

# CV Gudrun Overesch

---

## PERSONAL INFORMATION

Date of birth: 10<sup>th</sup> October 1962  
Place of birth: Burgsteinfurt (Steinfurt), North Rhine-Westphalia, Germany  
Nationality: German

## ADDRESS

*Private:*  
Schönaustrasse 8  
3600 Thun  
Switzerland  
Tel.: (+41) 33 223 74 34  
e-mail: gudrun.overesch@bluewin.ch

*Professional:*  
Institute of Veterinary Bacteriology  
Department of Infectious Diseases and Pathobiology  
Vetsuisse Faculty, University of Bern  
Längsassestrasse 122  
3012 Bern  
Switzerland  
Tel.: (+41) 31 631 24 38  
e-mail: gudrun.overesch@vetsuisse.unibe.ch  
skype: Gudrun Overesch

## EMPLOYMENT HISTORY

10/2018 – present	<b>Head of the subdivision Reference function and antimicrobial resistance monitoring at the Center for Zoonoses, Bacterial Animal Diseases and Antimicrobial Resistance (ZOBA)</b> Institute of Veterinary Bacteriology, Vetsuisse Faculty, University of Bern, Bern, Switzerland
01/2008 – 09/2018	Head of the Center for Zoonoses, Bacterial Animal Diseases and Antimicrobial Resistance (ZOBA) Institute of Veterinary Bacteriology, Vetsuisse Faculty, University of Bern, Bern, Switzerland
07/2005 – 12/2007	Head of the Division for Microbiology and Molecular Biology Department for Food of Animal Origin, National Testing and Analysis Agency of Rhineland-Palatinate, Koblenz, Germany
12/2001 – 06/2005	Scientific officer Department for Food of Animal Origin, National Testing and Analysis agency of Rhineland-Palatinate, Koblenz, Germany
06/2000 – 11/2001	Scientific officer Department of Food Microbiology, National Agency for Consumer Protection and Food Safety of Lower Saxony (LAVES), Braunschweig, Germany
01/1998 – 05/2000	Assistant in a start up private laboratory Labor Dr. Böse GmbH (start up of a private laboratory for veterinary microbiological diagnostics), Harsum, Germany

# CV Gudrun Overesch

---

## UNIVERSITY

01/1997 – 12/1997	<b>Postdoctoral Fellowship</b> University of Veterinary Medicine Hannover, Foundation, Institute of Immunology, Hannover, Germany (Prof. Dr. W. Leibold) Project title: Characterization of canine immunoglobulin heavy chain genes
02/1993 – 12/1996	<b>Ph.D. in Veterinary Medicine (Dr. med. vet.)</b> Doctor in Veterinary Medicine with distinction ( <i>summa cum laude</i> ) University of Veterinary Medicine Hannover, Foundation, Institute of Immunology, Hannover, Germany (Prof. Dr. W. Leibold) Thesis title: Isolation and restriction fragment length polymorphism analysis of the equine immunoglobulin G constant heavy chain genes
10/1986 – 01/1993	<b>DVM (Staatsexamen)</b> University of Veterinary Medicine Hannover, Foundation, Hannover, Germany
01/1985 - 10/1986	<b>Employment as Medical Laboratory Assistant</b> Fachklinik Zollernalb, Albstadt, Germany
10/1982 – 10/1984	<b>Vocational training</b> Medical Laboratory Assistant, Hannover Medical School (MHH), Hannover, Germany

## PUBLISHED & ACCEPTED PEER-REVIEWED PAPERS & NATIONAL PUBLICATIONS

Total number peer-reviewed papers: 41

Total number national publications: 24

## TEACHING AND SUPERVISION OF STUDENTS AT THE VETSUISSE FACULTY BERN

2014 -ongoing	Teaching three lectures per semester Infectiology II (Clinical bacteriology and mycology)
2011 –ongoing	Teaching three lectures per semester Infectiology I (General Bacteriology)
2008 –ongoing	Teaching practical courses of bacteriologicla diagnostics

No of current undergraduates: 1 doctoral student, 2 master students

No of undergraduates that I supervised: 7 doctoral students, 8 master students, 2 master students in cooperation with the small animal and horse clinics

### INFORMATION ON CURRENT OR PAST SOURCES OF RESEARCH FUNDING

#### Main & First Co-applicant:

- 12) 2021-2023 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Whole-genome-sequencing of cephalosporinase- and carbapenemase-producing Enterobacteriaceae from animals: a baseline for a One-health molecular epidemiology 218'000 CHF (First Co-applicant)
- 11) 2020 – 2021 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Therapeutic guide for antimicrobial stewardship in the most frequent exotics pets in small animal practice 67'000 CHF (First Co-applicant)
- 10) 2019 - 2021 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Antimicrobial resistance Monitoring in veterinary pathogens (Main applicant), 225'000 CHF
- 9) 2017 - 2018 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: MRSA typing in the framework of One Health, 20'000 CHF (Main applicant)
- 8) 2017 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Determination of minimal inhibitory concentrations (MICs) of relevant pathogens for the establishment of epidemiological cut offs (ecoffs) according to EUCAST, 77'500 CHF (Main applicant)
- 7) 2016 - 2018 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Effects of management practices, especially animal transport and barn climate, on animal health, antimicrobial use and development of bacterial resistances in Swiss veal calf operations – a prospective study, 305'851 CHF (First Co- applicant). Main applicant: Meylan M, Clinic for ruminants, Vetsuisse Faculty, University of Bern, Bern, Switzerland
- 6) 2016 – 2017 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Comparison of *Campylobacter jejuni/coli* detection rates in fresh broiler meat by cultural enumeration and quantitative real-time PCR, 27'250 CHF (Main applicant)
- 5) 2015 – 2016 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Detection of *Campylobacter*-free broiler herds ante mortem, 103'572 CHF (Main applicant)
- 4) 2013 – 2015 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Dynamics of methicillin-resistant *Staphylococcus aureus* (MRSA) in Swiss fattening pigs during the productive period, 93'352 CHF (Main applicant)
- 3) 2014 Donor: Fa. Ufamed  
Project title: Antimicrobial resistance of pathogenic bacteria from veal calves during fattening, 15'000 CHF (Project manager)
- 2) 2013 Donor: Kälberpraxis Rund ums Mastkalb (Dr. Corinne Bähler)  
Project title: “Welcome-Station” as an approach to prudent use of antibiotics and implementation of law in the Swiss veal calf production, 10'000 CHF (Project manager)
- 1) 2013 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title (follow up): Prevalence and genetic properties of extended cephalosporin-resistant *Escherichia coli* in Swiss meat, 70'752 CHF project funding (Main applicant)

#### Second & Third Co-applicant:

- 8) 2018 - 2021 Donor: Swiss National Science Foundation  
Resistome in the pig farms: Comparison of the breeding and fattening units with a One Health approach. Responsible applicant: markus Hilty (IFIK, Uni Bern), Further applicants: Oppliger, Anne (IST, UNIL), Gudrun Overesch (IVB, Uni Bern)
- 7) 2016 - 2018 Donor: Federal Office of Public Health (FOPH)

## CV Gudrun Overesch

---

Mcr-1 based colistin resistance: filling knowledge gaps in view of the spread of plasmid-mediated colistin resistance in Switzerland. (Third Co- applicant) Main applicant: Stephan R, Institute for Food Safety and Hygiene, Vetsuisse Faculty, University of Zürich, Zürich, Switzerland

6) 2016 -2017 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Evaluation of intervention measurement against of MRSA spread in pig population. (Second Co- applicant) Main applicant: Sidler X, Clinic of swine, Vetsuisse Faculty, University of Zürich, Zürich, Switzerland

5) 2016 -2018 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Spezifische weiterführende Diagnostik bei Bestandesproblemen in Kälber- und Rindermastbetrieben (Pathocalf). (First Co –applicant), Main applicant: Kaske M, Rindergesundheitsdienst, Vetsuisse Faculty, University of Zürich, Zürich, Switzerland

4) 2012 - 2013 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Virulence plasmid characterization of porcine *C. perfringens* type C. (Second Co-applicant) Main applicant: Posthaus H, Institute of Animal Pathology, Vetsuisse Faculty, University of Bern, Bern, Switzerland

3) 2010 - 2013 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: *Mycoplasma hyopneumoniae* detection and genotyping in wild boars and domestic pigs, and investigations on the possible reservoir role of free-ranging wild boar. (Second Co-applicant) Main applicant: Kuhnert P, Institute of Veterinary Bacteriology, Vetsuisse Faculty, University of Bern, Bern, Switzerland

2) 2012 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Genetic properties of extended cephalosporin-resistant *Escherichia coli* in humans and animals. (Third Co- applicant) Main applicant: Perreten V, Institute of Veterinary Bacteriology, Vetsuisse Faculty, University of Bern, Bern, Switzerland

1) 2009 - 2012 Donor: Federal Food Safety and Veterinary Office (FSVO)  
Project title: Genotyping and virulence targets of *Campylobacter* from humans and animals. (Second Co-applicant) Main applicant: Kuhnert P, Institute of Veterinary Bacteriology, Vetsuisse Faculty, University of Bern, Bern, Switzerland

### SCIENTIFIC EXPERT ACTIVITY

#### Qualifications

- |      |   |
|------|---|
| 2020 | Approval as de facto Diplomate of the European College of Veterinary Microbiology   |
| 2015 | Diploma as “Lehrtierärztin” for continuing education of veterinarians (FVH) from the Schweizer Vereinigung der Veterinär-Labordiagnostiker (SVVLD), special field: bacteriology |
| 2012 | Auditor of the Swiss Accreditation Service (SAS)<br>Specialities: food and veterinary microbiology  |
| 2007 | Auditor of the National Accreditation Body of Rhineland-Palatinate (Staatlichen Anerkennungsstelle der Lebensmittelüberwachung (SAL))   |

#### Membership

- Member of the **Management Committee and working group 2 leader** of the COST Action CA18217 "European Network for optimization of veterinary antimicrobial treatment" (ENOVAT)
- Member of the **VETCAST steering committee** (Veterinary committee for susceptibility testing, subcommittee of EUCAST)
- **Board Member of European Association of Veterinary Laboratory Diagnosticians** (EAVLD)
- Active member of the **ESCMID Study Group on Veterinary Microbiology** (ESGVM)
- **Country representative** for Switzerland at the **European Reference Laboratory for Salmonella**, National Institute for Public Health and the Environment (RIVM), Bilthoven, Netherlands

## CV Gudrun Overesch

---

- **Country representative** for Switzerland at the **European Reference Laboratory for *Campylobacter***, National Veterinary Institute (SVA), Uppsala, Sweden
- **Country representative** for Switzerland at the **European Reference Laboratory for Antimicrobial Resistance**, National Food Institute, Technical University of Denmark (DTU), Lyngby, Denmark

Ad hoc reviewer for the journals: African Journal of Microbiology Research, Swiss Medical Weekly, BMC Microbiology, Clinical Microbiology and Infection, Epidemiology and Infection, PLoS ONE, Veterinary Microbiology, Veterinary Record, Schweizer Archiv für Tierheilkunde

### Invited Speaker

- Invited speaker at the BfR Symposium Zoonosen und Lebensmittelsicherheit, Berlin, Germany, Title: "Charakterisierung porciner und humaner *Yersinia enterocolitica* Isolate vom Biotyp 4", November 10-11, 2014
- Invited speaker at the EU RL *Campylobacter* workshop, Uppsala, Sweden, Title: "A quantitative real-time PCR approach for assessing of *Campylobacter* colonization in broilers herds ante mortem", 03.-October 3-5, 2016
- Invited speaker at the EU RL *Salmonella* workshop, Zaandam, The Netherlands, Title: "Salmonellosis or *Salmonella* infection - high nasal colonization rates of *Salmonella enterica* subspecies *diarizonae* 61:k:1,5,(7) in Swiss sheep herds", May 29 – 30, 2017
- Invited speaker at the 8<sup>th</sup> meeting at EFSA, Parma, Italy, Title: " The monitoring of MRSA in pigs in Switzerland: an update", November 7-8, 2018, 8th meeting EFSA, Parma, Italy
- Invited speaker at the 13<sup>th</sup> EURL-AR workshop, Kgs. Lyngby, Denmark, Title: MRSA prevalence in Swiss slaughter pigs since 2009, April 25 – 26, 2019
- Invited speaker at the 9<sup>th</sup> meeting at EFSA, Parma, Italy, Title: " Antimicrobial resistance in Swiss *Salmonella* isolates", November 6 - 7, 2019

### Technical background

classical bacteriology, diverse techniques of antimicrobial susceptibility testing, 2D gel electrophoresis, western blot, ELISA, MALDI TOF MS, cell culture, flow cytometry, diverse PCR techniques, RFLP, sequencing

### Language skills

German:	Mother tongue
English:	Fluent
French:	Basic