

Melanie Blokesch
Associate Professor
EPFL-SV-UPBLO, Station 19
CH-1015 Lausanne, Switzerland
<https://www.epfl.ch/labs/blokesch-lab/>

Phone : +41 21 693 06 53
Email: melanie.blokesch@epfl.ch
Secretary: +41 21 693 7232
(Marisa Marciano Wynn)
OrchidID: 0000-0002-7024-1489
ResearcherID: A-4057-2013

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

- 2019** Elected member of the **European Molecular Biology Organization (EMBO)**
- 2018** Elected member of the **European Academy of Microbiology (EAM)**
- 2017** **Howard Hughes Medical Institute (HHMI) International Research Scholarship** (2017-2022)
- 2017** **Awardee ‘25 Frauen, deren Erfindungen unser Leben verändern’** by Edition F, ZEIT online, Handelsblatt and Gründerszene, Berlin, Germany
- 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** **The Emmanuelle Caron lecture** at Imperial College London, UK (May 2015)

- 2015** **EPFL teaching award “Polysphère”** by the student association AGEPoly for best teacher in the School of Life Sciences
- 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 sciences 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

- 2019-2023** **Swiss National Science Foundation individual grant** (31003A_162551; single PI)
- 2019** **Research grant**, Novartis Foundation for Medical and Biological Research
- 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; single PI)
- 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; single PI)
- 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; single PI)
- 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-** Associate Editor *PLoS Genetics*
- 2017-** Editor *Molecular Microbiology*
- 2017-2022** Academic Editor *PLoS Biology* (2017-2019; renewed for 2020-2022)
- 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* (2011-2013 renewed for 2013-2016; resigned by the end of 2015)

- Invited ad hoc reviewer for these journals: *Appl. Environ. Microbiol.*, *Arch. Microbiol.*, *BMC Microbiol.*, *Cell Host & Microbe*, *Cell Rep.*, *Cell. Microbiol.*, *Chemical Science*, *Curr. Opin. Microbiol.*, *eLife*, *EMBO J.*, *Environ. Microbiol.*, *FEBS J.*, *FEBS Lett.*, *FEMS Microbiol. Lett.*, *Infect. Immun.*, *ISME J.*, *J. Bacteriol.*, *J. Clin. Microbiol.*, *mBio*, *Mol. Microbiol.*, *Microbiology*, *Nature*, *Nat. Commun.*, *Nat. Microbiol.*, *Nat. Rev. Microbiol.*, *PLoS Genet.*, *PLoS Negl. Trop. Dis.*, *PLoS One*, *PLoS Pathog.*, *Proc. Natl. Acad. Sci. USA*, *Res. Microbiol.*, *Science*, *Sensors*, *Trends Ecol. Evol.*, *Vaccine*, *Water Res.*
- Invited ad hoc reviewer for the following funding agencies and foundations: *European Research Council (ERC)*, *Swiss National Science Foundation (SNSF, Switzerland)*, *French Research Agency (ANR, France)*, *Fondation pour la Recherche Médicale (France)*, the *Austrian Science Fund (FWF)*, the *Wellcome Trust (UK)*, *Research Council of the Université catholique de Louvain (Belgium)*, the *Gebert Rűf Foundation (Switzerland)*, the Swiss bilateral Science and Technology Cooperation by the State Secretariat for Education, Research, and Innovation (Switzerland), National Geographic (USA), and the Alexander von Humboldt Foundation, Germany.

COMMISSIONS OF TRUST

- 2019-2023: Elected member of the National Research Council of the *Swiss National Science Foundation*
- 2019: Faculty search committee member at the University of Basel, Switzerland (Swiss Tropical and Public Health Institute).
- 2019: Member scientific committee *Neue Strategien gegen multiresistente Krankheitserreger mittels digitaler Vernetzung – bayresq.net* by the *Bayerisches Staatsministerium für Wissenschaft und Kunst (Germany)*
- 2019-2022: Scientific Advisory Board *Research Centre for Infectious Diseases* in Würzburg, Germany
- Since 2018: Scientific Advisory Board *Laboratoire de chimie bactérienne (LCB)* in Marseille, France
- 2018: Jury committee member *l'Institut universitaire de France (IUF)*, Ministère de l'enseignement supérieur, de la recherche et de l'innovation (MESRI), France.
- 2018-2019: Hiring Committee Member EPFL Life Sciences Early Independence Research Scholar (ELISIR) program, EPFL, Lausanne, Switzerland
- Since 2018: Scientific Advisory Board *Centre for Integrative Biology (CBI)* of Toulouse, France
- 2017-2019: Member of the Research Commission and Vice-Chair Evaluation Panel III, EPFL Lausanne, Switzerland
- 2016 & 2017: Grant panel member *French Research Agency (ANR)*, France
- 2016: Faculty hiring committee *Serra Hűnter Programme*, Catalonia, Spain
- 2016: Faculty hiring committee *Department of Fundamental Microbiology at the University of Lausanne*, Switzerland
- 2014-2016: Faculty Council member, School of Life Sciences, EPFL Lausanne

EXTERNAL AND INTERNAL COMMITTEES

- 2019-: Board member Faculty Direction Meeting, EPFL School of Life Sciences, Switzerland
- 2018-2019: EPFL School of Life Sciences SV 2.0 committee, EPFL Lausanne, Switzerland
- 2017-2018: Vice Director, Doctoral Program in Molecular Life Sciences (EDMS), EPFL Lausanne, Switzerland
- 2017-2018: Open Science Strategic Committee, EPFL Lausanne, Switzerland
- 2017: Poster judgment committee at the New Approaches and Concepts in Microbiology, EMBO/EMBL Symposium in Heidelberg, Germany
- 2017: Thesis committee (external expert), CNRS & Paul Sabatier, Toulouse, France (April 2017)
- 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 Committee, 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: Poster judgment committee at the EMBO conference *Microbiology after the genomic revolution: Genomes 2014* in Paris, France
- 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
- 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)

CONFERENCE AND WORKSHOP ORGANIZATION

- 2019-2021: Vice Chair (2019) and Chair (2021) *Gordon Research Conference on Microbial Adhesion and Signal Transduction* (co-elected with Raphael Valdivia, USA) in Newport, USA
- 2018-2019: Scientific committee member for the *Swiss Microbial Ecology Meeting 2019* (SME 2019), Switzerland
- 2017-2018: Program committee member for the *ASM Microbe 2018* meeting by the American Society for Microbiology (ASM) in Atlanta, USA (invitation for 2018/2019 program committee for *ASM Microbe 2019* meeting in San Francisco declined)
- 2017-2018: Scientific committee member for the *Annual Meeting 2018* by the Swiss Society for Microbiology (SSM) in Lausanne, Switzerland
- 2012: Co-organizer (with Prof. P. Linder, CMU, Geneva) of the *Swiss Molecular Microbiology Meeting*
- 2012: Scientific organizer of the first Global Health Institute retreat in Villars.

CONFERENCES AND WORKSHOPS (SELECTION)

Oral presentations:

2020

- Conference on Microbiology by the European Microbiological Societies (FEMS) and the Serbian Society for Microbiology in Belgrade, Serbia (**invitation as keynote speaker declined**; scheduling conflict; July 2020)
- *Gordon Research Conference on Bacterial Cell Surfaces* in Mount Snow, West Dover (VT), USA (**invited speaker**; June/July 2020)
- Cell symposia *Infection Biology in the Age of the Microbiome* in Paris, France (**invitation declined**; scheduling conflict; May 2020)
- *Cellular Dynamics: host-pathogen Interface* in Surrey, UK (**invited speaker**; May 2020)
- *3rd Bacterial Cell Biology conference* in Nassau, The Bahamas (**invited speaker**; Februar 2020)

2019

- *Bacterial Morphogenesis, Survival and Virulence* in Cape Town, South Africa (**invited speaker**; November 2019)
- *Mexican Microbiology Society meeting 2019* in Oaxaca, Mexico (**invited keynote speaker**; invitation declined due to EPFL Life Sciences' travel reduction recommendations; October 2019)
- EMBO/FEBS Advanced course *The New Microbiology* in Spetses, Greece (**invited speaker**; September 2019)
- *Swiss Society for Microbiology* annual meeting in Zurich, Switzerland (**invitation declined**; scheduling conflict; September 2019)

- *Bacterial Networks* (BacNet19; EMBO Symposium) in San Feliu de Guixols, Spain (**invited speaker**; September 2019)
- *Host-Microbe Symbioses* Summer Course in Lisbon Portugal (**invited lecturer**; July 2019)
- Gordon Research Conference on *Animal-Microbe Symbiosis* in Mount Snow (VT), USA (**invited speaker**; June 2019)
- FEBS Advanced Lecture Course *Current Advances on Pathogen Research* in Yerevan, Armenia (**invited speaker**; March 2019)

2018

- Howard Hughes Medical Institute (HHMI) Science meeting at Janelia Research Center in Ashburn, Virginia, USA (**speaker** as international scholar; November 2018)
- *Fifth Genome Maintenance Meeting* (GMM5) in Oslo, Norway (**invited keynote speaker**; October 2018)
- *Gene regulation* workshop by the *Association for General and Applied Microbiology* (VAAM) in Tutzing/Munich, Germany (**invited speaker**; September 2018)
- *Midlands Molecular Microbiology Meeting* (M4) in Warwick, UK (**invitation declined**; scheduling conflict; September 2018)
- *EMBO at Basel Life 2018* meeting in Basel, Switzerland (**invited plenary speaker**; September 2018)
- *17th International Symposium on Microbial Ecology* (ISME17) in Leipzig, Germany (**invited speaker**; August 2018)
- *4th Warwick Quantitative Biomedicine Symposium on Microbial communities: decoding interactions* in Warwick, UK (**invitation declined**; scheduling conflict; June 2018)
- *Symposium Infection Biology for the 21st Century: Today's Giants Meet Tomorrow's Leaders* in Berlin, Germany (**invitation declined**; scheduling conflict; June 2018)
- *19th Annual UC Berkeley Microbiology Student Symposium* in Berkeley, USA (**invited keynote speaker**; April 2018)
- *Conference Spatiotemporal Regulation of Bacterial Cells* in Marburg, Germany (**invited speaker**; March 2018)
- *Lorne Infection and Immunity Conference* in Lorne, Australia (**invitation declined**; scheduling conflicts; February 2018)

2017

- *Annual Meeting of the Italian Society of Microbiology* in Genoa, Italy (**invited speaker**; September 2017; cancelled)
- *Cold Spring Harbor meeting on Microbial Pathogenesis and Host Response* in Cold Spring Harbor, USA (**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

- *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 (June 2011)
- *Molecular Microbiology Meeting 2011* in Würzburg, Germany (May 2011)

2009

- *5th ASM Conference on Biofilms* in Cancun, Mexico (**invited speaker**; November 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**; invitation declined; August 2007)
- *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:

- Annual Meeting of *Life Sciences Switzerland (LS²)* in Zurich, Switzerland (February 2020)
- *Gordon Research Conference Microbial Adhesion and Signal Transduction* in Newport, USA (July 2019)
- *Gordon Research Conference Bacterial Cell Surfaces* in Mount Snow, West Dover, USA (June 2018)
- *Molecular Genetics of Bacteria and Phages Meeting* in Madison, Wisconsin USA (August 2017)
- Session *Evolution and genome plasticity; FEMS 2017 – 7th Congress of European Microbiologists* in Valencia, Spain (July 2017; co-organizer of session)
- Session *Cooperation and Competition Inside the Host; ASM conference on Mechanisms of Interbacterial Cooperation and Competition* in Washington, DC, USA (March/April 2017)
- *Infection & Immunity Forum at the Fondation 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, USA (June 2015; organizer of session)

INVITED PRESENTATIONS AT INSTITUTIONS

2020

- *Department of Microbiology and Molecular Genetics*, Michigan State University, East Lansing, USA (Jan 2020)
- *Department of Microbiology and Immunology*, University of Michigan, Ann Arbor, USA (Jan 2020)
- *Institute of Structural and Molecular Biology*, Birkbeck & University College London, UK (Jan 2020)

2019

- *Department of Microbiology*, Harvard Medical School, USA (October 2019)
- *Biozentrum*, Basel, Switzerland (September 2019)
- *Department of Fundamental Microbiology*, University of Lausanne, Switzerland (September 2019)
- *Departamento de Genética, Facultad de Biología*, Universidad de Sevilla in Sevilla, Spain (May 2019)
- *Center for Integrative Genomics*, University of Lausanne, Switzerland (May 2019)
- *TOP lecture series*, University of Leiden, Netherlands (April 2019)

2018

- *Max Planck Institute for Developmental Biology* in Tübingen, Germany (December 2018)
- *University of California San Francisco*, San Francisco, USA (June 2018)
- *Stanford University*, Palo Alto, USA (May 2018)
- *Instituto Gulbenkian de Ciência*, Oeiras, Portugal (February 2018)

2017

- *John Innes Centre*, Norwich, UK (November 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, 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*, 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, 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

2020 (scheduled)

- *Infection Biology* (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL – Spring 2020
- *Protein localization in bacteria* (1 ECTS credit; doctoral course), EPFL – January 2020

2019

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

2018

- *Infection Biology* (5 ECTS credits; Master level; 5h/week, 14 weeks), EPFL – Spring 2018
- Participation to *Landmark Papers in Cancer and Infection* (doctoral course), EPFL

2017

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

- **11 postdocs** (J. Kühn, C. Van der Henst, L. Metzger, I. Mateus, M. Jaskólska, D. Adams, A. Vanhove, S. Isaac, J. Pereira, N. Flaugnatti, T. Sana)
- **7 PhD students** (G. Suckow, M. Lo Scudato, P. Seitz, N. Matthey, N. Drebes Dörr, N. Vesel, L. Lemos Rocha)
- **16 undergraduate students** (Bachelor students, Master students, Summer research students, internships)
- **5 technical assistants** (2 technical assistant trainees)

MEMBERSHIPS

- Member of AcademiaNet. Nominated by the European Research Council (ERC) and the Swiss National Science Foundation (SNSF)
- 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; 2015-2017)
- Member of VibrioNet Europe (<http://www.vibrionet.de/institutes/index.html>)
- Member of diverse societies: **ASM** (USA), **ISME** (international), **SSM** (Switzerland), **LS²** (Switzerland), **VAAM** (Germany)

PUBLICATIONS

Research articles (peer-reviewed):

Matthey N., Stutzmann S., Stoudmann C., Guex N., Iseli C., **Blokesch M.** (2019) Neighbor predation linked to natural competence fosters the transfer of large genomic regions in *Vibrio cholerae*. *eLife* 8:e48212.

Adams D.W., Pereira J.M., Stoudmann C., Stutzmann S., **Blokesch M.** (2019) The type IV pilus protein PilU functions as a PilT-dependent retraction ATPase. *PLoS Genet.*, 15:e1008393.

Piel D., Bruto M., James A., Labreuche Y., Lambert C., Janicot A., Chenivesse S., Petton B., Wegner K.M., Stoudmann C., **Blokesch M.**, Le Roux F. (2019) Selection of *Vibrio crassostreae* relies on a plasmid expressing a type 6 secretion system cytotoxic for host immune cells. *Environ. Microbiol.*, – *ePub ahead of print* [Aug 7th 2019] – doi: 10.1111/1462-2920.14776

Adams D.W., Stutzmann S., Stoudmann C., **Blokesch M.** (2019) DNA-uptake pili of *Vibrio cholerae* are required for chitin colonisation and capable of kin recognition via sequence-specific self-interaction. *Nat. Microbiol.*, 4:1545-1557. (also *bioRxiv*, doi: 10.1101/354878)

→ Featured as *Research Highlight* in *Nat. Rev. Microbiol.* (2019): Settling down on chitin by Andrea Du Toit; doi: 10.1038/s41579-019-0237-y

Metzger L.C.*, Matthey N.*, Stoudmann C., Collas E.J., **Blokesch M.** (2019) Ecological implications of gene regulation by TfoX and TfoY among diverse *Vibrio* species. *Environ. Microbiol.*, 21:2231-2247. (*equal contribution).

Matthey N.*, Drebes Dörr N.C.*, **Blokesch M.** (2018) Long-read-based genome sequences of pandemic and environmental *Vibrio cholerae* strains. *Microbiol. Resour. Announc.*, 7:e01574-18. (*equal contribution).

Van der Henst C., Vanhove A.S., Drebes Dörr N.C., Stutzmann S., Stoudmann C., Clerc S., Scignari T., Maclachlan C., Knott G., **Blokesch M.** (2018) Molecular insights into *Vibrio cholerae*'s intra-amoebal host-pathogen interactions. *Nat. Commun.*, 9:3460. doi: 10.1038/s41467-018-05976-x.

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

Jaskólska M., Stutzmann S., Stoudmann C., **Blokesch M.** (2018) QstR-dependent regulation of natural competence and type VI secretion in *Vibrio cholerae*. *Nucleic Acids Res.*, 46:10619-10634.

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.
- 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 Jan/Feb 2019)
- 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.**, Chatteraj 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 Scrudato 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.
- Blokesch M.** (2012) TransFLP – a method to genetically modify *Vibrio cholerae* based on natural transformation and FLP-recombination. *J. Vis. Exp.*, 68:e3761.
- Lo Scrudato M., **Blokesch M.** (2012) The Regulatory Network of Natural Competence and Transformation of *Vibrio cholerae*. *PLoS Genet.*, 8:e1002778.
 → Top 25% most cited *PLoS Genetics* article of all times as of August 31, 2017 (*PLoS Genetics* notification).
- Blokesch M.** (2012) A quorum sensing-mediated switch contributes to natural transformation of *Vibrio cholerae*. *Mob. Genet. Elements*, 2:224-7.
- Rinaldo A., Bertuzzo E., Mari L., Righetto L., **Blokesch M.**, Gatto M., Casagrandi R., Murray M., Vesenbeckh S.M. and Rodriguez-Iturbe I. (2012) Reassessment of the 2010-2011 Haiti cholera outbreak and rainfall-driven multiseason projections. *Proc. Natl. Acad. Sci. USA*, 109:6602-07.
- Blokesch M.** (2012) Chitin colonization, chitin degradation, and chitin-induced natural competence of *Vibrio cholerae* are subject to catabolite repression. *Environ. Microbiol.*, 14:1898-912.
- Rinaldo A., **Blokesch M.**, Bertuzzo E., Mari L., Righetto L., Murray M., Gatto M., Casagrandi R., Rodriguez-Iturbe I. (2011) A transmission model of the 2010 cholera epidemic in Haiti. *Ann. Intern. Med.*, 155:403-404.
- Suckow G., Seitz P., **Blokesch M.** (2011) Quorum Sensing Contributes to Natural Transformation of *Vibrio cholerae* in a Species-Specific Manner. *J. Bacteriol.*, 193:4914-24.
- Bertuzzo E., Mari L., Righetto L., Gatto M., Casagrandi R., **Blokesch M.**, Rodriguez-Iturbe I., Rinaldo A. (2011) Prediction of the spatial evolution and effects of control measures for the unfolding Haiti cholera outbreak. *Geophys. Res. Lett.*, 38:L06403.
- De Souza Silva O., **Blokesch M.** (2010) Genetic manipulation of *Vibrio cholerae* by combining natural transformation with FLP recombination. *Plasmid*, 64:186-195.
- Marvig R. L., **Blokesch M.** (2010) Natural transformation of *Vibrio cholerae* as a tool - optimizing the procedure. *BMC Microbiol.*, 10:155.
- Blokesch M.**, Schoolnik G.K. (2008) The extracellular nuclease Dns and its role in natural transformation of *Vibrio cholerae*. *J. Bacteriol.*, 190:7232-7240.
- Blokesch M.**, Schoolnik G.K. (2007) Serogroup Conversion of *Vibrio cholerae* in Aquatic Reservoirs. *PLoS Pathog.*, 3:e81.
- Blokesch M.**, Böck A. (2006) Properties of the [NiFe]-hydrogenase maturation protein HypD. *FEBS Lett.*, 580:4065-4068.
- Meibom K.L. *, **Blokesch M.** *, Dolganov N.A., Wu C.-Y., Schoolnik G.K. (2005) Chitin induces natural competence in *Vibrio cholerae*. *Science*, 310:1824-1827. (* shared first author)
 → Article recommended by F1000 as 'New finding' and rated as 'very good'
 → Article recommended by F1000 as 'New finding' and rated as 'Good'
 → Commentary on this work in Bartlett and Farooq (2005), *Science*, 310, 1775 (perspective).

Roseboom W., **Blokesch M.**, Böck A., Albracht S.P.J. (2005) The Biosynthetic Routes for Carbon Monoxide and Cyanide in the Ni-Fe Active Site of Hydrogenases are Different. *FEBS Lett.*, 579:469-472.

Blokesch M., Albracht S.P.J., Matzanke B.F., Drapal N.M., Jacobi A., Böck A. (2004) The Complex between Hydrogenase-Maturation Proteins HypC and HypD is an Intermediate in the Supply of Cyanide to the Active Site Iron of [NiFe]-Hydrogenases. *J. Mol. Biol.*, 344:155-167.

Blokesch M., Paschos A., Bauer A., Reissmann S., Drapal N., Böck A. (2004) Analysis of the transcarbamoylation-dehydration reaction catalysed by the hydrogenase maturation proteins HypF and HypE. *Eur. J. Biochem.*, 271:3428-3436.

Blokesch M., Rohrmoser M., Rode S., Böck A. (2004) HybF, a Zinc Containing Protein Involved in NiFe Hydrogenase Maturation. *J. Bacteriol.*, 186:2603-2611.

Blokesch M., Böck A. (2002) Maturation of [NiFe]-hydrogenases in *Escherichia coli*: the HypC cycle. *J. Mol. Biol.*, 324:287-296.

Hube M., **Blokesch M.**, Böck A. (2002) Network of hydrogenase maturation in *Escherichia coli*: role of accessory proteins HypA and HybF. *J. Bacteriol.*, 184:3879-3885.

Magalon A., **Blokesch M.**, Zehelein E., Böck A. (2001) Fidelity of metal insertion into hydrogenases. *FEBS Lett.*, 499:73-76.

Blokesch M., Magalon A., Böck A. (2001) Interplay between the specific chaperone-like proteins HybG and HypC in maturation of hydrogenases 1, 2, and 3 from *Escherichia coli*. *J. Bacteriol.*, 183:2817-2822.

Reviews:

Dubnau D., **Blokesch M.** (2019) Mechanisms of DNA Uptake by Naturally Competent Bacteria. *Annu. Rev. Genet.*, 53 – ePub ahead of print, Aug 21st 2019. (publication date: November 2019)

Le Roux F., **Blokesch M.** (2018) Eco-evolutionary Dynamics Linked to Horizontal Gene Transfer in Vibrios. *Annu. Rev. Microbiol.*, 72: 89-110.

Veening J.W., **Blokesch M.** (2017) Interbacterial predation as a DNA acquisition strategy for naturally competent bacteria. *Nat. Rev. Microbiol.*, 15:621-629.

Rinaldo A., Bertuzzo E., **Blokesch M.**, Mari L., Gatto M. (2017) Modeling key drivers of cholera transmission dynamics provides new perspectives on parasitology. *Trends Parasitol.*, 33:587-599.

Blokesch M. (2017) In and out – Contribution of natural transformation to the shuffling of large genomic regions. *Curr. Opin. Microbiol.*, 38:22-29.

Metzger L.C., **Blokesch M.** (2016) Regulation of competence-mediated horizontal gene transfer in the natural habitat of *Vibrio cholerae*. *Curr. Opin. Microbiol.*, 30:1-7.

Matthey N., **Blokesch M.** (2016) The DNA Uptake Process of Naturally Competent *Vibrio cholerae*. *Trends Microbiol.*, 24:98-110.

Seitz P., **Blokesch M.** (2013) Cues and regulatory pathways involved in natural competence and transformation in pathogenic and environmental Gram-negative bacteria. *FEMS Microbiol. Rev.*, 37:336-63. (Special issue *Molecular Insights into Environmental Microbes*; Epub September 2012)

Böck A., King P.W., **Blokesch M.**, Posewitz M.C. (2006) Maturation of Hydrogenases. *Adv. Microb. Physiol.*, 51:1-71.

Blokesch M., Böck A. (2002) Mechanismen der Metallzentrums-Synthese: Die Reifung Nickel-abhängiger Enzyme. *BIOspektrum*, 6/02:699-703. (article in german)

Blokesch M., Paschos A., Theodoratou E., Bauer A., Hube M., Huth S., Böck A. (2002) Metal insertion into NiFe-hydrogenases. *Biochem. Soc. Trans.*, 30:674-680.

Peer-reviewed commentaries and perspectives:

Drebes Dörr N.C., **Blokesch M.** (2018) The bacterial type VI secretion system facilitates niche domination. *Proc. Natl. Acad. Sci. USA*, 115:8855-8857.

Le Roux F., Wegner M., Baker-Austin C., Vezzulli L., Osorio C.R., Amaro C., Ritchie J., Defoirdt T., Destoumieux-Garzon D., **Blokesch M.**, Mazel D., Jacq A., Cava F., Gram L., Wendling C., Strauch E., Kirschner A., Huehn S. (2015) The Emergence of *Vibrio* pathogens in Europe: Ecology, Evolution and Pathogenesis. *Front. Microbiol.*, 6:830.

Invited publications:

Blokesch M. (2019) Cellular Microbiology Interview – Dr. Melanie Blokesch. *Cell. Microbiol.* 21:e13002; doi: 10.1111/cmi.13002

Blokesch M. (2016) Natural competence for transformation. *Curr. Biol.*, 26: pR1126–R1130; doi: 10.1016/j.cub.2016.08.058

Blokesch M. (2015) Leben und sterben lassen – horizontaler Gentransfer in *Vibrio cholerae*. *BIOspektrum*, 3/15:273-276. (article in german); doi: 10.1007/s12268-015-0572-0

Blokesch M. (2014) The Lifestyle of *Vibrio cholerae* Fosters Gene Transfers - Growing on chitinous surfaces helps these bacteria to initiate horizontal gene transfer and, perhaps, to swap pathogenic traits. *Microbe* (monthly news magazine of the American Society for Microbiology), 9(2): 64-70.

Blokesch M. (2006) [NiFe]-Hydrogenasen von *Escherichia coli*: Funktionen der am Metalleinbau beteiligten Proteine. *BIOspektrum*, 1/06:61. (article in german)

Book chapters:

Blokesch M. (2016) Protocols for visualizing horizontal gene transfer in Gram-negative bacteria through natural competence. In McGenity TJ, Timmis KN, Nogales B (eds.) *Hydrocarbon and Lipid Microbiology Protocols*, Springer, Berlin Heidelberg, pp 189-204.

Sawers R.G., **Blokesch M.**, Böck A. (September 2004, posting date) Chapter 3.5.4, Anaerobic Formate and Hydrogen Metabolism. In R. Curtiss III (Editor in Chief), *EcoSal-Escherichia coli and Salmonella: Cellular and Molecular Biology*. [Online.] <http://www.ecosal.org>. ASM Press, Washington, D.C.; doi: 10.1128/ecosalplus.3.5.4

Journal and book covers:

- Seitz P., **Blokesch, M.** (2013) FEMS Congress 2013 Virtual Issue, *Regulation of Gene Uptake/CRISPR*
- **Blokesch, M.** (2006) *Advances in Microbial Physiology, Volume 51*