

BIOGRAPHY

27th June 2012



Title and name

Dr. Ilaria Capua

Nationality

Italy

Panel

Animal Health and Welfare (AHAW)

Education

PhD "Avian Influenza: review on epidemiology and aspects of pathogenesis and control", 2007, University of Padova (Italy)

Post-graduate diploma in "Animal health and hygiene of animal breeding and production", 1991, University of Pisa (Italy)

DVM (Graduation with excellence 110/110 e lode), 1989, University of Perugia, (Italy)

Scientific and risk assessment experience

-I am currently in charge of a group of 70+ conducting diagnosis and research on viral diseases of animals. My Division hosts the national and international (OIE/FAO) reference laboratories for Animal Influenza, Newcastle Disease, Rabies and the OIE Collaborating Centre for Diseases at The Human Animal Interface.

- We collaborate in the management of avian influenza and Newcastle Disease epidemics at a national and international level and are active in science-to-policy working groups on animal influenzas.

- We are partners of several international collaborations on the molecular evolution of influenza viruses, on interspecies transmission and on pathogenesis studies in animal models. The group also focuses on the development and evaluation of novel intervention strategies for avian influenza, Newcastle disease and rabies including vaccination.

-We are involved in consortia to assess the risk of the emergence of a human pandemic virus from the animal reservoir and are part of several international consortia to develop pan reactive vaccines against influenza infections in humans.

- Coordination/ participation in a total of 45 projects, among which EU funded projects FLUAID and FLUTRAIN (as coordinator), FLUPATH, FLU-LAB-NET, FLURESIST, FLUBIRD, EPIZONE, RabMedControl, EPIZONE (as partner) and OIE funded twinning projects.

Main scientific publications

Areas of publication: influenza viruses, vaccination, viral diseases, interspecies transmission, public health

List of the top 10 publications

Bavagnoli L., Dundon W.G., Garbelli A., Zecchin B., Milani A., Parakkal G., Baldanti F., Paolucci S., Volmer R., Tu Y., Wu C., Capua I., Maga G. (2011) "The PDZ-Ligand and Src-Homology Type 3 Domains Epidemic Avian Influenza Virus NS1 Protein Modulate Human Src Kinase Activity during Viral Infection"; PloS One. 6(11):e27789.

Cattoli G., Fusaro A., Monne I., Coven F., Joannis T., Abd El-Hamid H.S., Hussein A.A., Cornelius C., Amarín N.M., Mancin M., Holmes E.C., Capua I. (2011) "Evidence for differing evolutionary dynamics of A/H5N1 viruses among countries applying or not applying avian influenza vaccination in poultry"; Vaccine. 29(50):9368-9375.

Cattoli G., Milani A., Temperton N., Zecchin B., Burattin A., Molesti E., Aly M.M., Arafa A.S., Capua I. (2011) "Antigenic Drift In H5N1 avian influenza in poultry is driven by mutations in major antigenic sites of the hemagglutinin molecule analogous to human influenza"; J Virol. 85(17):8718-24.

Rigoni M., Toffan A., Viale E., Mancin M., Cilloni F., Bertoli E., Salomoni A., Marciano S., Milani A., Zecchin B., Capua I., Cattoli G. (2010) "The mouse model is suitable for the study of viral factors governing transmission and pathogenesis of highly pathogenic avian influenza (HPAI) viruses in mammals" Vet Res. 41(5):66.

Keiner B., Maenz B., Wagner R., Cattoli G., Capua I., Klenk H.D. (2010) "Intracellular distribution of NS1 correlates with the Infectivity and interferon antagonism of an Avian Influenza virus (H7N1)"; J Virol. 84(22):11858-11865. IF: 5.189

Cattoli G., Monne I., Fusaro A., Joannis T.M., Lombin L.H., Aly M.M., Arafa A.S., Sturm-Ramirez K.M., Couacy-Hymann E., Awuni J.A., Batawui K.B., Awoume K.A., Aplogan G.L., Sow A., Ngangnou A.C., ElNasri Hamza I.M., Gamatiè D., Dauphin G., Domenech J.M., Capua I. (2008) "Highly pathogenic avian influenza virus H5N1 in Africa a comprehensive phylogenetic analysis and molecular characterization of isolates from 2006 to early 2008"; PlosOne. 4(3):1-9.

Capua I., Kajaste-Rudnitski A., Bertoli E., Vicenzi E. (2009) "Pandemic vaccine preparedness-have we left something behind?"; PLoS Pathog. 5(6):e1000482.

Monne I., Joannis T. M., Fusaro A., De Benedictis P., Lombin L. H., Ularamu H., Egbuji A., Solomon P., Obi T.U., Cattoli G., Capua I. (2008) "Reassortant Avian Influenza Virus (H5N1) in Poultry, Nigeria, 2007"; Emerg Infect Dis. 14(5):865.

Monne I., Ormelli S., Salviato A., De Battisti C., Bettini F., Salomoni A., Drago A., Zecchin B., Capua I., Cattoli G. (2008) "Development and Validation of A one step real time PCR Assay for the

simultaneous detection of H5, H7, and H9 subtype avian influenza viruses"; J Clin Microbiol. 46(5):1769-1773.

Salzberg S.L., Kingsford C., Cattoli G., Spiro D.J., Janies D.A., Aly M.M., Brown I.H., Couacy-Hymann E., De Mia G.M., Dung D.H., Guercio A., Joannis T., Ali M.S.A., Osmani A., Padalino I., Saad D.M., Savic V., Sengamalay A.N., Yingst S., Zaborsky J., Zorman-Rojs O., Ghedin E., Capua I. (2007) "Genome analysis linking recent European and African influenza (H5N1) viruses"; Emerg Infect Dis; 13(5):713-718.