

In the past 20 years, fish cytogenetics has become an essential tool in fields as diverse as systematics and evolution, conservation, aquaculture and more recently, genomics. This book is organized in four sections (systematics and evolution; biodiversity conservation; stock assessment and aquaculture; and genomics) covering the major fields of present fish cytogenetic research. The book provides a comprehensive picture of the ongoing research around the world. Due to the diversified arrays of themes approached, including speciation and evolution, biodiversity and conservation and genomics, the book is addressed not only to specialists in cytogenetics but to all scientists interested in fish biology.

THE EDITORS

Eva Pisano is Permanent Researcher and Professor of Cytochemistry and Histochemistry at the Department of Biology, University of Genova, Italy. Her research interests center on the chromosome changes during evolution and adaptation of polar fishes. As secretary of the European Science Foundation Network "Fishes of the Antarctic Ocean", she edited the book *Fishes of Antarctica: A biological overview*, Springer, 1998.

Catherine Ozouf-Costaz is a research scientist at CNRS, at the National Museum of Natural History, Paris, France. She has been studying fish chromosomes for over twenty years. Her research has centered upon the chromosome changes during the adaptive radiation of the Antarctic-fish suborder Notothenioidei a project she did in collaboration with Eva Pisano, and more recently of African cichlids. She has been responsible for the molecular cytogenetic part of the French whole genome sequencing project of *Tetraodon nigroviridis*. She is also interested in structural genomics and evolution of sex determining genes in teleosts, namely *Tilapia* group and the model species *Xiphophorus maculatus*.

Fausto Foresti is Permanent Researcher and Professor of Cell Biology at the Department of Morphology, São Paulo State University (UNESP), Brazil. His current research interest is the genetic variability of neotropical fish fauna using both the cytogenetic and molecular approach. He has published more than a hundred papers in this field. Since he is responsible for genetic studies of the Pantanal fish fauna, his research work includes characterization of gene banks for better knowledge of population structure and for conservation purposes, mainly in Characiformes and Siluriformes. He is also involved in studies using DNA markers and chromosome polymorphisms to assess relationships among fish populations in migrating species.

B.G. Kapoor was formerly Professor and Head of Zoology in Jodhpur University, India. He has co-edited several books including *Sensory Biology of Jawed Fishes*, 2001 (with T.J. Hara); *Fish Adaptations*, 2003 (with A.L. Val); *Catfishes*, 2003 (with G. Arratia, M. Chardon and R. Diogo); *Communication in Fishes*, 2006 (with F. Ladich, S.P. Collin and P. Moller). All the foregoing titles are from Science Publishers, Enfield, NH, USA. Dr. Kapoor has also co-edited *The Senses of Fish: Adaptations for the Reception of Natural Stimuli*, 2004 (with G. van der Emde and J. Mogdans); and co-authored *Ichthyology Handbook*, 2004 (with B. Khanna), both from Springer, Heidelberg.



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