

Curriculum Vitae – May 2019

Luca Guardabassi



Date of Birth: 6th April 1966

Place of Birth: Florence, Italy

Nationality: Italian

Telephone: +45 50116036

Email: lg@sund.ku.dk and lguardabassi@rvc.ac.uk

Education and board certification

- Msc in Veterinary Medicine (DVM), University of Pisa, Italy, September 1994
- PhD in Microbiology, The Royal Veterinary and Agricultural University (KVL), Denmark, February 2000
- Diplomate of the European College of Veterinary Public Health (ECVPH), February 2005

Employment Record

- December 2018 – now: Professor of Veterinary Bacteriology, The Royal Veterinary College, United Kingdom
- November 2018 – now: Professor in One Health Antimicrobial Resistance, Department of Veterinary and Animal Sciences, Faculty of Health and Medical Sciences (SUND), University of Copenhagen (UCPH)
- November 2017 – October 2018: Visiting Professor, SUND, UCPH
- September 2016 – June 2017: Director of One Health Center for Zoonoses and Tropical Veterinary Medicine, Ross University School of Veterinary Medicine (RUSVM)
- November 2015 – June 2017: Professor of Clinical Microbiology, RUSVM
- November 2015 – April 2017: Affiliated Professor, SUND, UCPH
- May 2012 – October 2015: Professor in Antimicrobial Resistance and Antibiosis, SUND, UCPH
- Jan-2004 – April 2012: Associate Professor, Faculty of Life Sciences, UCPH
- Apr 2004 – Mar 2005: Guest researcher, Institut Pasteur, Paris, France
- Jan 2000 – Dec 2003: Assistant professor (KVL)
- Mar 1996 – Dec 1999: PhD student (KVL)
- Mar 1995 – Feb 1996: Veterinary meat inspector (Danish Veterinary Directorate)

Research profile

Luca Guardabassi (LG) is an internationally recognized One Health microbiologist specialized in antimicrobial resistance and antimicrobial therapy with over 170 peer-reviewed articles and 8,568 citations in scientific journals (H-index 48 and i-10 index 134 on Google Scholar, accessed in May 2019). His dissemination outcomes include 1 book, 7 book chapters and more than 100 oral or poster presentations at international conferences, as well as numerous contributions to national conferences, workshops and seminars. His research ranges from evolutionary and epidemiological studies of multidrug-resistant (MDR) bacteria and resistance determinants of veterinary and medical interest, including both Gram-positive and Gram-negative organisms, to discovery of innovative antimicrobial therapies and development of diagnostic tests for detection of veterinary or zoonotic pathogens, and for optimization of antimicrobial use in veterinary practice. Among the highlights, he has contributed to a better understanding of the environmental origins of some of the most feared resistance determinants in human medicine, namely glycopeptide resistance operons in Gram-positive bacteria and carbapenemase-encoding genes in Gram-negative bacteria, and of the impact of various antimicrobial agents on microbial diversity and antimicrobial resistance in the faecal microbiota. Furthermore, LG's research has shed lights into the evolution and transmission patterns of plasmids encoding extended-spectrum β -lactamase (ESBL) within and between animal and human populations, and led to identification

of microbial, host and farm-related factors enhancing pig colonization and transmission of methicillin-resistant *Staphylococcus aureus* (MRSA) within and between herds. At present his research focuses on novel diagnostic tests, antibacterial drug targets and alternatives to antimicrobials that can be used to reduce and rationalize antimicrobial use in livestock.

Fund raising & project management

To date the overall amount of research funds granted from public funding agencies and private companies exceeds 100 million DKK. LG is an accomplished project manager with 22 years of operational and leadership experience in academia, including spearheading all aspects of staff development and management. His management highlights include the following leadership experiences:

- PI and coordinator of the EU Innovation Action project Alternatives to Veterinary Antimicrobials (AVANT) from 2019 to 2025. The project involves 4 industries, 4 universities, 3 SMEs and the Federation of Veterinarians in Europe (FVE). The overall budget is approximately 7 million EUR over 5 years.
- Director of the One Health Center for Zoonoses and Tropical Veterinary Medicine at RUSVM from November 2015 to June 2017. The Center comprised 29 Faculty, 7 Postgraduate Students and 2 Research Associates with an annual budget approximating 300,000 USD.
- PI and coordinator of the UCPH Center for Control of Antibiotic Resistance (UC-Care) from January 2013 to November 2015. This multidisciplinary research center supported 54 research staff members at 14 Departments and 4 Faculties within the University of Copenhagen for an approximate budget of 5 million euro.
- PI and coordinator of the EU training network TRAIN-ASAP from 2010 to 2017. The project had a budget of 3,5 million euro and involved 11 public institutions and 8 private enterprises from 10 countries.
- Leader of the research group on Antimicrobial Resistance and Antibiosis (ARA) at UCPH from May 2012 to October 2015. The team comprised up to 19 staff members (2 associate professors, 5 postdocs, 9 PhD students and 3 technicians) originating from more than 10 countries and 4 continents.
- Manager of the veterinary microbiology diagnostic laboratory at the UCPH from January 2004 to April 2013. The laboratory supported 2 laboratory technicians and provided diagnostic services to the University referral hospital and private clinics across the Denmark.

Teaching & education

LG has a long-standing academic background as a teacher at graduate and postgraduate level as well as in continuing education. To date he has trained 18 PhD, 28 MSc and 7 BSc students. Presently, teaching represents approximately 20% of his working time and consists of a variety of lectures and laboratory practicals targeting graduate veterinary students at UCPH and RVC. In the past, he designed and was responsible for a PhD course module on antimicrobial resistance (Infection Microbiology module B) until 2013 and for the DVM course in Veterinary Paraclinics until 2015, and contributed as lecturer to several other graduate courses at UCPH. During his stay at RUSVM, he was key lecturer in the DVM course on Principles in Infectious Diseases. As for continuing education, LG has a strong commitment to educating best practices for appropriate antimicrobial use and infection control in veterinary practice through development of national and international guidelines as well as courses targeting veterinary practitioners and nurses. As part of this educational activity, he organizes and lectures in an international postgraduate education course on veterinary antimicrobial stewardship supported by the largest microbiology society of the world, the European Society of Clinical Microbiology and infectious Diseases (ESCMID), where is the chair of the ESCMID Study Group for Veterinary Microbiology (ESGVM).

Honorary Office

LG is involved in several international committees related to veterinary microbiology, antimicrobial stewardship, standardization of antimicrobial susceptibility testing and One Health, and serves funding agencies, scientific journals, veterinary organizations, governmental agencies and pharmaceutical industries as an expert in AMR.

- Chair of the Therapeutics Guidelines Group of World Small Animal Veterinary Association (WSAVA) since 2018.
- Member of the WSAVA One Health Committee since 2016.
- Founder and chair of the ESCMID Study Group for Veterinary Microbiology (ESGVM) since 2014.
- Founder and member of the European Veterinary Committee on Antimicrobial Susceptibility Testing (VetCAST) in EUCAST since 2014.
- Member of the Federation of European Companion Animal Veterinary Associations (FECAVA) Working Group on hygiene and the use of antimicrobials in veterinary practice since 2013.
- Member of the editorial board of Veterinary Microbiology since 2012.
- Member of the International Society for Companion Animal Infectious Diseases (ISCAID) Antimicrobial Guidelines Working Group since 2010.
- Member of the expert group appointed by Ceva Santé Animale for developing the second edition of the “Guidelines for the rational use of antimicrobials” in 2015-2018.
- Danish representative in the Management of Committee of the EU Cost Action Network on Evaluation of One Health (NEOH) from 2014 to 2018.
- External advisor for development of the national action plan against antimicrobial resistance in St Kitts and Nevis according to the WHO guidelines in 2016-2017.
- Member of the External Advisory Board of the EU research programme Infect-ERA from 2013 to 2016.
- Member of the MRSA action group appointed by the Danish Ministry of Food, Agriculture and Fisheries from 2011 to 2015.
- Advisor for the Clinical Laboratory Standards Institute (CLSI) Subcommittee on Veterinary Susceptibility Testing from 2010 to 2016.
- Section Editor for Journal of Global Antimicrobial Resistance from 2013 to 2017.
- Member of the expert group appointed by Danish Small Animal Veterinary Association (SvHKS) for developing the first edition of the “Antibiotic Use Guidelines for Companion Animal Practice” in 2010-2012.
- Main organizer of the 3rd ASM-ESCMID Conference on Methicillin-Resistant Staphylococci in Animals (4-7 November 2013, Copenhagen) and the 1st International Conference on One Health Antimicrobial Resistance, (30 September-2 October 2015, Copenhagen, www.icohar.org).
- Danish veterinary scientific representative for the Danish Agency for Science, Technology and Innovation in the Joint Programming Initiative (JPI) on Antimicrobial Resistance in 2010-2011.
- Reviewer of grant applications for the EU Commission and various national funding agencies
- Reviewer of scientific manuscripts for high-ranked (IF>4) international microbiology journals such as Antimicrobial Agents and Chemotherapy, Journal of Antimicrobial Chemotherapy, Applied and Environmental Microbiology, Frontiers Microbiology and Scientific Reports.

Professional Society Memberships

Member of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID), and the American Society for Microbiology (ASM).

Languages

Fluency in English and Italian (mother language) and good understanding of Danish and Spanish, both written and spoken. Basic understanding of French.