Special Issue

Hormonal Control of Fish Reproduction: Insights From Molecular Endocrinology

Message from the Guest Editor

Reproduction in fish is a very complex process, which is regulated by the hypothalamus–pituitary–gonadal (HPG) axis. The hypothalamus controls the pituitary by releasing gonadotropin-releasing hormone (GnRH), which stimulates the pituitary gland to release gonadotropins (luteinizing hormone (LH) and follicle-stimulating hormone (FSH)). These peptide hormones act on gonads (testes and ovaries) through their specific receptors, prompting the production of sex steroids from the Lydic cells of the testis (testosterone) and the theca and granulosa cells of the ovary (estrogen), which are crucial for gametogenesis (sperm and egg production) and other reproductive processes. Endocrine disruptors (EDCs) can significantly disrupt these pathways and induce reproductive disparities in fish. Understanding the hormonal control of fish reproduction is crucial for improving aquaculture practices.

Guest Editor

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Message from the Editor-in-Chief

Animals is an on-line open access journal that was first published in 2011. *Animals* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. *Animals* is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2024, ranks 15/86 (Q1) in 'Agriculture, Dairy & Animal Science'; 21/170 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

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