



## María del Carmen Sarasquete Reiriz (1956-2021)

Dr Carmen Sarasquete passed away on 3 July 2021 at the early age of 65. She was born on 5 May 1956 in Ribeira, A Coruña. Her passion for the sea started at a very young age, spurred by fishing and visits to ports and fish markets with her father and the smell of the sea in her native Galicia. Later, the documentaries by Jacques-Yves Cousteau sustained her passion and marked her scientific career, which led her to become a top-ranked scientist in the field of aquaculture in Spain.

Her beginnings as a researcher at the Institute of Marine Sciences of Andalusia (ICMAN-CSIC) date back to 1978, when she obtained a scholarship from the Caja de Ahorros de Galicia (a savings bank) to complete her bachelor's degree thesis on *Artemia salina*. Shortly after, she obtained a predoctoral fellowship from the Spanish National Research Council (CSIC) and began to carry out her doctoral thesis on the cytomorphology and cytochemistry of the blood of the marine toadfish, *Halobatrachus didactylus*, at ICMAN-CSIC under the supervision of Dr Manuel Gutiérrez. She obtained her PhD in 1982 and in 1986 she gained a staff scientist position at ICMAN-CSIC, where she continued her career.

Sarasquete was director of ICMAN-CSIC for a long period, carrying out her main research work in the histology, histophysiology and histopathology of marine species of interest in aquaculture. She was a pioneer in her approach to knowing each and every one of the systems, organs and tissues of the commercial marine fish species she studied, including their functional capacities (vision, digestion, metabolism, motility, respiration, etc.) from when they reproduce in captivity until the juveniles are born, develop and grow. Most of her scientific activity focused on the selection of histo-physiological biomarkers and their application to the study of fish diseases and their origin (environmental, infectious or nutritional). She worked on phytochemicals present in dry food when fishmeal is replaced by plants as the main source of dietary protein and their role as potential growth promoters, endocrine regulators and immune system modulators.

Sarasquete participated in numerous European, Spanish and regional projects in basic and applied aquaculture. She published more than 200 Science Citation Index papers and supervised over 25 doc-

toral theses throughout her career. In her role as a teacher, she participated in the drafting of the curriculum of the degree in Marine and Environmental Sciences at the University of Cádiz (UCA), in addition to being coordinator and professor of the Reproduction, Biosafety and Pathology in Aquaculture module of the ACUIPESCA-UCA master's degree. She was also a member of the academic committee of the doctoral programme in Marine Resources and Sustainability at the UCA.

Among many other merits and honours, she was a member-elect of the Royal Academy of Medicine and Surgery of Cádiz, a member-elect of the Artistic, Literary and Scientific Athenaeum of Cádiz and an advisory member of the authorized body of the ethics commit-

tee/bioethics subcommittee of the CSIC. Her main scientific objective was to use her research to help consolidate modern aquaculture as a competitive industry and to give farmed marine products the visibility they deserve among consumers.

Her enthusiasm, her integrity, her rigour and her love for her work have left their mark on those of us who knew her. We thank her for her generosity and good work, and for having transmitted her passion and accompanied us on our way.

The entire marine scientific community will miss her, and her legacy will not be forgotten.

J.B. Ortiz-Delgado  
Institute of Marine Sciences of Andalusia, CSIC