Germany

GRANTS AND FELLOWSHIPS

- 2018-2023** **ERC Consolidator Grant** awarded by the **European Research Council** (“CholeraIndex”)
- 2017-2021** **Research grant by the Swiss National Science Foundation** in the framework of the National Research Program *Antimicrobial Resistance* (NRP 72; 407240_167061; single PI)
- 2016-2018** **Swiss National Science Foundation individual grant** (31003A_162551)
- 2015-2016** **Swiss National Science Foundation equipment grant** for a High Frequency Mass Spectrometer for Advanced Proteomics Analysis (316030_164075; co-applicant)
- 2015-2016** **Swiss National Science Foundation equipment grant** for a Multicolour 3D STED Microscope extension (316030_164106; co-applicant)
- 2014-2015** **Swiss National Science Foundation equipment grant** for a Serial Block Face Scanning Electron Microscope (316030_157883; co-applicant)
- 2013-2018** **ERC Starting Grant** awarded by the **European Research Council** (“VIR4ENV”)
- 2013-2015** **Swiss National Science Foundation individual grant** (31003A_143356)
- 2013** **Invited Speaker Meeting Grant**, GMM4, Federation of European Microbiological Societies (FEMS)
- 2012-2013** **Research grant**, Novartis Foundation for Medical and Biological Research
- 2012** **Seed money**, EPFL Cooperation & Development Center
- 2010-2012** **Swiss National Science Foundation individual grant** (31003A_127029)
- 2007-2008** **Dean's Fellowship Award**, Stanford University School of Medicine, Stanford, CA, USA
- 2005-2007** **Research Fellowship**, German Research Foundation (DFG)
- 2004** **Student Travel Grant**, ASM 104th General Meeting in New Orleans, USA

EDITORIAL BOARDS AND REVIEWING

- 2017-** Editorial Board *PLoS Genetics*
- 2017-** Features Editor *Molecular Microbiology*
- 2017-2019** Editorial Board *PLoS Biology*
- 2016-** Editorial Board *Current Opinion in Microbiology*
- 2015-2016** Senior Editor *mSphere* (resigned by the end of 2016)
- 2014-2015** Editor *Scientific Reports*
- 2013-** Editor *Microbes & Infection*
- 2014-** Member of the Editorial Board of *PeerJ*
- 2013** Associate Editor *BMC Microbiology* (resigned by the end of 2013)
- 2011-2015** Member of the Editorial Board of *Applied and Environmental Microbiology*

- Ad hoc reviewer for *Nat. Rev. Microbiol.*, *EMBO J.*, *Cell Host & Microbe*, *PLoS Genet.*, *Trends Ecol. Evol.*, *Chemical Science*, *Mol. Microbiol.*, *J. Bacteriol.*, *Environ. Microbiol.*, *Infect. Immun.*, *Vaccine*, *Appl. Environ. Microbiol.*, *BMC Microbiol.*, *Cell. Microbiol.*, *PLoS One*, *Arch. Microbiol.*, *FEBS Lett.*, *Res. Microbiol.*, *Sensors*, *Water Res.*, *PLoS Negl. Trop. Dis.*, *FEMS Microbiol. Lett.*, *Microbiology*, *FEBS*

J., J. Clin. Microbiol., ISME J., Curr. Opin. Microbiol., and PLoS Pathog., mBio, Cell Rep., and Proc. Natl. Acad. Sci. USA, Nat. Microbiol., eLife, and Nature.

- Ad hoc reviewer for the following funding agencies and foundations: *Swiss National Science Foundation (SNSF, Switzerland), French Research Agency (ANR, France), the Austrian Science Fund (FWF), the Wellcome Trust (UK), Research Council of the Université catholique de Louvain (Belgium) and the Gebert Rüf Foundation (Switzerland).*
- Grant panel member *French Research Agency (ANR); 2016 & 2017.*
- Independent peer reviewer of the Alexander von Humboldt Foundation, Germany (since 2017)

CONFERENCES AND WORKSHOPS (SELECTION)

Oral presentations:

2017

- *Cold Spring Harbor meeting on Microbial Pathogenesis and Host Response* in Cold Spring Harbor, USA (**invited speaker; September 2017**)
- *Annual Meeting of the Italian Society of Microbiology* in Genoa, Italy (**invited speaker; September 2017**)
- *Molecular Genetics of Bacteria and Phages Meeting* at University of Wisconsin, Madison, USA (**invited speaker; August 2017**)
- *Gordon Research Conference on Microbial Adhesion and Signal Transduction* in Newport, USA (**invited speaker; July 2017**)
- *FEMS 2017 – 7th Congress of European Microbiologists* in Valencia, Spain (**invited speaker; July 2017**)
- *ETOX18-European Workshop on Bacterial Protein Toxins* in Paris, France (**invitation declined; scheduling conflicts; June 2017**)
- *New Approaches and Concepts in Microbiology, EMBO/EMBL Symposium* in Heidelberg, Germany (**invited speaker; June 2017**)
- *Microbiology Society Annual Meeting* in Edinburgh, UK (**invited speaker; April 2017**)
- *ASM conference on Mechanisms of Interbacterial Cooperation and Competition* in Washington, DC, US (**invited speaker; March 2017**)

2016

- *EMBO conference on Bacterial morphogenesis, survival and virulence: Regulation in 4D* in Kerala, India (**invited speaker; November 2016; health-related last minute cancellation**)
- *Zing Conference on Protein Secretion in Bacteria* in Tampa, FL, USA (November 2016; health-related last minute cancellation)
- *Annual conference of the Austrian Association of Molecular Life Sciences and Biotechnology* in Graz, Austria (**invitation declined; scheduling conflicts; September 2016**)
- *10th Swiss Biosafety Meeting* in Lausanne, Switzerland (**invited speaker; August 2016**)
- *Gordon Research Conference on Microbial Toxins and Pathogenicity* in Waterville Valley Resort (VT), USA (**invited speaker; July 2016**)
- *Gordon Research Conference on Bacterial Cell Surfaces* in Mount Snow, West Dover (VT), USA (**invited speaker; June 2016**)
- *Young Microbiologists Symposium 2016* in Dundee, UK (**invitation declined; scheduling conflicts; June 2016**)
- *Microbe 2016 - American Society for Microbiology General Meeting & ICAAC* in Boston, USA (**invited speaker; June 2016**)
- *Symposium Communication among complex microbial populations, Collège de France* in Paris, France (**invited keynote speaker; May 2016**)
- *VIBRIO 2016 – 6th international conference on the Biology of Vibrios* in Roscoff, France (**invited speaker; April 2016**)

- *Colloque Charles Nicolle* at the General Meeting of the French Society for Microbiology (SFM) in Paris, France (**invited speaker for keynote presentation**; March 2016)
- *Annual Conference of the Association for General and Applied Microbiology (VAAM)* in Jena, Germany (March 2016)
- *Careers of women and men in Science* at the LS2 Annual Meeting 2016, in Lausanne, Switzerland (invited discussion leader; February 2016)

2015

- *Women in Science Session at New Approaches and Concepts in Microbiology*, EMBO/EMBL Symposium in Heidelberg, Germany (**invited panel member**; October 2015)
- *New Approaches and Concepts in Microbiology*, EMBO/EMBL Symposium in Heidelberg, Germany (October 2015)
- *SYNMArburg Symposium* in Marburg, Germany (**invited speaker**; September 2015)
- *Life Sciences Symposium 2015* in Lausanne, Switzerland (**invited speaker**; September 2015)
- *Top gear in science* meeting by the Norwegian Academy of Science and Letters, Oslo, Norway (**invited speaker**)
- *Infection & Immunity Forum* at the *Foundation Jeantet* in Geneva, Switzerland (**invited speaker**; June 2015)
- *FEMS 2015 – 6th Congress of European Microbiologists* in Maastricht, Netherlands (**invited speaker**; June 2015)
- Annual meeting of the Swiss Society for Microbiology in Lugano, Switzerland (May 2015)
- *Bacterial Networks (BacNet15; ESF-EMBO Symposium)* in San Feliu de Guixols, Spain (May 2015)
- @ASM Conference on *Mechanisms of Interbacterial Cooperation and Competition* in Washington, DC, USA (50 participants selected; March 2015)
- Workshop *Emergence of pathogens in natural Vibrio populations: ecology, evolution and pathogenesis* in Paris, France (**invited speaker**; March 2015)
- *Annual Conference of the Association for General and Applied Microbiology (VAAM)* in Marburg, Germany (**invited speaker**; March 2015)
- *Nestlé Institute of Health Sciences–EPFL Science Day* at EPFL, Lausanne, Switzerland (**invited speaker**; February 2015)

2014

- *Seed Money Program conference*, organized by the Cooperation & Development Center (EPFL) in Lausanne, Switzerland (**invited speaker**; October 2014)
- *3rd International Congress of the Molecular Biology Association of Turkey* in Izmir, Turkey (**invited speaker**; September)
- *Microbiology after the genomics revolution: Genomes 2014* in Paris, France (June 2014)
- Annual meeting of the Swiss Society for Microbiology in Fribourg, Switzerland (June 2014)
- *VIBRIO 2014 – 5th international conference on the Biology of Vibrios* in Edinburgh, UK (**invited speaker**; April 2014)
- Annual Meeting of the *Royal Dutch Society for Microbiology (KNVM)* and the *Dutch Society for Medical Microbiology (NVMM)*, Arnhem, Netherlands (**invited speaker**; April 2014)
- Annual Meeting of *Life Sciences Switzerland (LS²)* in Lausanne, Switzerland (February 2014)

2013

- *Gordon Research Conference on Microbial Adhesion and Signal Transduction* in Newport, USA (**invited speaker**; July 2013)
- *American Society for Microbiology 113th General Meeting (ASM 2013)*, plenary session, in Denver, USA (**invited plenary speaker**; May 2013)
- *Fourth Genome Maintenance Meeting (GMM4)* in Oslo, Norway (**invited speaker**; April 2013)
- *Bacterial Networks (BacNet13; ESF-EMBO Symposium)* in Pultusk, Poland (March 2013)

2012

- ISME – 14th *International Symposium on Microbial Ecology* in Copenhagen, Denmark (August 2012)
- Joint Annual meeting of the Swiss Society for Infectious Diseases, the Swiss Society for Hospital Hygiene, the Swiss Society for Microbiology and the Swiss Society of Tropical Medicine and Parasitology in St. Gallen, Switzerland (**invited speaker**; June 2012)

2011

- *VIBRIO 2011 – 4th international conference on the Biology of Vibrios in Santiago de Compostela, Spain* (November 2011)
- *FEMS 2011 – 4th Congress of European Microbiologists* in Geneva, Switzerland (poster discussion group presentation; June 2011)
- *Molecular Microbiology Meeting 2011* in Würzburg, Germany (May 2011)

2009

- 5th ASM Conference on *Biofilms* in Cancun, Mexico (**invited speaker**; November 2009)
- *VIBRIO 2009 - 3rd international conference on the Biology of Vibrios* in Rio de Janeiro, Brazil (November 2009)

2002-2008

- *Annual Conference of the Association for General and Applied Microbiology (VAAM)* in Frankfurt, Germany (March 2008)
- *Genomes, Medicine, and the Environment 2007* in San Diego, USA (**invited speaker**; October 2007)
- *8th International Hydrogenase Conference* in Breckenridge, USA (**invited speaker**; August 2007; declined)
- *EMBO Conference on Molecular Microbiology* in Heidelberg, Germany (August 2006)
- *Annual Conference of the Association for General and Applied Microbiology (VAAM)* in Göttingen, Germany (**invited speaker, thesis award**; October 2005)
- *7th International Hydrogenase Conference* in Reading, UK (**invited speaker**; August 2004)
- Meeting of COST Action 841 in Mülheim, Germany (**invited speaker**; September 2003)
- *Gordon Research Conference Molecular Basis of Microbial One-Carbon Metabolism* in New London, CT, USA (**invited substitute for Prof. Dr. A. Böck**; July 2002)

Invited session chair:

- *Molecular Genetics of Bacteria and Phages Meeting* at University of Wisconsin, Madison, USA (August 2017)
- Session *Cooperation and Competition Inside the Host*; ASM conference on *Mechanisms of Interbacterial Cooperation and Competition* in Washington, DC, US
- Session *Evolution and genome plasticity*; *FEMS 2017 – 7th Congress of European Microbiologists* in Valencia, Spain (July 2017; co-organizer of session)
- *Infection & Immunity Forum* at the *Foundation Jeantet* in Geneva, Switzerland (June 2016)
- Session *Sucking It up and Squirting It out - Novel Findings in Bacterial Secretion Systems*; *Microbe 2016 (American Society for Microbiology General Meeting & ICAAC)*, in Boston, USA (June 2016; organizer of session)
- *Annual Conference of the Association for General and Applied Microbiology (VAAM)* in Jena, Germany (March 2016)
- Session *General motors*; ASM General Meeting in New Orleans, US (June 2015; organizer of session)

INVITED PRESENTATIONS

2017

- *Institute of Microbiology*, ETH Zurich, Switzerland (November 2017)
- *Strathclyde Institute of Pharmacy and Biomedical Sciences*, University of Strathclyde, Glasgow, UK (October 2017)
- *Laboratoire de Microbiologie et Génétique Moléculaires UMR 5100*, Université Paul Sabatier, Toulouse, France (April 2017)
- *SV in extenso*, School of Life Sciences Research Day 2017, EPFL, Switzerland (March 2017)
- *Centre of Excellence in Bacteriology* of the University of Geneva (CEBUG), Geneva, Switzerland (January 2017)

2016

- Presentation preceding the 2016 Annual Balzan Lecture, Lausanne, Switzerland (December 2016)
- *Institut für Microbiologie*, Ludwig-Maximilians-University, Munich, Germany (November 2016)
- *Friedrich Schiller University*, Jena, Germany (November 2016)
- *Ruhr-University* Bochum, Germany (October 2016)

2015

- *Institute of Cell Biology*, University of Bern, Switzerland (December 2015)
- *School of Biosciences*, University of Birmingham, UK (November 2015)
- *Institute for Molecular Infection Biology*, University of Würzburg, Germany (November 2015)
- *College of Life Sciences*, University of Dundee, UK (September 2015)
- *Hannover Medical School*, Hannover, Germany (July 2015)
- *Max Planck Institute for Marine Microbiology* in Bremen, Germany (July 2015)
- *Max Planck Institute for Terrestrial Microbiology* in Marburg, Germany (May 2015)

2014

- *Institut de Microbiologie de la Méditerranée*, CNRS, Marseille, France (November 2014)
- University of Montpellier (CNRS), Montpellier, France (July 2014)
- Lecturer, summerschool *Microbes, Host and Infection* at Tübingen University, Germany (July 2014)
- Lecturer, *Cold Spring Harbor Laboratory Course on Advanced Bacterial Genetics*, Cold Spring Harbor, NY, USA (June 2014)
- *Institute for Cell and Molecular Biosciences* at Newcastle University, UK (February 2014)
- *Institute of Medical Microbiology* at the University of Zurich, Switzerland (February 2014)

2013

- *Max Planck Institute for Terrestrial Microbiology* in Marburg, Germany (November 2013)
- Lecturer, PhD course *Infection, Inflammation, and Immunity*, University of Tromsø, Norway (June 2013)
- *CNRS unit UMR5240*, Lyon, France (May 2013)
- *Biozentrum*, Basel, Switzerland (February 2013)
- *Max von Pettenkofer-Institut*, Ludwig-Maximilians-University, Munich, Germany (February 2013)

2006-2012

- *Institute Pasteur*, Paris, France (April 2012)
- *Centre de Genetique Moleculaire*, Gif-sur-Yvette, France (April 2012)
- *Institut de Microbiologie de la Méditerranée*, CNRS, Marseille, France (May 2011)
- *Swiss Federal Institute of Aquatic Science and Technology (Eawag)*, Dübendorf, Switzerland (April 2011)
- *Department of Fundamental Microbiology at the University of Lausanne*, Switzerland (March 2010)
- *Institute of Microbiology*, ETH Zürich, Switzerland (December 2009)
- *Département de microbiologie et médecine moléculaire*, CMU, Geneva, Switzerland (November 2009)
- *Helmholtz Centre for Infection Research* in Braunschweig, Germany (May 2008)

- *School of Life Sciences, Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland (May 2008)*
- *Max Planck Institute for Terrestrial Microbiology in Marburg, Germany (March 2008)*
- *Scripps Institution of Oceanography, San Diego, CA, USA (January 2008)*
- *University of California, San Diego, CA, USA (January 2008)*
- *Division of Infectious Diseases & Geographic Medicine Annual Retreat, Stanford, USA (May 2007)*
- *Department of Microbiology & Immunology Annual Retreat, Stanford, USA (April 2006)*

TEACHING AND TRAINING

2017

- *Infection Biology (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL (ongoing)*
- *Protein localization in bacteria (1 ECTS credit; doctoral course), EPFL*

2016

- *Infection Biology (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL*

2015

- *Infection Biology (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL*
- *Protein localization in bacteria (1 ECTS credit; doctoral course), EPFL*
- *Participation to Landmark Papers in Cancer and Infection (doctoral course), EPFL*

2014

- *Workshop Microbes and viruses in water: the good, the bad and the innocuous (1 ECTS credit; doctoral course for the CUSO Doctoral Program in Microbial Sciences), EPFL; Co-organized by Prof. Rizlan Bernier-Latmani and Prof. Tamar Kohn (both from Environmental Engineering / EPFL)*
- *Infection Biology (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL*
- *Protein localization in bacteria (1 ECTS credit; doctoral course), EPFL*
- *Participation to Landmark Papers in Cancer and Infection (doctoral course), EPFL*

2013

- *Bio-Design for the real world (contributing teacher; Bachelor level), EPFL*
- *Infection Biology (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL*
- *Protein localization in bacteria (1 ECTS credit; doctoral course), EPFL*

2012

- *Responses of bacteria to environmental signals (1 ECTS credit; doctoral course; jointly taught with Prof. J. Collier & Prof. K. Lapouge), University of Lausanne (UNIL)*
- *Infection Biology (5 ECTS credits, Master level; 5h/week, 14 weeks), EPFL*
- *Project in biomedical technologies (8 ECTS credits, Master level (minor), 1 student), EPFL*
- *Super-resolution microscopy of bacteria (1 ECTS credit; doctoral course; jointly taught with Prof. S. Manley, Biophysics), EPFL*
- *Participation to Landmark Papers in Cancer and Infection (doctoral course), EPFL*

2011

- *Infection Biology (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL*
- *Responses of bacteria to environmental signals (1 ECTS credit; doctoral course; jointly taught with Prof. J. Collier & Prof. K. Lapouge), University of Lausanne (UNIL)*
- *Participation to Landmark Papers in Cancer and Infection (doctoral course), EPFL*

2010

- *Biotechnology Laboratory I (4 ECTS credits, Bachelor level; 4h/week, 14 weeks), EPFL*

2008

- Supervision of Bachelor project, Stanford University, USA

2000-2003

- Teaching associate; Ludwig-Maximilians-Universität, Munich, Germany
- Supervision of Diploma Thesis projects, Ludwig-Maximilians-Universität, Munich, Germany

EPFL internal and external supervision (2009 until now)

- **6 postdocs** (J. Kühn, C. Van der Henst, L. Metzger, M. Jaskólska, D. Adams, I. Mateus)
- **6 PhD students** (G. Suckow, M. Lo Scudato, P. Seitz, N. Matthey, N. Drebes Dörr, N. Vesel)
- **15 undergraduate students** (Bachelor students, Master students, Summer research students, internships)
- **5 technical assistants** (2 technical assistant trainees)

COMMITTEES AND CONFERENCE ORGANIZATION

- 2017-2018: Scientific Committee Swiss Society for Microbiology (SSM) Annual Meeting 2018
- 2017: Thesis committee (external expert), CNRS & Paul Sabatier, Toulouse, France (April 2017)
- Since 2017: Co-Director, Doctoral Program in Molecular Life Sciences (EDMS), EPFL Lausanne
- 2016: Faculty selection committee *Serra Hünter Programme*, Catalonia, Spain
- 2016: Hiring committee *Department of Fundamental Microbiology at the University of Lausanne*, Switzerland
- 2016: Thesis committee (external expert/opponent), The Arctic University of Norway, Tromsø, Norway (April 2016)
- 2016: Thesis committee (external expert), University of Neuchâtel, Switzerland (April 2016)
- Since 2015: Committee member, Doctoral Program in Molecular Life Sciences (EDMS), EPFL Lausanne
- 2016: Member Audit Task Force, School of Life Science, EPFL Lausanne, Switzerland
- 2015: Thesis committee (external expert), CNRS & Aix-Marseille Université, Marseille, France
- 2015: Thesis committee (external expert), University of Lausanne, Lausanne, Switzerland
- 2014-2016: Faculty Council, School of Life Science, EPFL Lausanne
- 2014: Thesis committee (external expert), Newcastle University, UK
- 2009-2014: Committee member *International Summer Research Program* (SRP), EPFL
- 2013: Thesis committee (external expert), Institute Pasteur, Paris, France
- 2012: Co-organizer (with Prof. P. Linder, CMU, Geneva) of the *Swiss Molecular Microbiology Meeting*
- 2010-2011: Program Director (shared) *International Summer Research Program* (SRP), EPFL
- 2010-2012: Representing the School of Life Sciences in the ACAD group (working group between faculty and administrative members of EPFL).
- 2009-2016: Scientific board and local steering committee *Doctoral Program in Microbial Sciences*; overreaching program for the western part of Switzerland (CUSO-sponsored)
- 2012: Scientific organizer of the first Global Health Institute retreat in Villars.

MEMBERSHIPS

- Member of AcademiaNet (nominated by the European Research Council, ERC)
- Member of the *ETH Women Professors Forum* (ETH-WPF)
- Member of the *Association des Professeures de l'École Polytechnique Fédérale de Lausanne* (APEL)
- Member/Friend of the Women in Science and Humanities Foundation (EPFL-WISH)
- Member of Deutscher Hochschulverband (DHV; German Association of University Professors and Lecturers)
- Member of VibrioNet Europe (<http://www.vibrionet.de/institutes/index.html>)
- Member of diverse Microbiology societies: **ASM** (USA), **ISME** (international), **SSM** (Switzerland), **VAAM** (Germany)

PUBLICATIONS

Research articles (peer-reviewed):

Stutzmann S., **Blokesch M.** (2016) Circulation of a quorum-sensing-impaired variant of *Vibrio cholerae* strain C6706 masks important phenotypes. *mSphere*, 1:e000098-16.

Metzger L.C., Stutzmann S., Scignari T., Van der Henst C., Matthey N., **Blokesch M.** (2016) Independent regulation of type VI secretion in *Vibrio cholerae* by TfoX and TfoY. *Cell Rep.*, 15:951-958.

→ Article recommended by Faculty of 1000 (F1000) as 'New finding' and rated as 'very good'.

Van der Henst C., Scignari T., Maclachlan C., **Blokesch M.** (2016) An intracellular replication niche for *Vibrio cholerae* in the amoeba *Acanthamoeba castellanii*. *ISME J.*, 10:897-910 (advance online publication, September 22, 2015).

Blokesch M. (2015) Competence-induced type VI secretion might foster intestinal colonization by *Vibrio cholerae*. *Bioessays*, 37:1163-1168.

Borgeaud S., Metzger L.C., Scignari T., **Blokesch M.** (2015) The type VI secretion system of *Vibrio cholerae* fosters horizontal gene transfer. *Science*, 347:63-67.

→ Article recommended by F1000 as 'New finding' and rated as 'exceptional'.

→ Article recommended by F1000 as 'Good for teaching' & 'New finding' and rated as 'very good'.

→ Article recommended by F1000 as 'Interesting hypothesis' & 'New finding' and rated as 'very good'.

→ Article recommended by F1000 as 'Interesting hypothesis' & 'New finding' and rated as 'very good'.

→ Classified as 'Highly Cited Paper' by Web of Science (refers to top 1% of the academic field of Microbiology; as of July/August 2016)

Lo Scudato M., Borgeaud S., **Blokesch M.** (2014) Regulatory elements involved in the expression of competence genes in naturally transformable *Vibrio cholerae*. *BMC Microbiol.*, 14:327.

Kühn J., Finger F., Bertuzzo E., Borgeaud S., Gatto M., Rinaldo A., **Blokesch M.** (2014) Glucose- but not rice-based oral rehydration therapy enhances the production of virulence determinants in the human pathogen *Vibrio cholerae*. *PLoS Negl. Trop. Dis.*, 8:e3347.

Steinbock L.J., Krishnan S., Bulushev R.D., Borgeaud S., **Blokesch M.**, Feletti L., Radenovic A. (2014) Probing the size of proteins with glass nanopores. *Nanoscale*, 6:14380-14387.

Seitz P., **Blokesch M.** (2014) DNA transport across the outer and inner membrane of naturally transformable *Vibrio cholerae* is spatially but not temporally coupled. *mBio*, 5:e01409-14.

Metzger L.C., **Blokesch M.** (2014) Composition of the DNA-uptake complex of *Vibrio cholerae*. *Mob. Genet. Elements*, 4:e28142.

Seitz P., Pezeshgi Modarres H., Borgeaud S., Bulushev R.D., Steinbock L.J., Radenovic A., Dal Peraro M., **Blokesch M.** (2014) ComEA Is Essential for the Transfer of External DNA into the Periplasm in Naturally Transformable *Vibrio cholerae* Cells. *PLoS Genet.*, 10:e1004066.

→ Featured as *Research Highlight* in *Nat. Rev. Microbiol.* (2014): Bacterial physiology: ComEA pulls in DNA in *Vibrio cholerae* by Hofer U.; doi: 10.1038/nrmicro3220

→ Article recommended by Faculty of 1000 as 'New finding' and rated as 'Exceptional'.

Venkova-Canova T., Baek J.H., FitzGerald P.C., **Blokesch M.**, Chattoraj D.K. (2013) Evidence for two Different Regulatory Mechanisms Linking Replication and Segregation of *Vibrio cholerae* Chromosome II. *PLoS Genet.*, 9:e1003579.

Seitz P., **Blokesch M.** (2013) DNA-uptake machinery of naturally competent *Vibrio cholerae*. *Proc. Natl. Acad. Sci. USA*, 110:17987-92.

- Featured as *Research Highlight* in *Nat. Rev. Microbiol.* (2013): Bacterial physiology: *Vibrio* uptake apparatus by Molloy S.; doi: 10.1038/nrmicro3165
- Hornung C., Poehlein A., Haack F.S., Schmidt M., Dierking K., Pohlen A., Schulenburg H., **Blokesch M.**, Plener L., Jung K., Bonge A., Krohn-Molt I., Utpatel C., Timmermann G., Spieck E., Pommerening-Röser A., Bode E., Bode H.B., Daniel R., Schmeisser C., Streit W.R. (2013) The *Janthinobacterium* sp. HH01 genome encodes a homologue of the *V. cholerae* CqsA and *L. pneumophila* LqsA autoinducer synthases. *PLoS One*, 8:e55045.
- Lo Scudato M., **Blokesch M.** (2013) A transcriptional regulator linking quorum sensing and chitin induction to render *Vibrio cholerae* naturally transformable. *Nucleic Acids Res.*, 41:3644-58.
- Borgeaud S., **Blokesch M.** (2013) Overexpression of the *tcp* gene cluster using the T7 RNA polymerase / promoter system and natural transformation-mediated genetic engineering of *Vibrio cholerae*. *PLoS One*, 8:e53952.
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