

Francesco Ferretti

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Education

- Ph.D. in Marine Ecology, Dalhousie University, Halifax, NS, Canada. 2011
Supervisors: Dr. R.A. Myers, Dr. H. Lotze, and Dr. A. Rosenberg.
- University Laurea degree (equivalent of Msc) in Marine Biology, *summa cum laude*, Polytechnic University of Marche, Ancona, Italy. 2003
Supervisors: Dr. G. Bavestrello, Dr. M. Vacchi and Dr. S. Clo'.

Professional experience

Academic Positions

- Assistant Professor, Department of Fish and Wildlife Conservation, Virginia Tech September 2019 – pres.
- Affiliated Faculty, Global Change Center, Virginia Tech 2020 – pres.
- Affiliated Faculty, Center of Coastal Studies, Virginia Tech 2020 – pres.
- Research Associate, Hopkins Marine Station, Stanford University October 2016 – August 2019

Ecology and management of very large marine protected areas; analyses of telemetry data and stock assessment of sharks and other large marine predators; innovative approaches to combat illegal fishing in marine reserves and the high seas.

- Post-doctoral Fellow, Hopkins Marine Station, Stanford University July 2015 – September 2016

Stock assessment of reef shark populations for developing anti-poaching satellite- and radio-tagging technologies to aid monitoring and enforcement in remote large marine protected areas. *Advisor*: Dr. Barbara Block (*Stanford University*).

- Post-doctoral Fellow, Hopkins Marine Station, Stanford University September 2011 – June 2015

Reconstructing baselines of structure and population levels of shark assemblages in natural ecosystems, quantifying the magnitude of change that occurred because of human perturbation, and identifying patterns of change. *Advisor*: Dr. Fiorenza Micheli (*Stanford University*).

- Post-doctoral Fellow, Dalhousie University January 2011 - March 2011

Working on global shark abundance baselines. *Advisors*: Dr. Heike Lotze and Dr. Boris Worm (*Dalhousie University*)

Consultancy and Technical Advising Positions

- Consultant for the European Commission – JRC December 2017 – January 2018

Data exploration and analysis of large trawl survey databases and commercial catch and effort electronic archives.

- Consultant for NMFS - Pacific Islands Fisheries Science Center October 2011

Review of shark predation mitigation as a tool for conservation of the Hawaiian monk seal

- Shark Specialist for the IUCN. September 2003 – pres.

Technical advice on elasmobranchs' conservation; review and provide input to SSC technical documents and CITES listing proposals; advice and provide material for species conservation programs and workshops; working on Red List Assessments.

- **Biostatistician**, EVOMED project. **August 2009 - August 2010**

Analysis of time series of catch per unit effort from fishery independent data. *Project director*: Dr. Paolo Sartor, CIBM, 4, Viale Nazario Sauro, 57128 Livorno (Italy)

Editorial Boards

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- **Associate Editor, Frontiers in Marine Science** **2022 – Present**

Research Assistantships

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- **Research Assistant, Pew Global Shark Assessment.** **August 2003 - December 2003**

Data gathering analysis and presentation of results. *Supervisor*: Dr. Ransom Myers (Dalhousie University)

- **Internship, Dalhousie University.** **April 2003 - July 2003**

Training in statistical modeling, data gathering, analysis and presentation of results within the BIODAQUA project. *Supervisor*: Dr. Ransom Myers (Dalhousie University)

Teaching Experience

- **Instructor** – Advanced Fisheries Management FIW 5714G. **2022 - pres.**
Virginia Tech
- **Instructor** – Fisheries Management FIW 4714. Virginia Tech. **2020 – pres.**
- **Co-instructor** – Principles in Fish and Wildlife Conservation FIW 2114. Virginia Tech. **2021 – pres.**
- **Co-instructor** - Scientific Computing for Ecologists, Biologists and Environmental Scientists BIOS 248. Hopkins Marine Station, Stanford University. **October 2015**
- **Instructor** - course targeted to international PhD students, post-docs and researchers: “An introduction to Generalised Linear Models and extensions using R”. Department of Environmental Sciences, University of Bologna. **June 2014**
- **Instructor**, First Training Event within the Monitoring of Mediterranean Marine Protected Areas (MMMPA) project - Principles of experimental design applied to marine protected areas management. Marine protected area of Tavolara and Punta Coda Cavallo, Olbia, Italy **September - October 2012**
- **Co-instructor**, Synthesis in Ecology 275 H, Hopkins Marine Station, Stanford University **January - April 2012**
- **Teaching Assistant**, Analysis of Biological Data BIOL 4062-5062 Dalhousie University **January - April 2007**

- **Teaching Assistant**, Introductory Ecology BIOL 2060, Dalhousie University September - December 2006
- **Teaching Assistant**, Dalhousie Integrated Science Programme (DISP), Dalhousie University December 2005 - January 2006

Supervising Experience

PhD Students

Chiara Gambardella (PhD Marine Ecology, Polytechnic University of Marche, Italy, 2022 - present)
Brendan Shea (PhD in Fish and Wildlife Conservation [FWC], Virginia Tech, 2020 - present), **Jeremy Jenrette** (MSc in FWC, VT, 2020 - present), **Stefano Moro** (PhD in Ecology, University La Sapienza, Rome, Italy, 2018 - 2022), **Zac Yung-Chun Liu** (Stanford University, Geospatial Engineering, 2018 - 2020), **Filippo Bargnesi** (Marine Ecology, Polytechnic University of Marche, Italy, 2016 - 2019); **Rodrigo Barreto** (Marine Biology, University of Recife, Brazil, 2013 -2015); **Camilla Novaglio** (Quantitative Marine Science, University of Tasmania, Australia, 2013 - 2016); **Azzurra Bastari** (Marine Ecology, Polytechnic University of Marche, Italy, 2013 - 2016)

Honor and Master Students

Amritha Subramanian (MS-CE, Computer Engineering [CE], VT, 2022 - present), **Pranav Chimote** (MCS, Computer Science [CS], VT, 2020 - 2021), **Chiara Gambardella** (MSc Marine Ecology, Polytechnic University of Marche, Italy, 2020 - 2021), **Beatrice Pellegrino** (MSc Biology, University of Pisa, Italy, 2019-2021), **Caterina Bergonzini** (MSc Biology, University of Bologna, Italy, 2018 - 2021), **Emma Gee** (MSc Biology, Stanford University, 2018 - 2019), **Stefano Moro** (MSc in Biology, University La Sapienza, Rome, Italy, 2014 - 2017); **Alexandria Blackwell** (CSUMB, MSc Biology, Summer 2015); **Annie Adelson** (BSc Biology, Stanford University, 2012 - 2015); **Emanuel Mazzilli** (MEng CE, University of Reggio Emilia, Italy, Spring – Summer 2013); **Jacopo Beccacece** (BSc Marine Ecology, Polytechnic University of Marche, Italy, 2012 - 2013); **Gregory Britten** (BSc Biology and Statistics, Dalhousie University, 2010 - 2011)

Undergraduate Interns

Annabelle Fulwood (FIW, VT, Fall 2022), **Grant Miller** **Zac** (FIW, VT, Fall 2022), **Wendel** (Aerospace and Ocean Engineering [AOE], Fall 2021 – pres.), **Katie Gilbert** (AOE, Fall 2021 – pres.) **John Blake** (Fish and Wildlife Conservation [FIW], Fall 2021 – pres.), **Katie Busick** (FIW, 2021 - 2022), **Annie Webster** (Animal Science, VT, 2021 – 2022), **Morgan Karns** (FIW, VT, Fall 2021 – Spring 2022), **Lindsay Bomgardner** (FIW, VT, Fall 2020 – pres.), **Lauren Morris** (Biology, Virginia Tech, Fall 2020 – pres.), **Gregory Weaver** (Computer Science, Stanford University, Summer 2017 and 2018), **Zeke Tuszynski** (UCSB, Biology, Summer 2018), **Edgar Sandoval**, **Daniel Diaz**, **Brian De Anda**, and **Arturo Lopez** (CSUMB, Computer Science, September 2014 – May 2015); **Mariela Ceja**, **Elias Ramirez**, **Alcides Sorto**, **Adilene Costante**, **Brayanne Reyes Ron** (Computer Science, CSUMB, September - December 2014); **Parker Phillips** (Statistics and Computer Science, Stanford University, Summer 2013); **Lauren Daly** (UC Berkley, Communication Science, 2013); **Andy Alvarez** (CSUMB, Computer Science, summer 2103); **Owen O’Neal**, **Erin Bauman**, and **Alex Alifimoff** (Stanford University, Summer 2013)

Skills and Competencies

Languages: Italian (mother tongue), English (fluent), working knowledge of Spanish and French.

Computer: Excellent computer literacy. Able to work in DOS, Windows, Mac OS X, and Unix/Linux operating systems. Knowledge of the whole suite of Microsoft Office programs. Able to program with different statistical (R, S-plus, SAS, Systat, Win/OpenBUGS, JAGS, Stan), mathematical (Matlab, Maple), geographic data processing (Generic Mapping Tools, ArcGIS, Google Earth Engine), database management (SQL within MySQL, PostgreSQL, Google BigQuery, and MS Access), editing (LATEX, Pandoc, RMarkdown), version control systems (git), web site compiling (HTML, CSS, PHP, Drupal, Javascript, Wordpress, Markdown, Jekyll), and general purpose programming languages (Bash, Perl, Awk, Python).

Technical: Broad experience in biometrics and data science. Proficient in statistical modeling both in a hypothesis testing and Bayesian frameworks. Able to compile, manipulate, integrate and analyze large datasets, and developing analytical approaches for estimating abundance and distribution of animal populations from multiple sources of data. Extensive experience in analyzing unbalanced datasets with a substantial portion of missing information, over-dispersed data, and cases of zero inflation. Broad experience in research synthesis and pseudo-experimental approaches (i.e. identifying natural experiments from exploited or perturbed ecosystems).

Publications

Journal articles and book chapters (= student author)*

Sala, E., Mayorga, J., Bradley, D., Cabral, R., Atwood, T., Auber, A., Cheung, W., Costello, C., **Ferretti, F.**, Friedlander, A., Gaines, S., Garilao, C., Goodell, W., Halpern, B.S., Hinson, A., Kaschner, K., Kesner-Reyes, J., Laprieur, F., Lubcenco, J., McGowan, L., Morgan, D. Mouillot, H., Palacios-Abrantes, J., Possingham, K. Rechberger, B. Worm. **2023**. Reply to MA: Global Effects of Marine Protected Areas on Food Security Are Unknown. *Accepted in Nature*.

Shea, B*, Bomgardner*, L., Gallagher, A., **Ferretti, F.** **2023**. Big Data Reveals Cryptic Mortality of Pelagic Sharks in Remote Island Shark Sanctuaries. **Science Advances** 9 (33)
<https://doi.org/10.1126/sciadv.adg3527>

Dunn, N., Curnick, D., Carbone, C., Carlisle, A., Chapple, T., Dowell, R., **Ferretti, F.**, Jacoby, D., Schallert, R., Steyaert, M., Tickler, D., Williamson, M., Block, B., Vavolainen, V. **2023**. Environmental DNA helps reveal reef shark distribution across a remote archipelago. **Ecological Indicators** 154, 110718. <https://doi.org/10.1016/j.ecolind.2023.110718>

McDevitt-Irwin, J., McCauley, D.M., Brumbaugh, D., Elmer, F., **Ferretti, F.**, Joyce, F. H., White, T., Wible, J., Micheli, F. **2023**. Consumers decrease variability across space and turnover through time during coral reef succession. **Oecologia** 202 (2), 431-443.

Atwood, T.B., Sala, E. Mayorga, J., Bradley, D., Cabral, R.B., Auber, A., Cheung, W., Ferretti, F., Friedlander, A.M., Gaines, S.D., Garilao, C. Goodell, W., Halpern, B. S., Hinson, A., Kaschner, K., Kesner-Reyes, K., Leprieur, F., McGowan, J., Morgan, L.E., Mouillot, D., Palacios-Abrantes, P., Possingham, H.P., Rechberger, K.D., Worm, B., Lubcenco, J. **2023**. Reply to MA: Quantifying the carbon benefits of ending bottom trawling. **Nature**, 617 (7960): E3-E5.

Jenrette*, J.F., Jenrette, J.L., Truelove, N.K., Moro, S., Dunn, N.I., Chapple, T.K., Gallagher, A.J., Gambardella*, C., Schallert, R., Shea*, B.D., Curnick, D.J. Block, B.A., **Ferretti, F.** **2023**. Detecting white sharks in the Mediterranean Sea with Environmental DNA. **Oceanography** 36 (Supplement 1)
<https://doi.org/10.5670/oceanog.2023.s1.28>

Andrzejczek, S., Lucas, T., Goodman, M., Hussey, N.,..., **Ferretti, F.**, Shea, B* ,..., Curnick, D. **2022**. Diving into the vertical dimension of elasmobranch movement ecology. **Science Advances**, 8(33).
[DOI: 10.1126/sciadv.abo17](https://doi.org/10.1126/sciadv.abo17)

- Sala, E., Mayorga, J., Bradley, D., Cabral, R., Atwood, T., Cheung, W., Costello, C., **Ferretti, F.** A. Friedlander, S. Gaines, C. Garilao, W. Goodell, B. S. Halpern, K. Kaschner, K. Kesner-Reyes, J. McGowan, L. Morgan, D. Mouillot, H. Possingham, K. Rechberger, B. Worm, J. Lubchenco. **2022**. Reply to “A path forward analyzing impacts of marine protected areas. *Nature*, 607(7917): E3–E4. <https://www.nature.com/articles/s41586-022-04776-0>
- Jenrette, J.* Liu, Z. Y. C., Chimote, P.*, Hastie, T., Fox, E., **Ferretti, F.** **2022**. Rapid shark detection and classification with machine learning. *Ecological Informatics*, 69, 101673. <https://doi.org/10.1016/j.ecoinf.2022.101673>
- Bargnesi***, F., Moro, S., Leone, A., Giovos, I. and **Ferretti, F.** **2022**. New technologies can support data collection on endangered shark species in the Mediterranean Sea. *MEPS*, 689:57-76. DOI: <https://doi.org/10.3354/meps14030>
- Jorgensen, S., Micheli, F., White, T.D., Van Houtan, K.S, Alfaro Shigueto, J., Andrzejaczek, S., Arnoldi, N.S., Baum, J.K.,Shea*, B.D...., **Ferretti, F.** **2022**. Emergent research and priorities for shark and ray conservation. *Endangered Species Research*. DOI: <https://doi.org/10.3354/esr01169>.
- Queiroz, N., Humphries, N.E., Couto, A., Vedor, M., Da Costa, I., Sequeira, A.M.M., Mucientes, G., Santos, A.M.,..., **Ferretti, F.** et al. **2021**. Reply to: Shark mortality cannot be assessed by fishery overlap alone. *Nature*. <https://doi.org/10.1038/s41586-021-03397-3>
- Queiroz, N., Humphries, N.E., Couto, A., Vedor, M., Da Costa, I., Sequeira, A.M.M., Mucientes, G., Santos, A.M.,..., **Ferretti, F.** et al. **2021**. Reply to: Caution over the use of ecological big data for conservation. *Nature*. <https://doi.org/10.1038/s41586-021-03464-9>
- Alto, E, **Ferretti, F.**, Schallert, R., Stockesbury, M., Loretta, M., Walter, J. and Block, B. **2021**. Stock-of-origin catch estimation of Atlantic bluefin tuna (*Thunnus thynnus*) based on observed spatial distributions. *Canadian Journal of Fisheries and Aquatic Sciences*, 78(8): 1193-1204. <https://doi.org/10.1139/cjfas-2019-0445>
- Sala, E., Mayorga, J., Bradley, D., Cabral, R., Atwood, T., Cheung, W., Costello, C., **Ferretti, F.** A. Friedlander, S. Gaines, C. Garilao, W. Goodell, B. S. Halpern, K. Kaschner, K. Kesner-Reyes, J. McGowan, L. Morgan, D. Mouillot, H. Possingham, K. Rechberger, B. Worm, J. Lubchenco. **2021** Reconciling biodiversity protection, food production, and climate mitigation in the global ocean. *Nature*, 592: 397-402. <https://www.nature.com/articles/s41586-021-03371-z>
- Williamson, M.J., Tebbs, E.J., Dawson, T.P., Curnick, D.J., **Ferretti, F.**, Carlisle, A.B., Chapple, T.K., Schallert, R.J., Tickler, D.M, Block, B.A. and Jacoby, D.M.P. **2021**. A novel method for analysing detection gaps in imperfect acoustic telemetry data to infer differential movements patterns in fish. *Ecology and Evolution*. <https://doi.org/10.1002/ece3.7226>
- Curnick, D., Andrzejaczek, S., Jacoby, D., Coffey, D., Carlisle, A., Chapple, T., **Ferretti, F.** ... & Collen, B. **2020**. Behaviour and ecology of silky sharks around the Chagos Archipelago and evidence of Indian Ocean wide movement. *Frontiers in Marine Science*.
- Hays GC, Koldewey HJ, ..., **Ferretti F** et al. **2020**. A review of a decade of lessons from one of the world’s largest MPAs: conservation gains and key challenges. *Marine Biology*. <https://doi.org/10.1007/s00227-020-03776-w>
- Serena, F., Abella, A.J., Barone, M., Bargnesi, F.*, Colloca, F., **Ferretti, F.**, Fiorentino, F., Jenrette, J.*, Moro, S.* **2020**. Species diversity, taxonomy and distribution of Chondrichthyes in the Mediterranean and Black Sea. *European Journal of Zoology*, 87(1): 497-536. <https://doi.org/10.1080/24750263.2020.1805518>
- White, T., **Ferretti, F.**, McCauley, D., Ong, T., Block, B., Micheli, F. and De Leo, G. **2020**. Tracking the response of industrial fishing fleets to large marine protected areas. *Conservation Biology*, 34(6): 1571-1578. <https://doi.org/10.1111/cobi.13584>
- Mancusi, C, R. Baino, M. Barone, C. Fortuna, L.Gil de Sola, G. Morey, M. N. Bradai, A. Kallianotis, A., **Ferretti et al.** **2020**. MEDLEM database, a data collection on large Elasmobranchs in the

- Mediterranean and Black seas. **Med. Mar. Sci.**, 21(2), 276-288.
<https://doi.org/10.12681/mms.21148>
- Curnick, D., Koldewey, H., Jones, K., Kemp, K., **Ferretti, F.** 2020. Interactions between a large marine protected area, pelagic tuna and associated fisheries. **Frontiers of Marine Science**, 7, 318
<https://doi.org/10.3389/fmars.2020.00318>
- Jacoby, D., **Ferretti, F.**, Freeman, R., Carlisle, A., Chapple, T., Curnick, D., Dale, J., Schallert, R., Tickler, D., and Block, B. 2020. Shark movement strategies influence poaching risk and can guide enforcement decisions in a large, remote marine protected area. **Journal of Applied Ecology**, 57:1782–179. <https://doi.org/10.1111/1365-2664.13654>
- Ferretti, F.**, Jacoby, D., White, T., Dent, F., Micheli, F., Rosenberg, A., Crowder, L., Block, B. 2020. Shark Fin Trade Bans and Sustainable Shark Fisheries. **Conservation Letters**.
<https://doi.org/10.1111/conl.12708>
- Williamson, M.J., Tebbs, E.J., Dawson, T.P., Curnick, D.J., **Ferretti, F.**, Carlisle, A.B., Chapple, T.K., Schallert, R.J., Tickler, D.M, Block, B. A., and Jacoby, D.M. 2020. Gap analysis of acoustic tracking data reveals spatial and temporal segregation in sympatric reef sharks. **Research Square Preprint**.
<https://doi.org/10.21203/rs.2.19727/v1>
- Leone, A., Puncher, G.N., **Ferretti, F** et al. 2020. Pliocene colonization of the Mediterranean by Great White Shark inferred from fossil records, historical jaws, phylogeographic and divergence time analyses. **Journal of Biogeography**. <https://doi.org/10.1111/jbi.13794>
- Bargnesi F. *, Gridelli, S., Cerrano, C., and **Ferretti, F.** 2020. Reconstructing the history of the sand tiger shark (*Carcharias taurus*) in the Mediterranean Sea. **Aquatic Conservation: Marine and Freshwater Ecosystems**, 30(5): 915-927. <https://doi.org/10.1002/aqc.3301>
- Bargnesi*, F., Lucrezi, S. and **Ferretti, F.** 2020. Opportunities from citizen science for shark conservation, with a focus on the Mediterranean Sea. **European Journal of Zoology**, 87 (1): 20-34.
<https://doi.org/10.1080/24750263.2019.1709574>
- Novaglio, C., A.D.M. Smith, S. Frusher, **F. Ferretti.** 2020. Identifying historical changes at the onset of exploitation to improve understanding of fishing impacts. **Aquatic Conservation: Marine and Freshwater Ecosystems**. <https://doi.org/10.1002/aqc.3264>
- Moro*, S., Jona-Lasinio, G., Block, B., Micheli, F., De Leo, G., Bottaro, M., Scacco, U., Serena, F. and **Ferretti, F.** 2020. Abundance and distribution of the white shark in the Mediterranean Sea. **Fish and Fisheries**. <https://doi.org/10.1111/faf.12432>
- Dunn, D., Harrison, A., Curtice, C., **Ferretti, F.** et al. 2019. The importance of migratory connectivity for global ocean policy. **Proceedings of the Royal Society of London, B**.
<https://doi.org/10.1098/rspb.2019.1472>
- Queiroz, N., Humphries, N.E., Couto, A., Vedor, M., Da Costa, I., Sequeira, A.M.M., Mucientes, G., Santos, A.M.,..., **Ferretti, F.** et al. 2019. Global spatial risk assessment of sharks under the footprint of fisheries. **Nature**. <https://doi.org/10.1038/s41586-019-1444-4>
- Carlisle, A., Tickler, D., Dale, J, **Ferretti, F.**, Curnick, D., Chapple, T., Schaller, R., Castleton, M. and Block, B. 2019. Estimating Space Use of Mobile Fishes in a Large Marine Protected Area With Methodological Considerations in Acoustic Array Design. **Frontiers in Marine Sciences**, 6:256.
<https://doi.org/10.3389/fmars.2019.00256>
- Jorgensen, S. J., Anderson, S., **Ferretti, F.**, Tietz, J., Chapple, T., Kanive, P., Bradley, R., Moxley, J. and Block, B. A. 2019. Killer whales redistribute white shark foraging pressure on elephant seals. **Sci. Rep.**, 9, 6153. <https://doi.org/10.1038/s41598-019-39356-2>
- White, T., **Ferretti, F.**, Kroodsmas, D., Hazen, E., Carlisle, A., Scales, K., Bogard, S. and Block, B. 2019. Predicted hotspots of overlap between highly migratory fishes and industrial fishing fleets in the Northeast Pacific. **Science Advances**, 5 (3), eaau3761.

- Kroodsma, D., Mayorga, J., Hochberg, T., Miller, N.A., Boerder, K., **Ferretti, F.**, Wilson, A., Bergman, B., White, T.D., Block, B.A., Woods, P., Sullivan, B., Costello, C., and Worm, B. **2018**. Response to Comment on “Tracking the global footprint of fisheries”. **Science**, 361 (6404), eaat7789.
- Elahi, R., **Ferretti, F.**, Bastari, A.*, Cerrano, C., Colloca, F., Kowalik, J., Ruckelshaus, M., Struck, A. and Micheli, F. **2018**. Leveraging vessel traffic data and a temporary fishing closure to inform marine management. **Frontiers in Ecology and the Environment**. <https://doi.org/10.1002/fee.1936>
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- Ferretti F**, Curnick D., Liu, K., Romanov E and Block B.A. **2018**. Shark baselines and the conservation role of remote coral reef ecosystems. **Science Advances**, 4: eaaq0333. <https://doi.org/10.1126/sciadv.aaq0333>
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- Bastari, A.*, Pica, D., **Ferretti, F.**, Micheli, M. and Cerrano, C. **2018**. Sea pens in the Mediterranean Sea: diversity distribution and opportunities for ecosystem recovery. **ICES J. Mar. Sci., fsy010**, <https://doi.org/10.1093/icesjms/fsy010>
- Bastari, A.*, Beccacece, J.*, **Ferretti, F.**, Micheli, F. and Cerrano, C. **2017**. Local ecological knowledge reveals temporal trends of benthic invertebrates of the Adriatic Sea. **Frontiers in Marine Science**, 4: 157. <https://doi.org/10.3389/fmars.2017.00157>
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- Ferretti, F.**, Lopez, A. *, and Sandoval, E. * **2015.** SharkPulse 2.02 application software for iOS. <https://itunes.apple.com/us/app/sharkpulse-v1.1/id673243556?mt=8>
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Seminars and Conference Talks

- Gee*, E., Romanov, E., Curnick, D., Block, B., **Ferretti, F.** Historical standardized CPUEs of seven shark species in the Indian Ocean with preliminary catch estimation. 19th Working party for ecosystem and by-catch of the Indian Ocean Tuna Commission. **La Réunion, France. September 11-15, 2023.**
- Ferretti, F.** From Data Deficient to Big Data in Shark Conservation. Human Dimension Working Group Workshop. IUCN Shark Specialist Group. **Online 5th-8th June 2023. Invited.**

- Ferretti, F.** Tracking sharks with Citizen Science, Data Science, and Collaborative Interdisciplinary Research. Workshop: la ricerca pubblica italiana a supporto della conservazione degli elasmobranchi del Mediterraneo. **Stazione Zoologica Anton Dohrn, Napoli, Italy. February 28th – March 1st, 2023**
- Ferretti, F.** IUU fishing: Socio-economic & Ecological impacts & mitigation measures. Guest Lecture for Galapagos study abroad class. Virginia Tech, **Blacksburg, VA. February 2nd, 2023.**
- Ferretti, F.** SeaQL lab research. Global Change Center annual retreat. Virginia Tech, **Blacksburg, VA. January 27th, 2023.**
- Ferretti, F.** Tracking Sharks with Citizen Science, Data Science, and Interdisciplinary Exploration. Disaster Resilience and Risk Management (DRRM) seminar series. Center for Coastal Studies at Virginia Tech, **Blacksburg, VA. October 25th, 2022.**
- Ferretti F.** From Data Deficient to Big Data in Shark Conservation. Sharks International 2022, online conference. **Valencia, Spain, online conference. October 10th – 14th, 2022.**
- Jenrette*, J., Z.Y.C Liu., Chimote* P., Hastie T., Fox E., and **Ferretti, F.** Shark detection and classification with machine learning. Sharks International 2022, online conference. **Valencia, Spain. October 10th – 14th, 2022.**
- Shea*, B.D., Gallagher, A.J., Bomgardner*, L.K., and **Ferretti, F.** “Using Big Data to test the effects of spatial protections in remote island shark sanctuaries” Sharks International, **Valencia, Spain, online conference. October 10th – 14th, 2022.**
- Ferretti, F.** From Data Deficient to Big Data. From Shore to the Abyss Project Panel: Artificial Intelligence (AI) for Shark Conservation. Ocean Exploration Trust and National Geographic live event. **Online and onboard of EV Nautilus off Hawaii, September 20th, 2022. Invited.**
- Ferretti, F.** Big Data, Satellite Remote Sensing, and New Technology for Ocean Transparency. Guest Lecture for the International Maritime Officers Course. US Coast Guard Training Center, Office of International Affairs, **Yorktown, VA. August 30th – 31st, 2022. Invited**
- Ferretti, F.** Tracking sharks with Citizen Science. Lunch Break Science Lecture Series, Science Museum of Virginia, **Richmond, VA. August 10th, 2022. Invited**
- Ferretti, F.** Chasing White Sharks in the Mediterranean Sea. Sharkproject's Ocean Night 2022. **Vienna, Austria, June 10th, 2022. Invited**
- Ferretti, F.** Big Data, Satellite Remote Sensing, and New Technology for Ocean Transparency. Environmental Security forum II. Challenges and Solutions to Complex Global Issues. Mariners' Museum and Park. **Newport News, VA. May 24th – 25th, 2022. Invited**
- Shea*, B.D., Gallagher, A.J., Bomgardner*, L.K., and **Ferretti, F.** “Using Big Data to test the effects of spatial protections in remote island shark sanctuaries” Ocean Sciences Meeting, **March 2, 2022.**
- Ferretti, F.** Chasing White sharks in the Mediterranean Sea. Explorers Club Exploration Storytelling Workshop and Grantee Virtual Reception. **January 14th, 2022.**
- Shea BD*, Gallagher AJ, Bombardner LK* and **Ferretti, F.** “Using Big Data to test the effects of spatial protection in remote island shark sanctuaries.” Presented at *Ocean Sciences Meeting 2022, Innovative Session IN02: Small Islands, Big Ocean, March 2, 2022.*
- Ferretti, F.** The Mediterranean Sea: Sawfish's Ecological Repellent or Rosetta Stone? Redlist Sawfish Reassessment, **16th – 19th November, 2021.**
- Williamson, MJ, Tebbs, EJ, Dawson, TP, Curnick, DJ, **Ferretti, F.**, Carlisle, AB, Chapple, TK, Schallert, RJ, Tickler, DM, Block, BA, and Jacoby, DMP. The impact of changing oceanic conditions and habitat stress on the movement connectivity of reef shark species. European Elasmobranch Association Meeting, **Leiden, The Netherlands, 2-5 November 2021.**
- Ferretti, F.** Chasing White Sharks in the Mediterranean Sea. Global Exploration Summit. Lisbon | Azores, Portugal, 6th-10th July, 2021. **Invited**
- Jenrette, J*, Liu, Z.Y.C., Hastie, T. and **Ferretti, F.** Data Mining Instagram for Tracking Global Shark Populations. Fisheries Society of the British Isles Symposium, **KU Leuven, Belgium, 5-8th July, 2021.**

- Jenrette, J.*, Liu, Z.Y.C., Hastie, T. and **Ferretti, F.** Data Mining Instagram for Tracking Global Shark Populations. International Marine Conservation Conference, **Kiel, Germany, 17-28 August, 2020.**
- Moro, S.*, Palma, M., Jona-Lasinio, G., Colloca, F., Gambardella, G*. and **Ferretti, F.** Using high-resolution density models to predict white sharks' hot spots in the Mediterranean Sea. *Poster Session, GRASPA-TIES 2021, Rome 7-9 June 2021* <https://www.youtube.com/watch?v=I7xDSSHWOwK>
- Gee, E.*, Romanov, E., Curnick, D., Block, B. and **Ferretti, F.** Shifting the Baseline Back: Characterizing Historical Species Declines and Changes in Community structure for Indian Ocean Sharks. International Marine Conservation Conference, **Kiel, Germany, 17-28 August 2020.**
- Ferretti, F.** Embracing the Big Data Revolution for Shark Conservation. Shark Week Webinar, Virginia Tech. August 14th, 2020. **Invited.**
- Ferretti, F.** Embracing the Big Data Revolution for Shark Conservation. School of Marine Science and Policy, University of Delaware. May 15th, 2020. Lewes, DE. **Invited.**
- Ferretti, F.** Big Data in Marine Conservation. Global Fishing Watch Training Workshop. September 30th – October 3rd, 2019, Gordon and Betty Moore Foundation, **Palo Alto, CA. Invited**
- Ferretti, F.** From Data Deficiency to Big Data in Shark Conservation. Old Dominion University, Center for Coastal Physical Oceanography. November 18th, 2019, Norfolk, VA. **Invited**
- Ferretti, F.** From Data Deficiency to Big Data in Shark Conservation. American Fishery Society – Virginia tech Chapter. October 29th, 2019. Department of Fish and Wildlife Conservation, Virginia Tech. **Invited**
- Ferretti, F.,** F. Bargnesi, S. Moro. SharkPulse. WWF Workshop: From Citizen Science to Implementation of Regulation for By-catch of Vulnerable Sharks and Rays in the Mediterranean Sea. 15 October 2019, Rende, Italy. **Invited**
- Ferretti, F.,** Z. Y. C. Liu, F. Bargnesi*, S. Moro*, C. Butner, S. Haddock, T. Hastie, S. Jorgensen, F. Micheli. SharkPulse: taking the pulse of global shark populations. European Elasmobranchs Association, 23th Annual Conference, 16-18 October 2019, Rende, Italy. **Invited**
- Bargnesi, F*, Moro, S.*, Leone, A., **Ferretti, F.** A world platform to support data collection on endangered shark species in the Mediterranean Sea. **European Elasmobranchs Association, 23th Annual Conference, 16-18 October 2019,** Rende, Italy.
- Moro, S.*, Jona-Lasinio, G., Block, B., Micheli, F., De Leo, G., Serena, F., Bottaro, M., Scacco, U. and **Ferretti, F.** Abundance and distribution of the white shark in the Mediterranean Sea. **European Elasmobranchs Association, 23th Annual Conference, 16-18 October 2019,** Rende, Italy.
- Cröbe, V., Bergonzini, C.*, Cilli, E., Ferrari, A., Leone, A., **Ferretti, F.,** Tinti, F., Cariani, A. Molecular identification of endangered marine predators by barcoding ancient museum rostra of Mediterranean sawfish populations (Chondrichthyes, Pristidae). **8th International Barcode of Life Conference,** 17-20 June 2019, Trondheim, Norway. Published in *Genome* 62(6): 364.
- Ferretti, F.** Big Data, Satellite Technology and Research Synthesis for Ocean Conservation. **Virginia Tech, Research Seminar.** 3 December 2018, Blacksburg, VA. **Invited**
- Ferretti, F.** Historical Ecology for Fisheries Management and Conservation. **Virginia Tech, Teaching Seminar.** 4 December 2018, Blacksburg, VA. **Invited**
- Bargnesi, F.*, Moro, S.*, Gridelli, S., and **Ferretti F.** A new global platform for collecting data on sharks for conservation assessments in the Mediterranean Sea. 1st International Scuba Diving Sustainability Workshop. 19-21 October 2018, Galata Museum, Genova, Italy.
- Bargnesi, F.*, Cerrano, C., Serena, F., Gridelli, S., Moro, S. *, and **Ferretti F.** New opportunities from Citizen Science for conservation assessments of the Mediterranean shark populations. 53rd European Marine Biology Symposium, 17-21 September 2018, Oostende, Belgium.

- Ferretti, F.** Shark baselines and the conservation role of remote coral reef ecosystems. Bertarelli Foundation Marine Science Symposium 2018. Royal Geographic Society, 11 September 2018, London, UK. **Invited**
- Ferretti, F. and Block, B. Panel discussion on the creation of high-seas world heritage areas. High Seas International Conference, 27-28 June 2018, Nausicaa Aquarium, Boulogne Sur Mer, France. **Invited.**
- Jacoby, D. Ferretti, F. et al. Movement networks predict the dynamics and vulnerability of reef predators. Sharks International 2018, 3-8 June 2018, João Pessoa, Brazil.
- Barreto, R. *, Lessa, R., Marcante, F., Santander, J., Mancini, P., Kotas, J., Gallagher A., Ferretti, F. and Worm, B. Life history, demography, and conservation concerns for South Atlantic pelagic sharks. Sharks International 2018, 3-8 June 2018, João Pessoa, Brazil.
- Pfleger, M. and Ferretti, F. The science, politics and policies behind fin trade bans in the United States. Sharks International 2018, 3-8 June 2018, João Pessoa, Brazil.
- Ferretti, F. From Data Deficient to Big Data in Shark Conservation. 2018. Public event hoisted by the High Seas Initiative: The High Seas – Live from the White Shark Café. May 15th 2018, The Smithsonian Institution, Washington DC. **Invited.**
- Ferretti, F. Big Data, Satellite Technology and Research Synthesis for Ocean Conservation. Biological Science Department Seminar. California Polytechnic State University, 27 April 2018, San Luis Obispo. **Invited.**
- Ferretti, F. Yes we can, even in the Mediterranean Sea! Public talk on the conservation status and recovery options for the Adriatic Sea. Cattolica Aquarium, 5 January 2018, Cattolica, Italy. **Invited.**
- Ferretti, F. The Palau Shark Census. Public event on the world's first shark sanctuary. Arnoldi Studio, 2 December 2017, Venice Beach, Los Angeles, CA. **Invited.**
- Ferretti, F. Big Data, Satellite Technology and Research Synthesis for Ocean Conservation. Workshop on Technology and Small scale Fisheries. Center for Ocean Solutions, Stanford University, 20 November 2017, Stanford, CA. **Invited.**
- Ferretti, F. Big Data, Satellite Technology and Research Synthesis for Ocean Conservation. Meeting of the Minds Bay Area 2017. Global Fishing Watch, 15-22 September 2017, Oakland, CA. **Invited.**
- Bastari, A. *, Pica, D., Beccacece, J. *, Gnetti, V., Ferretti, F., Micheli, F., Senni, D., Cerrano, C. Habitat suitability models and fishers perception as tools for supporting the conservation of vulnerable marine ecosystems (VMEs) in the central Adriatic Sea. Second Joint Meeting of Société Zoologique de France and Unione Zoologica Italiana, 18-23 September 2017, Torino, Italy.
- Ferretti, F. From Data Deficient to Big Data in Shark Conservation. 2017 Marine GIS User Group Meeting. May 24th, Hopkins Marine Station of Stanford University, Pacific Grove, CA. **Invited.**
- Ferretti, F. Big Data, Satellite Technology and Research Synthesis for Ocean Conservation. Palau Shark Week 2017, 11 March 2017, Koror, Palau. **Invited.**
- Block, B., Ferretti, F., White, T., De Leo, G., Hazen, E., Bograd, S. Assessing Anthropogenic Impacts on Tunas, Sharks and Billfishes with Direct Observations of Human Fishers on the High Seas. American Geophysical Union Fall Meeting. 12-16 December 2016, San Francisco, CA.
- Jacoby, D.M.P., Ferretti, F., Tickler, D., Carlisle, A.B. and Block, B. Vulnerability of reef-associated sharks connecting the world's largest marine protected area. European Elasmobranch Association Annual Conference, 28 – 30 October 2016, Bristol UK.
- O'Leary, J., Micheli, F., Airoidi, L., Boch, C., De Leo, G., Elahi, R., Ferretti, F., and Graham, N. Bright Spots in the Resilience of Marine Ecosystems to Climatic Disturbances. International Marine Conservation Congress. 30 July – 3 August 2016, St. John's, Newfoundland and Labrador, Canada.

- Ferretti, F., Curnick, D., Block, B. Characterizing shark fishing in the Chagos archipelago and implications for reconstructing community baselines. International Marine conservation Congress. 30 July – 3 August 2016, St. John's, Newfoundland and Labrador, Canada.
- Curnick, DC; Ferretti, F; Koldewey, HJ; Jones, KE; Kemp, K; Collen, B. Early evidence from the Chagos marine reserve sets baselines for tuna protection. International Marine conservation Congress. 30 July – 3 August 2016, St. John's, Newfoundland and Labrador, Canada.
- Ferretti, F. From Data Deficient to Big Data in Shark Conservation. Monterey Bay Aquarium Research Institute Seminar Series. 13th July 2016, Monterey Bay Aquarium research Institute, Moss Landing, CA. **Invited.**
- Leone, A., Puncher, G.N., Ferretti, F. Sperone, E., et al. Mediterranean Jaws: Origin of the Mediterranean Population of Great White Shark, *Carcharodon carcharias*, Inferred from aDNA variation. Joint Meeting Of Ichthyologists and Herpetologists. 6-10 July 2016, New Orleans, LA.
- Ferretti, F. and Barreto, R. Shark decline in the South Atlantic. Lenfest Ocean Program Webinar. June 20th 2016. <https://pewcharitabletrusts.webex.com>. **Invited.**
- Ferretti, F. Ocean use and shark conservation: conflicts and opportunities. Monterey Bay Aquarium Lunchtime Seminar. Monterey Bay Aquarium, 10th February 2016, Monterey, CA. **Invited.**
- Ferretti, F. Ocean use and shark conservation: conflicts and opportunities. Guest Lecture in Marine Ecology Course. Hopkins Marine Station of Stanford University, 9th February 2016, Pacific Grove, CA. **Invited.**
- Ferretti, F. Animal tracking and stock assessment to detect illegal fishing in mega reserves. Hopkins Marine Station First Annual Postdoctoral Science Symposium. Boatworks Auditorium, Hopkins Marine Station of Stanford University, 29 January 2016, Pacific Grove, CA.
- Ferretti, F. Data Science for Conservation. Seminar talk. Center for Ocean Solutions, Stanford University. 17 September 2015, Monterey, Ca. **Invited.**
- Ferretti, F. Data Science for Conservation. Seminar talk. Center for Ocean Solutions, Stanford University. 10 September 2015, Stanford, Ca. **Invited.**
- Ferretti, F., Jorgensen, S., Chapple, T., De Leo, G., & Micheli, F. Modeling shark attack data to infer patterns of shark abundance: a case study on the California white shark population. 49th annual meeting of the American Fishery Society, California-Nevada chapter. 8-10 April 2015, Santa Cruz, Ca.
- Ferretti, F. Localizing sharkPulse for international users. Middlebury Institute of International Studies, **10 March 2015, Monterey, CA. Invited.**
- Ferretti, F. Unconventional data for shark conservation. Departmental Seminar for the Applied Marine and Watershed Science Seminar Series. California State University of Monterey Bay, **2 March 2015, Seaside, CA. Invited.**
- Ferretti, F. Conservation for data deficient species. Guest Lecture in Marine Conservation Biology Course. California State University of Monterey Bay, 9 February 2015, Seaside, CA. **Invited.**
- Novaglio, C. *, Ferretti, F., Smith, T., Frusher, S. Species-area relationships as indicators of human impact on fish communities. Ecological Society of America annual meeting, 10-15 August 2014, Sacramento, USA.
- Ferretti, F., Jorgensen, S., Chapple, T., De Leo, G., & Micheli, F. Modeling shark attack data to infer patterns of shark abundance: a case study on the California white shark population. Sharks International 2014, 2-6 June 2014, Durban, South Africa.
- Ferretti, F. A multi decadal natural experiment on large marine protected areas. Kick-off meeting for the Adriatic Ecosystem Recovery Project (AMER). Polytechnic University of Marche, 17th December 2013. Ancona, Italy.

- Ferretti, F. Morey, G. Seret, B., Sprem, J. & Micheli, F. Sawfish in the Mediterranean Sea: vagrant species or case of regional extinction. 17th European Elasmobranch Association Meeting. 1-3 November 2013, Plymouth, UK.
- Ferretti, F. Reconstructing Shark Baselines in the Ocean. Explorer Society. Canada Chapter. Victoria, 29 May 2013. **Invited.**
- Ferretti, F. Reconstructing Shark Baselines in the Ocean. Polytechnic University of Marche. 13 December 2012, Ancona, Italy. **Invited.**
- Ferretti, F. Priorities for elasmobranch research in the Mediterranean Sea. Panel of experts on the EU-MSFD and the role of the cartilaginous fishes. European Elasmobranch Association Meeting. Milan, 22-25 November, 2012. **Invited.**
- James, K. & Ferretti, F. & Moore, J. & Lewison, R. & Curtis, K.A. & Dillingham, P. (2012). Global Chondrichthyan Catch and Bycatch: Status and Sustainability. World Congress of Herpetology, Vancouver, Canada, August 8 - 14, 2012, Book of Abstracts: 342
- Ferretti, F. Morey, G. Seret, B. Harrison & L. Micheli, F. Sawfish in the Mediterranean Sea: vagrant species or case of regional extinction. Global Sawfish Conservation Strategy Workshop. IUCN Shark specialist Group. 21-24 May 2012. Zoological Society of London, UK. **Invited.**
- Ferretti, F. The shark CPUE database: reconstructing baselines of abundance and community change. By-catch Risk Assessment Workshop. 6 – 8 March, 2012. Southwest Fisheries Science Center (NOAA) in La Jolla, California
- Ferretti, F. Reconstructing shark baselines in the ocean. Stanford University Shark Week. Stanford Coastal Society and Center for Ocean Solution. 6-10 February 2012. Stanford, California. **Invited.**
- Ferretti, F. Osio, G., Jenkins, C. Rosenberg, A. and Lotze, H. Long-term ecological change in the elasmobranch community of the Adriatic Sea. Workshop on Stock Assessment of Selected Species of Elasmobranchs in the GFCM area; FAO, General Fishery commission for the Mediterranean and European Commission; 12-16 December 2011; Brussels, Belgium. **Invited.**
- Ferretti, F. Mediterranean shark conservation assessments: using analyses of historical data to shape concrete conservation actions. International Marine Conservation Congress 2, Symposium: Integrating Marine Historical Ecology into Conservation and Management: Using the Past to Manage for the Future. 14-19 May 2011, Victoria (Canada).
- Ferretti, F. Where Have All the Big Sharks Gone? Panel discussion on shark populations, fishing and finning. Center for the Future of the Oceans (CFFO). 21 April 2011, Monterey, California (USA). **Invited.**
- Ferretti, F. Global Shark Declines and Why It Matters. COMPASS policy briefing: Healthy Predators, Healthy Ocean: Ecosystem roles of sharks and other predators. California Chamber of Commerce. 4 April 2011, Sacramento, California (USA). **Invited.**
- P. Sartor, J. Cartes, D. Damalas, F. Ferretti, S. Kavadas, C. Osio, C. Maravelias, F. Maynou: Changes in demersal species composition and size over the past 50 years in the Mediterranean. Ocean Past III. 18-20th November 2010, Dublin (Ireland).
- Ferretti, F., C. G. Osio, C. Jenkins, A. A. Rosenberg, & H. K. Lotze. Long-term changes in the Adriatic demersal elasmobranch community in response to prolonged human disturbance. 14th EEA Scientific Conference 10-13th November 2010, Galway (Ireland).
- Ferretti, F., B. Worm, G. L. Britten, M. R. Heithaus and H.K. Lotze. The role of sharks in marine ecosystems: insights from a global overview of changes in abundance and ecosystem consequences. Sharks International, 6-11 June 2010, Cairns (Australia).
- Ferretti, F. Ecological change in meso-predator community in response to prolonged human disturbance: an example of methodological approach. EVOMED workshop, 1-5 March 2010, Barcelona (Spain).

- Ferretti, F. Analysis of projected Adriatic fishing effort from aggregated official statistics and observer data. Workshop on analytical strategies for the "OAK Recovery Scenarios for the Northwestern Mediterranean Marine Ecosystem: motivating policy action on an ecosystem basis" project. 1-5 February 2010, Conservation International, Washington, DC (USA).
- Ferretti, F.**, G.C. Osio, A.A. Rosenberg, & H.K. Lotze. 2009. The History of elasmobranch exploitation in the Mediterranean Sea: patterns of change and emerging consequences. Oceans Past II, 26-28 February 2009, Vancouver, British Columbia (Canada).
- Osio, G.C. & F. **Ferretti**. 2009. Can we incorporate historical landings and CPUE's into modern stock assessment? A comparative case in Italy and Spain. Oceans Past II, 26-28 February 2009, Vancouver, British Columbia (Canada).
- Ferretti, F.** Once upon a time there were sharks in the Mediterranean Sea. Sustainable Fisheries Management Workshop. 9-12 December 2008, Barcelona (Spain). **Invited.**
- Romeo, T., F. **Ferretti** (speaker), P. Consoli, S. Canese & F. Andaloro. Assessment of the Mediterranean swordfish based on the Italian harpoon fishery data. ICES Annual Science Conference, theme session on Small-scale and recreational fisheries surveys, assessment, and management (K), 22-26 September 2008, Halifax, Nova Scotia (Canada)
- Ferretti, F.** Assessment of the Mediterranean swordfish based on the Italian harpoon fishery data. HMAP-FMAP Workshop, 2-4 October 2008, Dalhousie University, Halifax, Nova Scotia (Canada).
- Osio, G. C. and **Ferretti, F.** Historical fisheries data in the Mediterranean Sea. ICES workshop on historical data on fisheries and fish (WKHIST), 11-15 August 2008, ICES Headquarters, Copenhagen.
- Ferretti, F.** Losing large predatory sharks from the Mediterranean Sea. Lenfest Ocean Program Press Conference, 11 June 2008, Rome (Italy).
- McClenachan, L., **F. Ferretti**, H.K. Lotze, B. MacKenzie & G.C. Osio. 2008. Ecosystems in Search of Recovery: The Caribbean, Mediterranean, and Baltic Seas. AAAS Annual Meeting, 14-18 February 2008, Boston (USA).
- Baum (speaker), J.K., L. Lucifora (speaker) & F. **Ferretti** (speaker). The Global Shark Assessment. Scientific and conservation achievements to date and forthcoming contributions. Pew Conference series on supported shark research, 27 November 2007. Dalhousie University, Halifax, Nova Scotia (Canada).
- Osio G.C. & F. **Ferretti**. Modelling the historical trends of the Adriatic Sea demersal assemblages as a basis for ecosystem recovery. ECEM Conference, 27-30 November 2007, Trieste (Italy).
- Ferretti, F.**, R.A. Myers, G.C. Osio, H.K. Lotze & A.A. Rosenberg. 2007. The Mediterranean Sea: a case study to explain the ecological role of elasmobranchs in the marine ecosystem. Joint Italian Association of Oceanography and Limnology (AIOL) - Italian Ecological Society (SIte) meeting, 17-20 September 2007, Ancona (Italy). **Invited.**
- Ferretti, F.** Long term analyses of demersal fish communities in the Adriatic Sea from multiple scientific surveys. Workshop on Statistical Methods for Marine Ecological Data. 7-8 June 2007, Dalhousie University, Halifax, Nova Scotia (Canada).
- Ferretti, F.** 2007. Status of Mediterranean elasmobranchs: a preliminary overview. WWF-Italia, 3 January 2007, Rome (Italy).
- Ferretti F.** By-catch of sharks in the Mediterranean: mitigation tools. Workshop on the Mediterranean Cartilaginous Fish with emphasis on Southern and Eastern Mediterranean, 14-16 October 2005, Istanbul (Turkey). **Invited.**
- Ferretti F.**, R.A. Myers, P. Sartor & F. Serena. Long Term Dynamics of the Chondrichthyan Fish Community in the Upper Tyrrhenian Sea. ICES Annual Science Conference, theme session on elasmobranch fisheries science (N), 20-24 September 2005, Aberdeen, Scotland (U.K)

Lucifora L., F. **Ferretti** & R. A. Myers. Shark management: the Good, the Bad and the Ugly. Mote Marine Laboratory Symposium, 9-11 November 2004, Sarasota, Florida (U.S.A).

Ricard D., R.A. Myers, L. Lucifora, F. **Ferretti** & A. Porter. Integrating the OBIS schema into the information system that supports the Pew Global Shark Assessment. Ocean Biodiversity Informatics International Conference on Marine Biodiversity Data Management, 29 November - 1 December 2004, Hamburg (Germany).

Posters

Hessian, Z.* , Carvalho, F., Hani, B., Lemsi, C., Chouikhi, K., Moro, S., Gambardella, C.* , and **Ferretti, F.** A Morphometric and Spatial Analysis of the White Shark Population in the Mediterranean Sea. 2023 Summer research Symposium at Virginia Tech, July 27th, 2023, Blacksburg, VA.

Morris, L.* and **Ferretti, F.** Increasing User Engagement and Experience with sharkPulse. Undergraduate Research Expo 2021. Department of Fish and Wildlife Conservation, Virginia Tech. Poster presentation, May 5th, 2021.

Moro, S.* , Palma, M., Jona-Lasinio, G., Colloca, F., Gambardella, G.* and **Ferretti, F.** Using high-resolution density models to predict white sharks' hot spots in the Mediterranean Sea. Poster Session, **GRASPA-TIES 2021**, Rome 7-9 June 2021

Jenrette, J.* and **Ferretti, F.** Utilizing untapped Instagram resources for discovering global shark distributions. **American Fisheries Society Virginia Chapter Annual Meeting, Feb. 5, 2020**, Lexington, VA (awarded best poster).

Moro, S.* , Jona-Lasinio, G., Colloca, F., Mastrantonio, G., Serena, F., Bargnesi, F*., **Ferretti, F.** Analyzing Opportunistic Sighting Data with Point Process Models: The Mediterranean White Shark as a Case Study. **European Elasmobranchs Association, 23th Annual Conference, 16-18 October 2019**, Rende, Italy.

Bargnesi F*., Gennari E., Ahlers J., Moro S* and **Ferretti F.** Ecoinformatics and Citizen Science to Boost Shark Research in South Africa. **5th South African Sharks and Ray Symposium, 7- 9 October, 2019**. Two Oceans Aquarium, Cape Town, South Africa.

Williamson, M. J., Emma Tebbs, **Francesco Ferretti**, Aaron B. Carlisle, Taylor K. Chapple, David J. Curnick, Jonathan J. Dale, Robert J. Schallert, David Tickler, Barbara A. Block and David M. P. Jacoby. 2018. Reconstructing Indian Ocean shark baselines using an historical longline survey. **Bertarelli Foundation Marine Science Symposium 2018**. 11 September 2018, London, UK.

Gee, E. * , Romanov, E., Block, B. and **Ferretti, F.** 2018. Reconstructing Indian Ocean shark baselines using an historical longline survey. **Bertarelli Foundation Marine Science Symposium 2018**. 11 September 2018, London, UK.

Ferretti, F., Chesi, S., Weaver, G., De Leo, G. and Block, B. 2018. Protecting Large Marine Reserves with Drone Swarms. **Bertarelli Foundation Marine Science Symposium 2018**. 11 September 2018, London, UK.

Jorgensen, S.J., Anderson, S.D., Chapple, T.K., **Ferretti, F.**, Kanive, P.E., Tietz, J., and Block, B.A. Cryptic ecology of top ocean predators revealed: tracking rare interactions between white sharks and killer whales. **The 6th International Bio-logging Science Symposium**. 24-29 September 2017, Kostanz, Germany.

Bargnesi, F.* , Canini, S., Cerrano, C., Gridelli, S., Leone, A. and **Ferretti, F.** SharkPulse Italia: monitoring sharks through social media and a dedicated app. **VIII Convegno Nazionale della Ricerca nei Parchi**, 28 September – 1 October 2017, Parco Natura Viva, Bussolengo (VR), Italy.

Leone, A. Carlisle, A., Serena, F., Leeney, R., Litvin, S.Y. & **Ferretti, F.** Restoring the history of sawfish in the Mediterranean from museum exhibits. Annual Conference of the Italian Association of Scientific Museums (ANMS). **12 October 2014**, Livorno, Italy.

Adelson, A.* , **Ferretti, F.** & Micheli, G. Changing abundances of white sharks (*Carcharodon carcharias*) in the Mediterranean Sea. World Congress of Herpetology, **August 8 - 14, 2012**, Vancouver, Canada.

Barreto, R. R.* , **Ferretti, F.**, Flemming, J., Andrade, H., Amorim, A., Santana, F., Worm, B., and Lessa, R. Inferring sharks population's trends in the South Atlantic Ocean (SAO). **Sharks International 2014**, 2-6 June 2014, Durban, South Africa (Poster presentation).

Mancusi, C. *et al.* MEDLEM Database, A data collection on large cartilaginous fishes in the Mediterranean basin. **Sharks International 2014**, 2-6 June 2014, Durban, South Africa (poster).

Ferretti, F., Jorgensen, S., Chapple, T., De Leo, G. & Micheli, F. Modeling shark attacks off the Coast of California to infer trends in abundance of the local great white shark population. Stanford Woods Institute for the Environment. Community Retreat. **April 4-6 2013**. Aptos, California. (Poster presentation.)

Ferretti, F. Reconstructing Shark Baselines in the Ocean. Hopkins Marine Station Open House, 29 October 2011, Pacific Grove, California. (Poster presentation.)

Policy, Communication and Outreach Experience

- Received formal communication training at the [COMPASS](#) Communications Training Workshop for the Ecosystem-Based Management Forum for Early Career Scientists (Porthsmouth, NH, 12-14 December 2007).
- Given interviews to international press agencies, newspapers, radio and television stations including the BBC, The New York Times, The Times, Washington post, and Le Monde.
- Collaborated with Lenfest Ocean Program and Communications INC of London to prepare a press conference for the paper *Conserv. Biol.* 22(4): 952-964 about the status of sharks in the Mediterranean Sea. Rome, 7-11 June 2008.
- Collaborated with COMPASS and the Monterey Bay Aquarium in briefing and communicating to Senators and Assembly members of the State of California about the global state of sharks for the discussion of the shark fin trade bill of California, AB376.

Projects

- Drone Prototype for Marine Surveillance 2022 – pres.
- Horseshoe Crab Monitoring and Management project 2021 – pres.
- Kennedy Tree Farm Research and Educational Project 2021 – pres.
- A compliance Toolkit to combat IUU 2022 – pres.
- Tracking the Last White Sharks in the Mediterranean Sea (PI) 2021 – pres.
- Taking the Pulse of Global Shark Populations (PI) 2020 – pres.
- Global Ocean Conservation Priorities (PI: Sala, E. – National Geographics) 2018 - 2021
- Migratory Connectivity in the Ocean (PI: Halpin, P. – Duke University) 2018 - 2020
- Protecting vulnerable marine ecosystems beyond national jurisdiction in the Adriatic Sea (PI: Senni, D. - MedReact) 2016 - 2019
- Global Fishing Watch Initiative (PI: Block, B.) 2016 - 2020
- Bertarelli Foundation Marine Program in the Chagos Archipelago (PI) 2015 - 2024
- Fast-tag Project (PI: Block, B.) 2015 - 2020
- Using large MPAs to recover highly productive marine ecosystems and the services: the Adriatic Sea (PI: Micheli, F., Naylor, R. and Ruckelshaus, M.) 2015 - 2018
- Palmyra Coral Recruitment Project (PI: McCauley, D. and Micheli F.) 2013 - 2016
- Palmyra connectivity Project (PI: Micheli, F. and De Leo, G.) 2013 - 2016
- Adriatic Marine Ecosystem Recovery (PI) 2013 - 2016
- Lenfest Global Shark Baseline Project (PI) 2011 - 2015
- Lenfest Mediterranean Shark Assessment (PI) 2007 - 2010
- Pew Global Shark Assessment (PI: Myers, R.A.) 2003 - 2007
- Future of Marine Animal Populations (FMAP) of the Census of Marine Life (COML) (PI: Myers, R.A., Lotze, H.K. and Worm, B.) 2004 - 2011

- History of Marine Animal Populations (HMAP) of the COML (PI: Lotze, H.K. and Rosenberg, A.A.) 2004 - 2010
- OAK Mediterranean recovery scenarios project (PI: Rosenberg, A.A., Micheli, F. and Sala, E.) 2007 - 2010
- The 20th Century evolution of Mediterranean exploited demersal resources under increasing fishing disturbance and environmental change (EVOMED) (PI: Sartor, P.) 2009 - 2010

Fellowships, Scholarships, Research Grants (RG), Contracts (C), and Donations and Gifts (DG)

- DG RDL Production (60,000\$, Tracking the last white sharks in the Mediterranean Sea) 2023 - 2024
- RG Seakeepers Society (30,000\$, Tracking the last white sharks in the Mediterranean Sea) 2023 - 2024
- RG Augmentum Foundation (52,000\$, Tracking the last white sharks in the Mediterranean Sea) 2023 - 2024
- C Oxford University (15,000\$, SharkPulse Frontend Mobile development) 2022 - 2024
- DG SharkProject Foundation + Private donor (20,000€, Tracking the last white sharks in the Mediterranean Sea) 2022 - 2024
- RG Atlantic States Marine Fisheries Commission (600,000\$, Horseshoe Crab [*Limulus polyphemus*] Research and Monitoring, co-Pi with Dr. E. Hallerman) 2021 - 2023
- RG Marine Management Organization (113,400\$, *Marine Surveillance Drone Prototype phase II*) 2021 - 2022
- DG Acorn Alcinda foundation (42,000\$, *Fisheries Management and Educational Program*) 2021 - 2023
- RG Center of Coastal Studies (15,000\$, *Tracking the last White Sharks in the Mediterranean Sea*) 2021 - 2022
- RG Bertarelli Foundation (153,140\$, IUU project for LMPA and the Indian Ocean) 2022 - 2024
- RG The Explorers Club (51,480\$, Tracking the last white sharks in the Mediterranean Sea) 2021 - 2022
- RG Marine Management Organization (13,440\$, *Marine Surveillance Drone Prototype*) 2020 - 2021
- RG Global Change Center (30,000\$, *Taking the Pulse of Global Shark Populations*) 2020 - 2021
- RG Bertarelli Foundation (102,912\$, *Ecology of Reef Sharks in the BIOT*) 2020 - 2022
- Mentoring Program Grant (1,500\$) 2020 - 2022
- RG Moore Foundation (1,900,000\$, co-written with B. Block; *FAST tag project*) 2018 - 2020
- RG Bertarelli Foundation (2,000,000\$, co-written with B. Block; *Chagos Archipelago Project*) 2018 - 2021
- RG Bertarelli Foundation (250,000\$, co-written with B. Block; *FAST Tag Project*) 2015 - 2016
- RG Rishani Marine Conservation Fund (700,000\$, co-written with B. Block; *FAST Tag Project*) 2018 - 2019
- RG Schmidt Technology Partners (200,000\$, co-written with B. Block; *FAST tag project*) 2017 - 2018

- RG Polytechnic University of Marche (250,000€; *AMER Project*) December 2013 – December 2016
- RG Stanford University VPUE program (5,600\$; *Global Shark Baselines Project*) June 2013
- RG Stanford University VPUE program (11,200\$; *Global Shark Baselines Project*) June 2012
- RG from Lenfest Ocean Program (300,000\$; *Global Shark Baselines Project*) August 2011- June 2015
- Fellowship from Lenfest Ocean Program (100,00\$; *Mediterranean Shark Assessment Project*) September 2007-December 2010
- Dalhousie University Patrick F. Lett Bursary (7,500 CAD) May 2007 – August 2007
- Faculty of Graduate Studies and Research Grant Scholarships, Dalhousie University (20,000 CAD per year) September 2006 – August 2007
- Faculty of Graduate Studies and Research Grant Scholarships, Dalhousie University (27,500 CAD per year) September 2004 – August 2006
- Faculty Research Grant Scholarship Dalhousie University (18,000 CAD) January 2004 – August 2005
- Biodaqua Scholarship Polytechnic University of Marche (3,000€) April 2003 – July 2003

Referee services

Acta Adriatica, Advances in Oceanography and Limnology, Animal Conservation, Aquatic Living Resources, Biological Conservation, Cahiers De Biologie Marine, Conservation Biology, Conservation Letters, Current Biology, Deep Sea Research, Ecology Letters, Ecological Modelling, Endangered Species Research, Estuaries and Coasts, Fish and Fisheries, Fisheries Research, Frontiers in Marine Science, Global Ecology and Biogeography, Global Ecology and Conservation, Journal of Natural History, Journal of the Marine Biological Association of the United Kingdom, Marine and Freshwater Research, Marine Biodiversity, Marine Biodiversity Records, Marine Environmental Research, Marine Ecology Progress Series, Nature Communications, Pan-American Journal of Aquatic Sciences, PLoS One, PNAS, Proceedings of the Royal Society B, Reviews in Fish Biology and Fisheries, Science Advances, Trends in Ecology and Evolution.

References

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