

MARÍA DEL MAR BLANCO GUTIÉRREZ

Full Professor

Dpt. of Animal Health
Faculty of Veterinary Sciences
Complutense University of Madrid. Spain

ACADEMIC BACKGROUND

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TEACHING ACTIVITIES

Veterinary Faculty (Complutense University of Madrid)

Teaching activities at the Department of Animal Health.

- Teaching and training in Veterinary Degree courses. Subjects related to Animal Health, mainly Microbiology, Immunology, and Infectious Diseases
- Postgraduate courses and Master (Master in Research in Veterinary Sciences, Master in Virology)
- Specialized and training courses for Veterinarians, and professionals working in Public Health

Teaching stays (Erasmus and International Programs)

- Parma (Italy). January 2011
- Lisbon (Portugal). September 2011
- VetAgrosup, Lyon (France). March 2013
- Liège (Belgium). February 2014
- ENV Alfort, (France). November 2014 and December 2016
- Uppsala (Sweden). March 2018
- Oniris-Nantes (France). April 2018
- Villa María (Córdoba, Argentina). October-November 2019

Design and development of teaching materials (in collaboration)

• Published Books:

- Manual de Microbiología Veterinaria. Cap. 34. *Listeria*, *Eryipelothrix*, *Renibacterium* and *Lactobacillus*. 2002
- Manual de Inmunología Veterinaria (E. Gómez-Lucía, M.M. Blanco and A. Doménech, eds.) 2007
- Graphic Handbook Immunology and infectious diseases of the dog and cat (M. Blanco and J.A. Orden, coord.) 2013. Published in English, Spanish, Portuguese and Korean.
- Pet Owner Educational Atlas. Immunology and transmissible diseases (M. Blanco,

coord.) 2016. Published in Spanish, English, Chinese and Korean.

- Graphic Handbook immunology and infectious diseases in cattle (A. Doménech, coord.) 2017. Published in English and Spanish

- **Translations:**

- Tizard, I. Veterinary Immunology. Translation of several chapters, and revision of the complete 8th and 10th editions in Spanish (2009 and 2019)
- Collaboration in the translation of the chapters on Immunology of the Spanish editions of Cunningham, Klein, Veterinary Physiology (chapters 54 and 55) (2009 and 2013), and Nelson and Couto, Small Animal Internal Medicine (2010)

- **Interactive CDs and on-line material:**

- *Virtual laboratory of Veterinary Microbiology*
- *Immunotrivial and Advanced Immunotrivial* (coordinator)
- *Viropolis* (<http://sevirologia.es/viropolis/>)
- *Virtual Epidemy* (<http://epidemia.sevirologia.es/>)
- The EU project *Innovirology* (<http://www.innovirology.com/>). 2016-17

- **Attendance and presentations in conferences and seminars on teaching at different Universities**

RESEARCH ACTIVITY

Positive evaluations of the Research activity by the Spanish National Committee for evaluation of research activity: 5 periods (6 years/period: 1989-2018)

Participation in Research projects: Member of the research scientific team "Health Surveillance". Participation in more than 20 research projects in Veterinary Microbiology and Immunology. Director of two projects

Selected projects:

- New alternatives for the treatment and control of lactococcosis (2019-2021)
- Advances technologies in health surveillance (2014-18)
- Pathogen-host interaction in trout *Lactococcus garvieae* infection: virulence factors and immune response (2012-2015)
- *Lactococcus garvieae*, emerging pathogen in Mediterranean aquaculture: studies of host adaptation and pathogenicity through genetic and proteomic analyses (2005-2008)
- Virulence studies in *Pseudomonas anguilliseptica*, agent involved in the winter disease of sea bream (2004)
- Development and standardization of multiple PCR methods for the detection of pathogens in aquaculture (2000-2003)
- Improvement of the characterization and diagnosis systems of microorganisms responsible for mastitis in sheep, with special reference to new pathogens of emerging clinical significance (1998-2001)

- Listeriosis: Study of an experimental model of risk factors, intraorganic dissemination and nerve lesions (1993-1996)
- Micro-organism-eukaryotic cell interaction in Gram positive bacteria: role of internalins in invasion (1993)
- Development of a rapid technique for isolation, identification and enumeration in a single medium of pathogenic listeria in food (1989-1991)

Research stays

- Institut National de la Recherche Agronomique (INRA) France. Centre de Recherches de Jouy-en-Josas, Unité de Virologie et Immunologie Moléculaires
 - November 1997 to February 1999. Research project: Innate immune response of trout to Rhabdovirus infection
 - April to September, 2009. Research project: Immune response of sensible and resistant clone trouts to *Flavobacterium psychrophilum*
- University of California Davis, USA. School of Veterinary Medicine, Department of Medicine and Epidemiology. April to October, 2005. Research project: Innate immune response of koi fish infected with CyHV-3 (koi herpesvirus)

OTHER ACTIVITIES

- Member of the evaluation panel for university professors and research staff
- Member of the jury of PhD presentations in Veterinary Microbiology, Virology and Immunology in different Spanish Universities
- Reviewer of scientific papers for different journals
- Member of the evaluation panel of national and international research projects
- Member of several scientific national and international associations
- Member of different committees at the Veterinary Faculty (UCM)

Selected publications in peer reviewed journals (10 from 49)

1. Rosario Castro, Julio Coll, María del Mar Blanco, Antonio Rodríguez-Bertos, Luc Jouneau, José Francisco Fernández-Garayzábal and Alicia Gibello. Spleen and head kidney differential gene expression patterns in trout infected with *Lactococcus garvieae* correlate with spleen granulomas. 2019. *Veterinary Research*. 50:32. doi: 10.1186/s13567-019-0649-8.
2. Gustavo Domínguez-Bernal, Abel Martínez-Rodrigo, Alicia Mas, M. Mar Blanco, José A Orden, Ricardo De La Fuente, Javier Carrión. Alternative strategy for visceral leishmaniasis control: HisAK70-*Salmonella* Choleraesuis-pulsed DCs. 2017. *Comparative Immunology, Microbiology and Infectious Diseases*. 2017. 54:13-19. doi: 10.1016/j.cimid.2017.07.002
3. Alicia Gibello, Fátima Galán-Sánchez, M. Mar Blanco, Manuel Rodríguez-Iglesias, Lucas Domínguez and José F. Fernández-Garayzábal, The zoonotic potential of *Lactococcus garvieae*: an overview on microbiology, epidemiology, virulence factors and relationship with its presence in foods. 2016. *Research in Veterinary Science*. 109: 59-70
4. Mónica Aguado-Urda, Antonio Rodríguez-Bertos, Ana I. de las Heras, M. Mar Blanco, Félix Acosta, Raquel Cid, José F. Fernández-Garayzábal, Alicia Gibello. 2014. Experimental *Lactococcus garvieae* infection in zebrafish and first evidence of its ability to invade non-phagocytic cells. *Veterinary Microbiology* 171: 248-254
5. Langevin C, Blanco M, Martin S, Jouneau L, Bernardet J-F, Houel A, Lunazzi A, Duchaud E, Michel C, Quillet E, and Boudinot P. 2012. Transcriptional responses of resistant and susceptible fish clonal lines to the bacterial pathogen *Flavobacterium psychrophilum*. *PLoS ONE* 7(6): e39126. doi:10.1371/journal.pone.0039126
6. Mónica Aguado-Urda, Guillermo H. López-Campos, Alicia Gibello, M. Teresa Cutuli, Victoria López-Alonso, José F. Fernández-Garayzábal, M. Mar Blanco. 2011. Genome sequence of *Lactococcus garvieae* 8831, isolated from rainbow trout lactococcosis outbreaks in Spain. *Journal of Bacteriology* 193(16): 4263-4264
7. Gibello, A.I. Mata, M.M. Blanco, A. Casamayor, L. Domínguez and J.F. Fernández-Garayzábal. 2005. First identification of *Streptococcus phocae* isolated from Atlantic salmon (*Salmo salar*). *Journal of Clinical Microbiology* 43:526-527
8. Téllez, S., V. Briones, S. González, F.J. García-Peña, J. Altimira, A.I. Vela, M.M. Blanco, C. Ballesteros, J.F. Fernández-Garayzábal and J. Goyache. 2002. *Salmonella* septicaemia in a beauty snake (*Elaphe taeniura taeniura*): a case report. *The Veterinary Record*. 151:28-29
9. Blanco, M.M., A. Gibello, A.I. Vela, M.A. Moreno, L. Domínguez and J.F. Fernández-Garayzábal. 2002. PCR detection and PFGE macrorestriction analyses of clinical isolates of *Pseudomonas anguilliseptica* from Winter Disease outbreaks in sea bream. *Diseases of Aquatic Organisms*. 50:19-27
10. Blanco, M.M., J.F. Fernández-Garayzábal, M.C. Cabrero, J. Alemany and L. Domínguez. 1998. Comparison of two commercial ELISA test with a culture procedure for the detection of *Listeria* in naturally contaminated foods. *Zeitschrift für Lebensmittel-Untersuchung und-Forschung A*. 206:148-150