

Manuel Gesto

Year of birth: 1979

ORCID

0000-0002-9136-7857

Degrees

MSc (Spanish equivalent: "DEA"), University of Vigo, Spain (2004).

PhD, University of Vigo, Spain (2008).

Positions

Researcher, Section for Aquaculture, DTU Aqua, Technical University of Denmark (2015-2018).

Senior Researcher, Section for Aquaculture, DTU Aqua, Technical University of Denmark (2018-present).

Research area

Fish stress physiology and neurophysiology, mainly regarding the neuroendocrine and behavioral responses, from cells to organismal levels, to different factors including both aquaculture (handling, poor water quality, stock density, etc.) and environmental (pollutants, global warming) stressors. Fish health and welfare in the aquaculture context, including the development and use of fish-based welfare indicators for monitoring purposes at laboratory and farm facilities.

Distinctions and awards

Graduate student scholarship, University of Vigo, Spain (2003-2004).

PhD student scholarship, University of Vigo and Xunta de Galicia, Spain (2004-2007).

Postdoctoral fellowship, Fundação para a Ciência e a Tecnologia, Portugal (2009-2010).

Postdoctoral fellowships, Xunta de Galicia, Spain (2014, 2010-2012, 2008-2009).

Web of Science publications: 54. **Citations:** 1242. **h-index:** 24. **Other publications:** 13.**Book chapters:** 3. **Scientific conference contributions:** > 50.**Evaluation tasks, 2016-present**

Member of review committee for The Polish Academy of Sciences (Poland) and CSIC (Uruguay).

Referee (115+ assignments) for a number (> 20) of international peer-reviewed journals including Aquaculture, PLoS ONE, Journal of Experimental Biology, Frontiers in Physiology, Scientific Reports, Physiology and Behavior, Aquatic Toxicology.

Journal guest editor: Physiology & Behavior. Associate Editor: Frontiers in Aquatic Physiology (2022-)

PhD censor: Univ. Vigo, Spain (2018, 2021), Univ. Namur, Belgium (2020) and DTU, Denmark (2020, 2021, 2x2022).

Educational tasks at academical level, 2016-presentDTU course MSc: Fish physiology in aquaculture (responsible).**Supervision**

Supervision of BSc students/trainees: 2; Supervision of MSc students: 7; Supervision of PhD students: 2 (co-supervisor).

Grants (competitive), ongoing or finished in 2016 or later

Nordic Council of Ministers – Nordic Network on Fish Welfare (Coordinator)

FP7, ANIHWA ERA-NET: Welfare, health and individuality in farmed fish (WIN-FISH) (PI and coordinator).

GUDP: New possibilities for growth and robustness in organic aquaculture (Robustfish) (PI).

GUDP: Re-thinking organic trout production (ShelterFish) (PI).

Selected publications

Gesto M, de Jesus Gregersen KJ, Pedersen L-F (2022). Effects of ozonation and foam fractionation on rainbow trout condition and physiology in a small-scale freshwater recirculation aquaculture system. *Aquaculture* 557: 738312

Gesto M, Jokumsen A (2022). Effects of simple shelters on growth performance and welfare of rainbow trout juveniles. *Aquaculture* 551: 737930.

Gesto M (2021). Characterization of the neuroendocrine stress status as part of the multiparametric assessment of welfare in fish. In: *Cellular and molecular approaches in fish biology* (ISBN: 978-0-12-822273-7). Elsevier-Academic Press, London, UK. pp. 285-308.

Alfonso S, **Gesto M**, Sadoul B (2021). Temperature increase and its effects on fish stress physiology in the context of global warming. *Journal of Fish Biology* 98: 1496-1508.

Gesto M, Madsen L, Andersen NR, El Kertaoui N, Kestemont P, Jokumsen A & Lund I (2021). Early performance, stress- and disease-sensitivity in rainbow trout fry (*Oncorhynchus mykiss*) after total dietary replacement of fish oil with rapeseed oil. Effects of EPA and DHA supplementation. *Aquaculture*, 536, 736446. DOI: 10.1016/j.aquaculture.2021.736446.

Gesto M, Zupa W, Alfonso S, Spedicato MT, Lembo G & Carbonara P (2020). Using acoustic telemetry to assess behavioral responses to acute hypoxia and ammonia exposure in farmed rainbow trout of different competitive ability. *Applied Animal Behaviour Science*, 230, 105084. DOI: 10.1016/j.applanim.2020.105084.

Gesto M (2019). Consistent individual competitive ability in rainbow trout as a proxy for coping style and its lack of correlation with cortisol responsiveness upon acute stress. *Physiology & Behavior*, 208, 112576. DOI: 10.1016/j.physbeh.2019.112576.

Hoseini SM, Pérez-Jiménez A, Costas B, Azeredo R & **Gesto M** (2019). Physiological roles of tryptophan in teleosts: Current knowledge and perspectives for future studies. *Reviews in Aquaculture*, 11, 3-24. DOI: 10.1111/raq.12223.

Gesto M, Liu D, Pedersen LF, Meinelt T, Straus DL & Jokumsen A (2018). Confirmation that pulse and continuous peracetic acid administration does not disrupt the acute stress response in rainbow trout. *Aquaculture*, 492, 190-194. DOI: 10.1016/j.aquaculture.2018.04.009.