

UNIVERSITA' DEGLI STUDI DI PADOVA


Application of the photocatalytic remediation system in Rainbow trout grow-out (RAS freshwater system)




The UNIPD unit is part of the Department of Comparative Biomedicine and Food Science (BCA). The unit has great experience in aquaculture focused on fish welfare, throughout the evaluation of stress and growth markers. Integrate competences of anatomy and physiology are used to evaluate influences of environmental and farming condition on farmed and wild fish.




In this project, the UNIPD unit will be responsible for application of the photocatalytic remediation system in Rainbow trout grow-out (RAS freshwater system) and, by means of a morphological and physiological approach, will perform the following analyses on trout and seabream:





- growth;
- health status;
- welfare assessment;
- larval/fry deformities;
- fillet quality and safety.

Moreover, UNIPD will be responsible for dissemination activities.

NAME	DEPARTMENT	BRIEF DESCRIPTION
<p>Prof. Cristina Ballarin</p> 	<p>Department of Comparative Biomedicine and Food Science (BCA)</p> <p>Viale dell'Università 16, 35020 Legnaro (PD) Italy</p>	<p>Biology, PhD in Biochemistry and Biophysics, Associate Professor in Veterinary Anatomy (SSD VET/01) at BCA.</p> <p>Her research interests focus on the detection of factors involved in fish stress response and growth, by histological and immune-histochemical analysis of tissues from aquaculture species. She also studies the impact of nutritional supplement intake on the gut response, in broiler chickens and fishes.</p> <p>Expertise & skills: https://www.researchgate.net/profile/Cristina-Ballarin https://www.scopus.com/authid/detail.uri?authorId=6603365373 E-mail: cristina.ballarin@unipd.it</p>

<p>Prof. Daniela Bertotto</p> 	<p>Department of Comparative Biomedicine and Food Science (BCA)</p> <p>Viale dell'Università 16, 35020 Legnaro (PD) Italy</p>	<p>Natural Sciences, PhD in Veterinary Sciences, Associate Professor of Veterinary Physiology (SSD VET/02) at BCA.</p> <p>Her research focus mainly in fish physiology, stress and growth biomarkers, and welfare both in wild and reared conditions as well as fish reproduction to support breeding programs, through gametes and larvae quality assessment.</p> <p>Expertise & skills: https://www.researchgate.net/profile/Bertotto-Daniela https://sciprofiles.com/profile/1068694 Email: daniela.bertotto@unipd.it</p>
<p>Dr. Martina Bortoletti</p> 	<p>Department of Comparative Biomedicine and Food Science (BCA)</p> <p>Viale dell'Università 16, 35020 Legnaro (PD) Italy</p>	<p>MSc in Marine Biology, PhD in Veterinary Science and Food Safety. Researcher in Veterinary Physiology (SSD VET/02).</p> <p>Her research interests the evaluation of fish growth and welfare using physiological and behavioural indicators and radioimmunoassay, histological and molecular biology techniques, as well as the application of nanotechnologies in aquaculture.</p> <p>Expertise & skills: https://www.researchgate.net/profile/Martina-Bortoletti E-mail: martina.bortoletti@unipd.it</p>
<p>Prof. Luca Fasolato</p> 	<p>Department of Comparative Biomedicine and Food Science (BCA)</p> <p>Viale dell'Università 16, 35020 Legnaro (PD) Italy</p>	<p>Veterinary Medicine, Associated Professor on Food inspection of food products (SSD VET/04).</p> <p>His research interests could be summarized into three major topics: 1) Food microbiology ecology and foodborne bacteria characterization. 2) Alternative methods to improve food safety and quality 3) New methods for food authentication. Many of his works are characterized by a multidisciplinary approach in many fields of food safety/quality especially seafood products.</p> <p>Expertise & skills: https://www.researchgate.net/profile/Luca-Fasolato Email: luca.fasolato@unipd.it</p>

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<p>Dr. Laura Gregoletto</p> 	<p>Department of Comparative Biomedicine and Food Science (BCA)</p> <p>Viale dell'Università 16, 35020 Legnaro (PD) Italy</p>	<p>MSc in Marine Biology, PRIMA FishPhotoCAT Research grant.</p> <p>Her research aims at investigating the efficiency of a smart photocatalytic remediation system to improve water quality, fish production and environmental sustainability in aquaculture systems.</p> <p>Email: laura.gregoletto@unipd.it</p>
<p>Prof. Lisa Maccatrozzo</p> 	<p>Department of Comparative Biomedicine and Food Science (BCA)</p> <p>Viale dell'Università 16, 35020 Legnaro (PD) Italy</p>	<p>Biology, Associate Professor in Veterinary Anatomy (SSD VET/01) at BCA.</p> <p>Her research interests regard expression analysis of genes involved in skeletal muscle myogenesis, growth factors and stress genes in different organisms such as: teleost fishes, and some mammals of veterinary interest.</p> <p>Expertise & skills: https://www.researchgate.net/profile/Lisa-Maccatrozzo E-mail: lisa.maccatrozzo@unipd.it</p>

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Biological Sciences, PhD in Cellular and Molecular Biology, Full Professor of Veterinary Anatomy (SSD VET/01) at BCA.

He has long lasting experience in: i) evaluation of development and growth in fish of interest in aquaculture; ii) evaluation of stress parameters in veterinary animals using morphological, physiological and biomolecular approaches.

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Master degree in Agricultural Sciences, PhD in Animal Science, Full professor of Poultry and Rabbit Science, Aquaculture (SSD AGR/20).

Research topics include sustainable aquaculture systems (aquaponics, molluscs production); fish feeding based on protein and fat sources alternative to fish meals and oils (including insects); effect of rearing and slaughtering systems on welfare, freshness, and quality of fish and molluscs.

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