



Marco Stagioni

PHD TECHNICIAN AND ADJUNCT PROFESSOR

Marine Biology and Fisheries Lab - Dept. BiGeA - Alma Mater Studiorum University of Bologna

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Research activities and skills

- National and international research project on demersal resources, small-big pelagic fishes: monitoring, management, sampling and ageing.
- Onboard fisheries researcher: scientific vessel Andrea (MEDITS project - GSA17) planning, management, data collection and analysis, scientific devices maintenance.
- Trophic net and stomachs contents analysis of demersal fishes.
- Population genetic data analysis.
- Taxonomist for main marine systematic groups (Crustacea, Mollusca, Fishes, ecc.)
- Hard part sample processing for sclerochronology (embedding, cutting, grinding, polishing, ecc.).
- Geometrical and elliptic fourier analysis for morphometric studies.
- Laser ablation - microchemical analysis of otoliths.
- Optical microscope and SEM digital images acquisition, processing and analysis.
- Univariate and multivariate statistical analyses with open source R software and related ecology, spatial mapping, morphometry, genetic and advanced plotting packages.
- Literate programming and reporting with R, RStudio and Rmarkdown languages.

Work experience

Showed only last 20 years

Marine Biology and Fisheries Lab. - Dept. Bigea - Alma Mater Studiorum University of Bologna

PHD TECHNICIAN AND ADJUNCT PROFESSOR

Fano (PU), Italy

from dec 2013

Marine Biology and Fisheries Lab. - Dept. Bigea - Alma Mater Studiorum University of Bologna

PHD DOCTORATE GRANT

Fano (PU), Italy

Jan 2011 - Dec 2013

Marine Biology and Fisheries Lab. - Dept. Bigea - Alma Mater Studiorum University of Bologna

TECHNICIAN FIXED TERM CONTRACT

Fano (PU), Italy

May 2007 - Dec 2010

Marine Biology and Fisheries Lab. - Dept. Bigea - Alma Mater Studiorum University of Bologna

FELLOWSHIP

Fano (PU), Italy

Feb 2005 - Apr 2007

Education

Alma Mater Studiorum University of Bologna

PHD PROGRAMME DEGREE - ENVIRONMENTAL SCIENCE: CONSERVATION AND MANAGEMENT OF NATURAL RESOURCES

Ravenna, Italy

2014

Alma Mater Studiorum University of Bologna

MASTER'S DEGREE - ENVIRONMENTAL SCIENCE — MARINE ECOLOGY

Ravenna, Italy

2000

ITIS G. Marconi

SECONDARY SCHOOL DIPLOMA IN CHEMISTRY

Forlì, Italy

1994

Teaching

- from 2011
 - Fisheries resources biology: **Fisheries biology module**

Adriamed

STUDY GROUP ON INTERCALIBRATION OF FISH OTOLITH READING (ANCHOVY) (SG-OTH)

Ancona, Italy

2017

Adriamed

WORKSHOP ON AGEING VALIDATION METHODOLOGY OF MULLUS SPECIES (WKVALMU)

Conversano (BA), Italy

2017

Adriamed

STUDY GROUP ON INTERCALIBRATION OF FISH OTOLITH READING (ANCHOVY) (SG-OTH)

Split, Croatian

2017

COISPA

WORKING GROUP ON ALADYM (AGE-LENGTH BASED DYNAMIC MODEL)

Bari, Italy

2011

ICES - IFREMER

WORKSHOP OF NATIONAL AGE READINGS COORDINATORS - WKNARC

Boulogne sur Mer, France

2011

Alma Mater Studiorum University of Bologna

STATISTICAL METHODS FOR ENVIRONMENTAL SCIENCES: TIME SERIES ANALYSIS

Ravenna, Italy

2011

Adriamed

TRAINING COURSE ON: VIRTUAL POPULATION ANALYSIS (VPA) METHODS IN FISH STOCK ASSESSMENT

Rome, Italy

2010

Publications

1. Leone, A., Arnaud-Haond, S., Babbucci, M., Bargelloni, L., Coscia, I., Damalas, D., Delord, C., Franch, R., Garibaldi, F., Macias, D., Mariani, S., Martinsohn, J., Megalofonou, P., Micarelli, P., Nikolic, N., Prodohl, P. A., Sperone, E., Stagioni, M., Zanzi, A., ... Tinti, F. (2024). Population Genomics of the Blue Shark, *Prionace glauca*, Reveals Different Populations in the Mediterranean Sea and the Northeast Atlantic. *EVOLUTIONARY APPLICATIONS*, 17(9). <https://doi.org/10.1111/eva.70005>
2. Corti, R., Piazza, E., Armelloni, E. N., Ferrari, A., Geffen, A. J., Maes, G. E., Masnadi, F., Savojardo, C., Scarcella, G., Stagioni, M., Tinti, F., Zemella, A., & Cariani, A. (2024). A multidisciplinary approach to describe population structure of *Solea solea* in the Mediterranean Sea. *FRONTIERS IN MARINE SCIENCE*, 11. <https://doi.org/10.3389/fmars.2024.1372743>
3. Ferrari, A., Crobe, V., Cannas, R., Leslie, R. W., Serena, F., Stagioni, M., Costa, F. O., Golani, D., Hemida, F., Zaera-Perez, D., Sion, L., Carbonara, P., Fiorentino, F., Tinti, F., & Cariani, A. (2023). To Be, or Not to Be: That Is the Hamletic Question of Cryptic Evolution in the Eastern Atlantic and Mediterranean *Raja miraletus* Species Complex. *ANIMALS*, 13(13). <https://doi.org/10.3390/ani13132139>
4. Di Crescenzo, S., Ferrari, A., Barria, C., Cannas, R., Cariani, A., Drewery, J., Fernandez-Peralta, L., Giordano, D., Hidalgo, M., Kousteni, V., Marino, I. A. M., Massi, D., Moura, T., Rey, J., Sartor, P., Scacco, U., Serena, F., Stagioni, M., & Tinti, F. (2022). First evidence of population genetic structure of the deep-water blackmouth catshark *Galeus melastomus* Rafinesque, 1810. *FRONTIERS IN MARINE SCIENCE*, 9. <https://doi.org/10.3389/fmars.2022.953895>
5. Mancuso, A., Yam, R., Prada, F., Stagioni, M., Goffredo, S., & Shemesh, A. (2023). Oxygen and carbon isotope variations in *Chamelea gallina* shells: Environmental influences and vital effects. *GEOBIOLOGY*, 21(1), 119–132. <https://doi.org/10.1111/gbi.12526>
6. Palazzo, Q., Stagioni, M., Raaijmakers, S., Belleman, R. G., Prada, F., Hammel, J. U., Fermani, S., Kaandorp, J., Goffredo, S., & Falini, G. (2022). Multiscale analysis on otolith structural features reveals differences in ontogenesis and sex in *Merluccius merluccius* in the western Adriatic Sea. *ROYAL SOCIETY OPEN SCIENCE*, 9(5). <https://doi.org/10.1098/rsos.211943>
7. Riccioni, G., Stagioni, M., Manfredi, C., Tinti, F., Piccinetti, C., & Libralato, S. (2022). DNA metabarcoding suggests dietary niche partitioning in the Adriatic European hake. *SCIENTIFIC REPORTS*, 12(1). <https://doi.org/10.1038/s41598-022-05346-0>
8. Catalano, G., Crobe, V., Ferrari, A., Baino, R., Massi, D., Titone, A., Mancusi, C., Serena, F., Cannas, R., Carugati, L., Hemida, F., Manfredi, C., Melis, R., Scarcella, G., Sion, L., Stagioni, M., Tinti, F., & Cariani, A. (2022). Strongly structured populations and reproductive habitat fragmentation increase the vulnerability of the Mediterranean starry ray *Raja asterias* (Elasmobranchii, Rajidae). *AQUATIC CONSERVATION-MARINE AND FRESHWATER ECOSYSTEMS*, 32(1), 66–84. <https://doi.org/10.1002/aqc.3739>

9. Palazzo, Q., Stagioni, M., Raaijmakers, S., Belleman, R. G., Prada, F., Fermani, S., Hammel, J. U., Kaandorp, J., Goffredo, S., & Falini, G. (2021). Ecomorphological, behavioural and physiological patterns in otoliths. *ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES*, 77(S), C1068.
10. Cheli, A., Mancuso, A., Azzarone, M., Fermani, S., Kaandorp, J., Marin, F., Montroni, D., Polishchuk, I., Prada, F., Stagioni, M., Valdre, G., Pokroy, B., Falini, G., Goffredo, S., & Scarponi, D. (2021). Climate variation during the Holocene influenced the skeletal properties of *Chamelea gallina* shells in the North Adriatic Sea (Italy). *PLOS ONE*, 16(3). <https://doi.org/10.1371/journal.pone.0247590>
11. Peristeraki, P., Bitetto, I., Carbonara, P., Carlucci, R., Certain, G., De Carlo, F., Gristina, M., Kamidis, N., Pesci, P., Stagioni, M., Valls, M., & Tserpes, G. (2019). Investigation of spatiotemporal patterns in mean temperature and mean trophic level of MEDITS survey catches in the Mediterranean Sea. *SCIENTIA MARINA*, 83(1), 165–174. <https://doi.org/10.3989/scimar.04835.12A>
12. Mancuso, A., Stagioni, M., Prada, F., Scarponi, D., Piccinetti, C., & Goffredo, S. (2019). Environmental influence on calcification of the bivalve *Chamelea gallina* along a latitudinal gradient in the Adriatic Sea. *SCIENTIFIC REPORTS*, 9. <https://doi.org/10.1038/s41598-019-47538-1>
13. Riccioni, G., Stagioni, M., Piccinetti, C., & Libralato, S. (2018). A metabarcoding approach for the feeding habits of European hake in the Adriatic Sea. *ECOLOGY AND EVOLUTION*, 8(21), 10435–10447. <https://doi.org/10.1002/ece3.4500>
14. Ferrari, A., Tinti, F., Maresca, V. B., Velona, A., Cannas, R., Thasitis, I., Costa, F. O., Follesa, M. C., Golani, D., Hemida, F., Helyar, S. J., Mancusi, C., Mulas, A., Serena, F., Sion, L., Stagioni, M., & Cariani, A. (2018). Natural history and molecular evolution of demersal Mediterranean sharks and skates inferred by comparative phylogeographic and demographic analyses. *PEERJ*, 6. <https://doi.org/10.7717/peerj.5560>
15. Leon, A., Urso, I., Damalas, D., Martinsohn, J., Zanzi, A., Mariani, S., Sperone, E., Micarelli, P., Garibaldi, F., Megalofonou, P., Bargelloni, L., Franch, R., Macias, D., Prodohl, P., Fitzpatrick, S., Stagioni, M., Tinti, F., & Cariani, A. (2017). Genetic differentiation and phylogeography of Mediterranean-North Eastern Atlantic blue shark (*Prionace glauca*, L. 1758) using mitochondrial DNA: panmixia or complex stock structure? *PEERJ*, 5. <https://doi.org/10.7717/peerj.4112>
16. Riccioni, G., Cariani, A., Ferrara, G., Cannas, R., Melis, R., Stagioni, M., Addis, P., & Tinti, F. (2017). Evolutionary constraints limiting the variation of Expressed Sequence Tag-linked microsatellite loci, prevent the detection of local adaptation in Mediterranean Bluefin tuna. *FISHERIES RESEARCH*, 190, 157–163. <https://doi.org/10.1016/j.fishres.2017.02.011>
17. Montanini, S., Stagioni, M., Benni, E., & Vallisneri, M. (2017). Ontogenetic changes in otolith morphology and shape analyses in *Chelidonichthys cuculus* (Linnaeus, 1758) and *Chelidonichthys lucerna* (L., 1758). *JOURNAL OF APPLIED ICHTHYOLOGY*, 33(2), 217–220. <https://doi.org/10.1111/jai.13299>
18. Cariani, A., Messinetti, S., Ferrari, A., Arculeo, M., Bonello, J. J., Bonnici, L., Cannas, R., Carbonara, P., Cau, A., Charilaou, C., El Ouamari, N., Fiorentino, F., Follesa, M. C., Garofalo, G., Golani, D., Guarniero, I., Hanner, R., Hemida, F., Kada, O., ... Tinti, F. (2017). Improving the Conservation of Mediterranean Chondrichthyans: The ELASMOMED DNA Barcode Reference Library. *PLOS ONE*, 12(1). <https://doi.org/10.1371/journal.pone.0170244>
19. Montanini, S., Stagioni, M., Benni, E., & Vallisneri, M. (2017). Feeding strategy and ontogenetic changes in diet of gurnards (Teleostea: Scorpaeniformes: Triglidae) from the Adriatic Sea. *EUROPEAN ZOOLOGICAL JOURNAL*, 84(1), 356–367. <https://doi.org/10.1080/24750263.2017.1335357>
20. Gizzi, F., Caccia, M. G., Simoncini, G. A., Mancuso, A., Reggi, M., Fermani, S., Brizi, L., Fantazzini, P., Stagioni, M., Falini, G., Piccinetti, C., & Goffredo, S. (2016). Shell properties of commercial clam *Chamelea gallina* are influenced by temperature and solar radiation along a wide latitudinal gradient. *SCIENTIFIC REPORTS*, 6. <https://doi.org/10.1038/srep36420>
21. Frodella, N., Cannas, R., Velona, A., Carbonara, P., Farrell, E. D., Fiorentino, F., Follesa, M. C., Garofalo, G., Hemida, F., Mancusi, C., Stagioni, M., Ungaro, N., Serena, F., Tinti, F., & Cariani, A. (2016). Population connectivity and phylogeography of the Mediterranean endemic skate *Raja polystigma* and evidence of its hybridization with the parapatric sibling *R. montagui*. *MARINE ECOLOGY PROGRESS SERIES*, 554, 99–113. <https://doi.org/10.3354/meps11799>
22. Montanini, S., Stagioni, M., Valdre, G., Tommasini, S., & Vallisneri, M. (2015). Intra-specific and inter-specific variability of the sulcus acusticus of sagittal otoliths in two gurnard species (Scorpaeniformes, Triglidae). *FISHERIES RESEARCH*, 161, 93–101. <https://doi.org/10.1016/j.fishres.2014.07.003>

23. Vallisneri, M., Tommasini, S., Stagioni, M., Manfredi, C., Isajlovic, I., & Montanini, S. (2014). DISTRIBUTION AND SOME BIOLOGICAL PARAMETERS OF THE RED GURNARD, CHELIDONICHTHYS CUCULUS (ACTINOPTERYGII, SCORP AENIFORMES, TRIGLIDAE) IN THE NORTH-CENTRAL ADRIATIC SEA. *ACTA ICHTHYOLOGICA ET PISCATORIA*, 44(3), 173–180. <https://doi.org/10.3750/AIP2014.44.3.01>
24. Milano, I., Babbucci, M., Cariani, A., Atanassova, M., Bekkevold, D., Carvalho, G. R., Espineira, M., Fiorentino, F., Garofalo, G., Geffen, A. J., Hansen, J. H., Helyar, S. J., Nielsen, E. E., Ogden, R., Patarnello, T., Stagioni, M., Consortium, F., Tinti, F., & Bargelloni, L. (2014). Outlier SNP markers reveal fine-scale genetic structuring across European hake populations (*Merluccius merluccius*). *MOLECULAR ECOLOGY*, 23(1), 118–135. <https://doi.org/10.1111/mec.12568>
25. Riccioni, G., Stagioni, M., Landi, M., Ferrara, G., Barbujani, G., & Tinti, F. (2013). Genetic Structure of Bluefin Tuna in the Mediterranean Sea Correlates with Environmental Variables. *PLOS ONE*, 8(11). <https://doi.org/10.1371/journal.pone.0080105>
26. Stagioni, M., Montanini, S., & Vallisneri, M. (2013). Feeding habits of anglerfish, *Lophius budegassa* (Spinola, 1807) in the Adriatic Sea, north-eastern Mediterranean. *JOURNAL OF APPLIED ICHTHYOLOGY*, 29(2), 374–380. <https://doi.org/10.1111/jai.12148>
27. Stagioni, M., Montanini, S., & Vallisneri, M. (2012). Feeding of tub gurnard *Chelidonichthys lucerna* (Scorpaeniformes: Triglidae) in the north-east Mediterranean. *JOURNAL OF THE MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM*, 92(3), 605–612. <https://doi.org/10.1017/S0025315411000671>
28. Vallisneri, M., Montanini, S., & Stagioni, M. (2012). Size at maturity of triglid fishes in the Adriatic Sea, north-eastern Mediterranean. *JOURNAL OF APPLIED ICHTHYOLOGY*, 28(1), 123–125. <https://doi.org/10.1111/j.1439-0426.2011.01777.x>
29. Pasolini, P., Ragazzini, C., Zaccaro, Z., Cariani, A., Ferrara, G., Gonzalez, E. G., Landi, M., Milano, I., Stagioni, M., Guarniero, I., & Tinti, F. (2011). Quaternary geographical sibling speciation and population structuring in the Eastern Atlantic skates (suborder Rajoidea) *Raja clavata* and *R. straeleni*. *MARINE BIOLOGY*, 158(10), 2173–2186. <https://doi.org/10.1007/s00227-011-1722-7>
30. Vallisneri, M., Stagioni, M., Montanini, S., & Tommasini, S. (2011). Body size, sexual maturity and diet in *Chelidonichthys lucerna* (Osteichthyes: Triglidae) from the Adriatic Sea, north eastern Mediterranean. *ACTA ADRIATICA*, 52(1), 141–148.
31. Stagioni, M., Montanini, S., & Vallisneri, M. (2011). FEEDING HABITS OF EUROPEAN HAKE, MERLUCCIIUS MERLUCCIIUS (ACTINOPTERYGII: GADIFORMES: MERLUCCIIDAE), FROM THE NORTHEASTERN MEDITERRANEAN SEA. *ACTA ICHTHYOLOGICA ET PISCATORIA*, 41(4), 277–284. <https://doi.org/10.3750/AIP2011.41.4.03>
32. Montanini, S., Stagioni, M., & Vallisneri, M. (2010). Diet of the grey gurnard, *Eutrigla gurnardus* in the Adriatic Sea, north-eastern Mediterranean. *CYBIUM*, 34(4), 367–372.
33. Vallisneri, M., Montanini, S., & Stagioni, M. (2010). Length-weight relationships for the family Triglidae in the Adriatic Sea, northeastern Mediterranean. *JOURNAL OF APPLIED ICHTHYOLOGY*, 26(3), 460–462. <https://doi.org/10.1111/j.1439-0426.2009.01389.x>
34. Vallisneri, M., & Stagioni, M. (2008). Assessment of reproductive cycle in common sole by citometry. *CYTOMETRY PART A*, 73A(1), 76.