

Ph.D. POSITION AVAILABLE

- 4 Year Ph.D. Position at Neiker-Tecnalia, Vitoria, Spain
- Multidisciplinar project in: Poultry welfare/behavior, Artificial Intelligence, Modeling, Production, Sustainability.
- Opportunities for paid stays abroad
- Starting January 2015 (aprox.)
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i-BOSP: Intelligent software to support sustainable strategies and decisions in the meat chicken production chain

iBOSP project will integrate last technological approaches with traditional broiler production to provide the meat chicken industry with an intelligent system able to support an efficient and sustainable broiler production. The model of sustainable production will be based on considerations for animal welfare and environmental responsibility. By means of the most novel Artificial Intelligence algorithms, knowledge models to optimally manage broiler processes will be generated, offering key recommendations to help industry to design better production strategies. Likewise, it will facilitate to the players of the production chain such as farmers, veterinarians and technical personnel crucial information to optimize production. Thus, iBOSP would be able to provide the necessary tools to assure efficient and sustainable production according to a production model based in social responsibility. Features of interest will be identified according to best management practices and most recent scientific knowledge in broiler production, health and welfare provided by the animal scientists' team. This team will also provide additional tools for broiler welfare and health assessment, and will play a key role as inter-communicator with the meat chicken industry and in the system validation process. In addition, the team counts with the support and contributions from the broiler industry (represented by AN Avicola Melida), providing also the opportunity for field testing that will be essential for the development of a realistic, field adapted, system. Thanks to this knowledge framework, theoretical models will be designed and improved by using data-driven modeling and self-learning capacities, able to produce a system with capacity to automatically determine the real time status of the monitored processes with accuracy, and acting in consequence. Resulting system will be integrated and tested into key phases of the meat chicken production chain: hatchery, farm and slaughterhouse. Results obtained will be disseminated and presented in related forums, focusing on the national and international poultry industry. iBOSP also presents opportunities for further application and evolution of the system by means of collaboration with international partners in Brazil, the world's second larger country in broiler production.