

# Curriculum Vitae

## Personal information Rosario Bullido

## Work experience

- 1. Employer: Spanish Medicines and Medical Devices Agency
   Start date: 05\_2006

  - End date:
  - Position: Head of Assesment Unit of Veterinary Biological\_Immunological Medicines (including Novel Therapies)
  - Activities:
  - Coordination and assesment of veterinary biologicals\_immunologicals (Quality, safety and efficacy) and quality of biological non\_immunologicals medicinal products in Veterinary
    Department in Spain (AEMPS), with around 10 assessors for authorization by centralized, mutual recognition decentralized and national procedures, including scientific advices, product under development and clinical trials.
  - Member of EU groups as Immunological Working Party (IWP) and Novel Therapies Working Party (NTWP) of EMA and 15V group European Pharmacopoeia\_EDQM\_, involved in the development and revision of EU guidelines and legislation (including Ph. Eur. monographs) of veterinary biological products. Also participant in other EU groups/ guidelines as CMDv autogenous vaccines, ATA (alternatives to antimicrobials) and in discussions of the Annex II to Regulaton 6/2019 veterinary medicines (Biological Expert Gorup). And also member of the Standing Cometee on Pre\_Qualification of Vaccine (SPCQv) against FAST transboundary diseases
- Country: Spain2. Employer: Spanish Medicines and Medical Devices Agency
  - Start date: 06\_2001
  - End date: 04 2006
  - Position: Assessor of Immunological Veterinary Medicines
  - Activities: Assessor of veterinary immunological medicinal products for authorization by national, mutual recognition decentralized and centralized procedures. Member of 15V group European Pharmacopoeia\_EDQM
- Country: Spain
  3. Employer: Instituto de Salud Carlos III.Spanish Health Ministry
  - Start date: 06\_1997 End date: 05\_2001

  - Position: Postdoctoral Research Fellowship
     Activities: Research in Molecular Biology of human Influenza Virus: "Nucleo\_cytoplasmic transport of NP protein and functional characterization of NS2 protein
- Country: Spain
   Employer: CISA\_INIA. Animal Health Research Centre. Spanish Health Ministry
  - Start date: 06\_1996 End date: 05\_1997
  - Position: Research Contract
  - Activities: Research in production and characterization of monoclonal antibodies against
  - VHSV, a salmonid rhabdovirus
- Country: Spain
   Employer: CISA\_INIA. Animal Health Research Centre. Spanish Health Ministry

  - Start date: 10\_1992
    End date: 06\_1996
  - Position: Pre\_doctoral Research Fellowship
  - Activities: Research in Porcine Immunology, on production and characterization of
  - monoclonal antibodies specific for porcine leukocyte antigens

## Education and training

- Subject: School of Veterinary Medicine, Complutense University of Madrid, Spain
   Start date: 10\_1992

  - End date: 05\_1997 Qualification: Ph.D. in Veterinary Sciences
  - Organisation:
  - Country: Spain
- 2. Subject: School of Veterinary Medicine, Complutense University of Madrid, Spain
  - Start date: 10\_1986 End date: 06\_1991

  - Qualification: Bachelor and Master in Veterinary Medicine Organisation:

  - Country: Spain

#### Additional information

#### **Publications**

1. Bullido R., Alonso F., Gómez del Moral M., Ezquerra A., Alvarez B., Ortuño E and Dominguez J. Monoclonal antibody 2F4/11 recognizes the  $\Box$  chain of the porcine alpha2 integrin involved in adhesion and complement

- mediated phagocytosis, J. Immunol, Methods, 195, 125, 134, 1996.
- 2. Bullido R., Ezquerra A., Alonso F., Gómez del Moral M., Domínguez J. Characterization of a new monoclonal antibody (4B7/8) specific for porcine SLA class I antigens. Investigación Agraria. 11 (1) 29\_37. 1996.
- 3. Bullido R. Gómez del Moral M., Alonso F., Ezquerra A., Zapata A., Ortuño E., Alvarez B., Domínguez J. Monoclonal antibodies specific for porcine monocyte/macrophages: Macrophage heterogeneity in pig evidenced by the expression of surface antigens. Tissue Antigens. 49 (4), 403\_413. 1997.
- 4. Bullido R., Gómez del Moral M., Doménech N., Alonso F., Ezquerra A. and Domínguez J. Monoclonal antibodies to high molecular weight isoform of porcine CD45. biochemical and tissue distribution analyses. Vet. Immunol. and Immunopathol. 56, 151\_162. 1997.
- 5. Bullido R., Doménech N., Gómez del Moral M., Alonso F., Babín M., Ezquerra A., Ortuño E. and Domínguez J. Characterization of five monoclonal antibodies specific for swine class II major histocompatibility antigens. Crossreactivity studies with leucocytes of domestic animals. Develop. and Comparativ Immunol. 21 (3), 311\_322. 1997.
- 6. Aasted B., Gori K., Domínguez J., Ezquerra A., Bullido R., Arn S., Bianchi A., Binns R., Chu R.M., Davis W.C., Denham S., Harveson K., Jesen K.T., Kim Y.B., Magyar A., Petersen K.R., Saalmüller A., Sachs D., Schütt C., Shimizu M., Stockes C., Whittall T., Yang H., Zuckermann F. Immunoprecipitation studies of monoclonal antibodies submitted to th Second International Swine CD Workshop. Vet. Immunol. and Immunopath. 60., 229\_236. 1998.
- 7. Pescovitz M.D., Book B.K., Aasted B., Domínguez J., Bullido R., Trebichavsky I., Novikov B., Valpotic I., Tomaskovic M., Nielsen J., Arn S., Sachs D.H., Lunney J.K., Boyd P.C., Walker J., Lee R., Saalmüller A. Analyses of monoclonal antibodies reacting with porcine CD5: results from the Second International Swine CD Workshop. Vet. Immunol. and Immunopathol. 60, 269\_273. 1998.
- 8. Pescovitz M.D., Book B.K., Aasted B., Domínguez J., Bullido R., Trebichavsky I., Novikov B., Valpotic I., Nielsen J., Arn S., Sachs D.H., Lunney J.K., Boyd P.C., Walker J., Lee R., Petrinec N., Saalmüller A. Analyses of monoclonal antibodies reacting with porcine wCD6: results from the Second International Swine CD Workshop. Vet. Immunol. and Immunopathol. 60 285 289. 1998.
- 9. Domínguez J., Ezquerra A., Alonso F., Bullido R., McCullough K., Summerfield A., Bianchi A., Zwart R.J., Kim Y.B., Blecha F., Eicher S., Murtaugh M.p., Pampusch M., Burger K. Workshop studies with monoclonal antibodies identifying a novel porcine differentiation antigen, SWC9. Vet. Immunol. and Immunopatol. 60, 343\_349. 1998.
- 10. Fernandez\_Alonso M., Lorenzo G., Pérez L., Bullido R., Estepa A., Lorenzen N and Coll J. Mapping of linear antibody epitopes of the glycoprotein of VHSV, a salmonid rhabdovirus. Dis. Aquat. Organ. 34 (3), 167\_176. 1998.
- 11. Bullido R., Doménech N., Gómez del Moral M., Alonso F., Ezquerra A. and Domínguez J. Monoclonal antibodies 2F6/8 and 2A10/8 recognize a porcine antigen (SWC7) expressed on B cells and activated T cells. J. Immunol. Methods. 222 (1), 1\_11. 1999.
- 12. Pérez de la Lastra J.M., Van den Berg C.W., Bullido R., Almazán F., Domínguez J., Llanes D. and Morgan B.P. Epitope mapping of 10 monoclonal antibodies against the pig analogue of human membrane cofactor protein (MCP). Immunology. 96. 663\_670. 1999.
- 13. Bullido R., Pérez de la Lastra J.M., Almazán F., Ezquerra A., Llanes D. Alonso F. and Domínguez J. Induction of aggregation in porcine lymphoid cells by antibodies to CD46 Vet. Immunol. and Immunopatol.73 (1), 73\_81. 2000.
- 14. Alvarez B., Sanchez C., Bullido R., Marina A., Lunney J., Alonso F., Ezquerra A. and . Dominguez J..A porcine cell surface receptor identified by monoclonal antibodies to SWC3 is a member of the signal regulatory protein family and associates with protein\_tyrosine phosphatase SHP\_1. Tissue Antigens 55 (4), 342\_351. 2000.
- 15. Bullido R., Gómez\_Puertas P., Albo C. and Portela A. Several protein regions contribute to determine the nuclear and cytoplasmic localization of the Influenza A virus Nucleoprotein. J. General Virol. 81, 135\_142, 2000.
- 16. Bullido R., Gómez\_Puertas P., Saiz M.J. and Portela A. The NEP (NS2) protein of influenza A virus inhibits replication of model template RNAs. J. Virol. 75,  $4912\_497$ , 2001.
- 17. Domenech N., Alvarez B., Bullido R., Alonso F., Ezquerra A., Dominguez J. A new epitope on swine CD5 molecule detected by monoclonal antibody 5F12/9. Hybrid Hybridomics. 22 (3), 179\_82. 2003
- 18. Domenech. N, Bullido R., Alvarez B., Campos E., Rodriguez Carreño M.P., Gomez del Moral M., Alonso F., Ezquerra A., Dominguez, J. Characterization of a novel activation antigen on porcine lymphocytes recognized by monoclonal antibody 5A6/8. Vet. Research. 35(3): 339\_48. 2004.
- 19. Tellez S, Casimiro R., Vela A.I., Fernnandez\_Garayzabal J.F., Ezquerra R., Latre M.V., Briones V., Goyache J., Bullido R., Arboix M. and Domínguez L. Unexpected inefficiency of the European Pharmacopoeia sterility test for detecting contamination in clostridial vaccines. Vaccine. 24 (10) 1710\_1715. 2006.

#### Projects

#### Memberships

### MEMBERSHIPS UE:

- $\_$  IWP (Immunological Working Party)
- NTWP (Novel Therapies Working Party)
- \_ 15 V (EDQM)
- \_ Standing Commetee on Pre\_Qualification of Vaccine (SPCQv) against FAST diseases (FAO)
- BEG (Biological Expert Group "ad hoc") for revison of Annex II to Regulation 6/2019 of Veterinary Medicines
- \_ Participation as expert in ATA (Alternatives to antimicrobials) guideline
- \_ Participation as expert in ADVENT topic group expert on monoclonal antibodies
- \_ Autogenous vaccines working group (CMDv) National (Spain):
- Member of CNB (Spanish National Comission for authorisation\_environmental risk assessment of GMOs)

#### Other Relevant Information

 ${\tt MANAGEMENT\ TRAINING-COURSES\ GIVEN\ (About\ VETERINARY\ BIOLOGICAL\ MEDICINES\ and\ NOVEL\ THERAPIES):}$ 

\_- Different courses/trainings about Novel therapies in veterinary medicine, Biologicals-Immunologicals included allergens and autogenous vaccines and clinical traials during the present year (2025) and also during 2024, and 2023, in Spain and in other EU countries, for regulatory assessors and also for industry and researchers.

Other ones during 2022-2002:

- Rountable session. One Health XV conference technological platforms in biomedicine, Barcelona, 1 june 2022,
- \_ News in Veterinary biologicals and immunological vet medicines. Including allergens. XIV Forum Técnico Veterindustria. 17/03/22 (webinar)
- \_ Autogenous Veterinary Vaccines in Spain and EU (webinar 31 marzo 2022)
- $\_$  AUTOGENOUS VACCINES in SPAIN Autogenous Vaccines: Quality of Production and Movement in a Common Market. Munich, Germany  $\_$  An IABS\_EU and EMAV Hybrid Meeting .16/09/21
- \_Novel Reagulation and guidelines about INMUNOLOGICAL/ BIOLOGICAL and NOVEL THERAPIES ). Master ESIC + Vet+i. Madrid. July 2021
- $\_$  New EU Regulation for Veterinary Medicines (News for INMUNOLOGICAL/ BIOLOGICAL and NOVEL THERAPIES ). Master ESIC + Vet+i. Madrid. November 2020
- New EU Regulation for INMUNOLOGICAL/ BIOLOGICAL and NOVEL THERAPIES Veterinary medicines . Reus (Tarragona). Spain. 27 June 2019  $\_$  - New EU Regulation for INMUNOLOGICAL/ BIOLOGICAL and NOVEL THERAPIES Veterinary medicines . AEMPS Madrid. 20 de June 2019
- $\_$  New EU Regulation for Veterinary Medicines (News for INMUNOLOGICAL/ BIOLOGICAL and NOVEL THERAPIES ). Master ESIC + Vet+i. Madrid. 20 June 2019
- \_ New EU Regulation for INMUNOLOGICAL/ BIOLOGICAL and NOVEL THERAPIES Veterinary medicines. For de Veterinary National Association ( Cuerpo Nacional Veterinarios). Madrid. 28 May 2019
- \_ New EU Regulation for INMUNOLOGICAL/ BIOLOGICAL and NOVEL THERAPIES Veterinary medicines Veterindustria . Madrid. Spain. 29 May 2019
- \_ FIGAN (ZARAGOZA) XII TECHNIC FÓRUM Novel EU Regulations about Veterinary products. 21 March 2019
- $\_$  Infoday about MUMS Veterinary Medicines Registration sobre Registro de Medicamentos Veterinarios y Madrid. 24 September 2018
- \_ World Veterinary Vaccine Congress in Lisbon, Portugal : October 29th 31st 2018
- \_ Practice about IMMUNOLOGICAL VETERINARY MEDICINES (R&D) (Vet + i, VETERINDUSTRIA). Madrid. 7 November 2018.
- \_ Training on MUMS Veterinary products (EU\_NTC network ), AEMPS. 18\_19 December 2017. Madrid. Spain
- $\_$  INMUNOLOGICAL/ BIOLOGICAL Veterinary medicines . Present situation and future legislation. Reus (Tarragona). Spain. 6 June 2017
- $\_$  INMUNOLOGICAL/ BIOLOGICAL Veterinary medicines . Present situation and future legislation. Veterinary College Toledo. Spain. 3 June 2017
- \_ Veterinary clinical trials (Vet+i). Madrid.Spain. 27 April 2017.
- \_ FIGAN 2017. IVMP/ Biologicals. Present situation and novel therapies. 31 March 2017. Zaragoza. Spain
- $\_$  World Veterinary Vaccine congress Barcelona (10 $\_$ 12 October 2016), round table  $\_$  Fish vaccines and vaccination in Spain $\_$  (OSLO, Norway 10 $\_$ 11 May 2016)  $\_$  Webinar EU $\_$ NTC network "Advanced Therapies in veterinary medicine": 25 $\_$ 27 April 16.
- \_ Veterinary basic Immunology. AEMPS. Madrid. 2 y 5 de October 2015 \_ 35 Symposium AEFI (Spansih Farmaceutical Industry): Scientific advances in veterinary biological products. 12\_13 may 2015. Barcelona \_ Basic Veterinary Immunology AEMPS. Madrid (Spain). 2015
- \_ Advanced Therapy in veterinary medicine. AEMPS. Madrid (Spain). 5 December 2014 \_ Immunological Veterinary Medicines in University Master (Veterinary Faculty, UCM. Madrid). 17 November 2014 Advanced Therapy in veterinary medicine. Mahon (Spain) 2\_3 Julio 2013
- $\_$  Training on the guide for the elaboration and use of monographs on immunological veterinary medicinal products. 18 $\_$ 19 March 2010. Strasbourg. France.
- $\_Training\ Course\ in\ Evaluation\ of\ Veterinary\ Immunological\ Products\ for\ junior\ assessors\ (Spanish\ assessors\ and\ assessors\ from\ Poland\ National\ Agency).$  March 2006 (3 days)
- \_ International Training Course in Evaluation, Registration and Marketing of Veterinary Medicinal Products. November 22\_26, 2004. EXPOAVIGA (Barcelona, Spain). Evaluation of safety and efficacy of immunological products.
- \_ International Course in Veterinary Medicinal Products. November 4\_8, 2002. EXPOAVIGA (Barcelona, Spain). Vaccine Efficacy. Laboratory and field trials.
- Other CONFERENCE PRESENTATIONS (about vet medicinal products): De la Fuente R. and Bullido R. Adeverse effects and factors influencing the response to vaccination (Reacciones adversas y factores que influyen en la respuesta a la vacunación . SEOC\_EXOPOL Ciudad Real, 2012 :