



**FRANCESCA GHERARDI**  
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Francesca Gherardi was an Associate Professor in the Department of Biology, University of Florence, Italy, specializing in the ecology, ethology, and systematics of decapod crustaceans, especially that of the crayfish. She passed away in Florence, at the age of 57 after nobly bearing for three years the onslaught of lung cancer.

In 32 years of active research, Francesca wrote over 220 scientific articles, mostly on aquatic and marine decapods, and scores of book chapters (see publication list in the Appendix). During the last months of her life Francesca bravely struggled to complete several manuscripts on aquatic

invasions and their impacts on the environment and on human health. She produced two seminal volumes on aquatic invasions: “Crayfish in Europe as Alien Species. How to make the best of a bad situation?” with co-editor David Holdich (1999); and “Biological Invaders in Inland Waters: Profiles, Distribution, and Threats” (2007). Both publications arose from international workshops she organized in Florence. These volumes are an essential basis for the study of freshwater invasions in Europe. She was elected Secretary-treasurer (2000-2002) and President (2004-2006) of the International Association of Astacology

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(IAA), and she was the recipient of the IAA's "Distinguished Astacologist" award in 2010 for her achievements.

Francesca was born in Florence in 1955; she enjoyed a carefree childhood with her siblings, Ugo and Simonetta. Her love for living beings was obvious early, but she claimed her partiality for aquatic organisms dawned when, as a teenager, she became enchanted by the colorful denizens of a tropical aquarium kept by a friend. That friend, Roberto Pieraccini, became her close companion.

In 1979, she received her "Laurea," the equivalent to a M.Sc. degree, for her thesis entitled "Aggressiveness, dominance hierarchies and individual recognition in decapods." This was followed in 1987 by a Ph.D. in Animal Biology (Ethology) from the University of Florence for her research on the eco-ethology of freshwater crab *Potamon fluviatile*. Both theses were prepared under the supervision of Prof. Marco Vannini. In the following decade, Francesca travelled widely, spending months at a time on a succession of research fellowships. She went to Kenya (1988, 1995, studying the eco-ethology of mangrove decapods); in Israel (1990, examining symbiosis in coral reefs); to the United States and separately to the Maldives (1992, 1993, 1994, focusing on the systematics of Indian Ocean pagurids); Spain (1998, researching the eco-ethology of *Procambarus clarkii*); South Africa (1998, larval development of mangrove crabs); Portugal (1999, 2000, continuing her work on the eco-ethology of *Procambarus clarkii*); and finally in Australia (2000, exploring the human impact on a population of *Cherax tenuimanus* in southwestern Australia).

During these active years Francesca published extensively as well as served as a reviewer for some 107 journals: from 'Acta Adriatica' to 'Zoology' and in 1995 she assumed duties as an Associate Editor of the Journal of Crustacean Biology, where she served admirably until the time of her death. In 1992, she was appointed researcher in her alma mater, the Department of Biology of the University of Florence, where over the past two decades she supervised 32 M.Sc. and 10 Ph.D. students. As an educator, Francesca was attuned to her students, tutoring them firmly, yet with the genuine care and concern of an older sister. Many of her former students, now researchers themselves, recall the hours with her spent discussing science and life. Francesca was also associated with the pan-European ERASMUS network in systematic biology beginning in the early 1990s, which had funding for over a decade to encourage the development of human capital and mobility in the field of systematics amongst the participating institutes.

In recognition of her contributions to her chosen field she was much sought after as a member of international scientific bodies, becoming a member of the 'Invasive Species Specialist Group' (ISSG), IUCN Species Survival Commission (SSC), and the Freshwater Crab and Crayfish Specialist Group, IUCN, as well as nominated IUCN expert for the compilation of the Red List of Mediterranean region freshwater crabs and crayfish.

Francesca was widely acknowledged for the depth and extent of the body of research work, but she was especially beloved for her joy of life and sunny disposition. She felt at ease pretty much anywhere, whether in a tent in Kenya or in a high-rise in New York, but home was her house

overlooking the beautiful Tuscan countryside. She will long be remembered for a remarkable career in science.

#### ACKNOWLEDGEMENTS

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#### APPENDIX: PUBLICATIONS BY FRANCESCA GHERARDI LIST OF ARTICLES ARRANGED CHRONOLOGICALLY 1981-2013

##### Research Papers

- Vannini, M., and F. Gherardi. 1981. Dominance and individual recognition in *Potamon fluviatile* (Decapoda, Brachyura): possible role of visual cues. *Marine Behaviour and Physiology* 8: 13-20.
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- Vannini, M., F. Gherardi, and M. Pirillo. 1983. Aggressive communication in *Potamon fluviatile* (Herbst) (Decapoda, Brachyura): role of size, colour, and other visual cues. *Crustaceana* 45: 203-209.
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