

WORKSHOP PDCA 2022



15th SEPTEMBER 2022

ICBAS - University of Porto
Salão Nobre

TO BE HELD BOTH IN PERSON AND VIRTUALLY

9h00 a.m.

Western European Time Zone (WET)

Mandatory registration via the following link:

<https://forms.gle/G4n3ttLt2Zj9Lk529>

About the Animal Science Doctoral Programme

The Doctoral Programme in Animal Science aims to promote advanced training in the field of Animal Science through research. This programme was designed to achieve levels of excellence, with the supervision of researchers associated with research institutions, including several associated laboratories of recognized merit at national and international levels in the different specialities of Animal Science.

The School of Medicine and Biomedical Sciences (ICBAS) is a Faculty of the University of Porto recognized for its multidisciplinary characteristics within the Life Sciences, which is reflected in its innovative educational, scientific and cultural project, that presides over the formation of the institution. Being the only Portuguese School, which offers courses in Medicine and Veterinary Medicine in parallel with Biochemistry, Bioengineering and Aquatic Sciences, ICBAS is particularly well placed to effectively contribute to the new challenges of Animal Science: the sustainable production of safe and healthy animal food products, using innovative production techniques able to respect animal welfare, increase efficiency and protect the environment.

The SANFEED Programme (Sustainable Animal Nutrition and Feeding) is a branch of the ANIMAL SCIENCE Programme in an industrial setting. It has been funded by the Portuguese Foundation for Science and Technology (FCT) since 2014/2015 and is coordinated by ICBAS. SANFEED establishes a unique collaboration between three exceptionally strong R&D institutions of international excellence in the University of Porto (ICBAS, CIMAR & REQUIMTE), and ten highly selected industrial partners with strong R&D activity (AGROS, ALGAPLUS, ALLMICROALGAE, ALLTECHADITIVOS, CAVC, ADM PORTUGAL S.A., PREMIX, SEA8, SENSE TEST, SOJA DE PORTUGAL and SPAROS).

HOST INSTITUTIONS



SANFEED INDUSTRIAL PARTNERS



FUNDING



AGENDA

09:00 • WORKSHOP OPENING

Henrique Cyrne Carvalho (ICBAS Director)

Scientific Committee of the Doctoral Programme in Animal Science:

Luísa Valente (ICBAS / CIIMAR)
António Mira da Fonseca (ICBAS / REQUIMTE-LAQV)
Ana Rita Cabrita (ICBAS / REQUIMTE-LAQV)
Benjamín Costas (CIIMAR / ICBAS)
Maria Leonor Nunes (CIIMAR)

Accompaniment Committee of the Doctoral Programme in Animal Science:

Luísa Valente (ICBAS / CIIMAR)
Luís Mira Vieira (ICBAS)
Joana Fernandes (ICBAS / REQUIMTE-LAQV / SOJA DE PORTUGAL)
Ricardo Pereira (CIIMAR/CBQF-UCP/ICBAS)

09:15 • THE ANIMAL SCIENCE DOCTORAL PROGRAMME IN ICBAS - UNIVERSITY OF PORTO, ASSOCIATE RESEARCH CENTERS AND INDUSTRIAL PARTNERS,
Luísa Valente (Animal Science Doctoral Programme Director)

SESSION I

Chairs: Margarida Maia (ICBAS/REQUIMTE-LAQV) & Sofia Costa Lima (FFUP/REQUIMTE-LAQV)

09:30 • Plenary lecture: THE RUMEN MICROBIOME AND ITS RELEVANCE IN LIVESTOCK HUSBANDRY TO MITIGATE CLIMATE CHANGE, David R. Yanez-Ruiz Estación Experimental del Zaidín (EEZ), Consejo Superior de Investigaciones Científicas (CSIC)

10:15 • Oral presentation 1 Emission of greenhouse gases and ammonia from naturally ventilated dairy buildings, Raquel Rodrigues (LAQV-REQUIMTE/ICBAS/CAVC,CRL/AGROS,UCRL)

10:30 • Oral presentation 2 Whole conventional, whole pasture-based, and fat-free cow's milk: effect in mRNA expression of human gastric epithelium, Susana Pinho (LAQV-REQUIMTE/ICBAS/SOJA DE PORTUGAL)

10:45 • Oral presentation 3 Effect of dietary algae blend supplementation to intensive reared lambs and of gender on meat quality and intramuscular fatty acid composition, Cátia Mota (LAQV-REQUIMTE/ICBAS/ALGAPLUS/ALLMICROALGAE)

11:00 • COFFEE BREAK & POSTER SESSION

Chairs: Alexandra Correia (i3s) & Rita Azeredo (CIIMAR)

11:45 • Oral presentation 4 Assessment of *in vivo* immune and health status parameters in Holstein-Friesian calves fed milk replacer supplemented with *Chlorella vulgaris*, Ana Pedro (ICBAS/i3S/LAQV-REQUIMTE/CAVC/ADM Portugal)

12:00 • Oral presentation 5 Empowering evaluation of intestinal health status merging traditional and cutting-edge technologies, Mariana Ferreira (ICBAS/CIIMAR)

12:15 • Oral presentation 6 Early mucosal immune responses in European seabass (*Dicentrarchus labrax*) following *Tenacibaculum maritimum* infection, Inês Ferreira (CIIMAR/ICBAS/IBMC/i3S)

12:30 • Oral presentation 7 Dietary modulation strategies in gilthead seabream (*Sparus aurata*) following intestinal inflammation, Carla Teixeira (CIIMAR/ICBAS/SPAROS)

12:45 • LUNCH & POSTER SESSION

SESSION II

Chairs: Marta Monteiro (CIIMAR) & Andreia Silva (ICBAS/CIIMAR)

14:15 • Plenary lecture: HOW CAN WE SOLVE THE GLOBAL RAW MATERIAL CRISIS? - Margareth Øverland (Norwegian University of Life Sciences, NMBU)

15:00 • Oral presentation 8 Impact of partial and total fishmeal replacement by defatted *Tenebrio molitor* larvae meal on short- and mid-term homeostatic regulation of food intake in European sea bass (*Dicentrarchus labrax*), Ana Basto (CIIMAR/ICBAS/PHYStoFISH-U. Vigo)

15:15 • Oral presentation 9 Evaluation of sardine cooking wastewaters as feed intake modulators for European seabass diets, Daniela Resende (CIIMAR/ICBAS/CBQF-UCP/GreenUPorto/Sense Test)

15:30 • Oral presentation 10 Towards optimal calibration of Nile tilapia growth models, Andreia Raposo (ICBAS/SPAROS)

15:45 • Oral presentation 11 Accumulation of microplastics in tissues of farmed European seabass and risks for the consumers, Ricardo Matias (ICBAS/CIIMAR)

16:00 • ROUND TABLE: “A PRODUÇÃO ANIMAL NUM CENÁRIO DE ALTERAÇÕES CLIMÁTICAS”

Chair: Manuel Molinos (Jornal de Notícias)

Participants: Ingrid Van Dorpe (Premix); Tiago Aires (Sorgal); Raquel Rodrigues (LAQV-REQUIMTE / ICBAS / CAVC, CRL / AGROS, UCRL); Carolina Castro (Flatlantic), Ana Sofia Santos (CoLab FeedInov)

17:00 • BEST PARTICIPANT, POSTER AND ORAL PRESENTATION AWARDS

Jury: Maria Leonor Nunes (CIIMAR), Ingrid Van Dorpe (Premix), Luís Mira Vieira (ICBAS), Ana Sofia Santos (CoLab FeedInov)

17:00 • WORKSHOP CLOSING

17:15 – Closed meeting with all PhD students and the Scientific committee (Foyer)

POSTER SESSION

- **Poster 1** - Does *Salicornia ramosissima* improves immune response of European seabass? Ana Garcia (CIIMAR/ICBAS)
- **Poster 2** - *Chlorella vulgaris* extracts as modulators of gilthead seabream juveniles (*Sparus aurata*) health status and inflammatory response, Bruno Reis (CIIMAR/SPAROS/Sorgal/ICBAS)
- **Poster 3** - New ingredients with functional properties from *Hermetia illucens* and *Tenebrio molitor* through the enzymatic hydrolysis with corolase, Daniela Leal (LAQV-REQUIMTE/ICBAS)
- **Poster 4** - Central immune and neuroendocrine gene expression patterns of European seabass (*Dicentrarchus labrax*) undergoing chronic inflammation and fed tryptophan supplemented diets, Diogo Peixoto (ICBAS/CIIMAR/INMAR-CEIMAR)
- **Poster 5** - Marine sources in dog feeding: nutritive value and palatability of squid meal and shrimp hydrolysate, Joana Fernandes (LAQV-REQUIMTE/ICBAS/SOJA DE PORTUGAL)
- **Poster 6** - Tolerance signatures to *Perkinsus olseni* parasite infection in *Ruditapes decussatus* clams, João Estêvão (CIIMAR/ICBAS)
- **Poster 7** - Beyond methionine: new tools to improve fish robustness and disease resistance, Inês Carvalho (CIIMAR/ICBAS/CISA-INIA-CSIC)
- **Poster 8** - Pineapple byproducts in aquafeeds: impact on the radical-scavenging potential of diets and stress-response of farmed European seabass, Ricardo Pereira (CIIMAR/CBQF-UCP/ICBAS)

