

Personal Information

Name and surname Manrico Sebastiano
Date of birth 14th of July 1989
Place of birth Rome, Italy
Marital Status Single, one child
Languages Italian, English, French
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Education

- 1/02/2019-present:** **Post-doctoral researcher**
 French national center of scientific research (CNRS), Chizé, France
 Research project: “Effects of persistent organic pollutants on the physiology of seabirds”
 Supervisors: Dr. Olivier Chastel; Dr. Angelier Frederic; Prof. Paco Bustamante
- 1/10/2014-6/12/2018:** **PhD in Science** (Four years degree)
 University of Antwerp, Belgium, Department of biology
 Research project: “Stress and herpes infections in the frigatebird (*Fregata magnificens*): an experimental physiological approach”
 Supervisor: Prof. Marcel Eens; Prof. David Costantini
- 1/9/2011-18/12/2013** **Master degree in Eco-Biology** (Two years degree)
 University of Rome “La Sapienza”
 Final grade: 110 cum laude/110 (highest honors)
 Supervisor: Prof. Alberto Fanfani
- 1/9/2009-14/12/2011** **Bachelor degree in Biological Sciences** (Three years degree)
 University of Rome “La Sapienza”
 Final grade 103/110

Research fellowship and awards

- 2018** Recipient of the “Grant for the participation in an international conference” issued by the FWO (Fonds Wetenschappelijk Onderzoek – Flanders) to attend the International Ornithological Congress IOC in Vancouver, British Columbia.
- 2017** Recipient of the “Long stay abroad research grant” of 9,300 euro issued by the FWO (Fonds Wetenschappelijk Onderzoek – Flanders) as a support of the project: “Assessing morbidity of frigatebird *Fregata magnificens* from Brazil to Caribbean: an approach to clarify the mechanisms of viral outbreaks”.
- 2016** Recipient of the “La Vallée des Singes Primate Conservation and Research Grant” of 1,500 euro by the “*Conservatoire pour la Protection des Primates*” as a support for the project: “Genetics and physiological stress in the Western Tarsier (*Tarsius bancanus borneanus*) in logging areas”.
 Awarded the Leopold III small research grant of 3,000 euro as a support for the field work in French Guiana for the project “Stress and herpes infection in the frigatebirds”.
- 2015** Recipient of the travel grant for the participation at the LIGA Workshop in French Guiana, issued by ECOLAB association (Écosystèmes côtiers amazoniens).

Selected major talks at international conferences

- 2018** *International Ornithological Congress*, “Role of dietary antioxidants in coping with early life exposure to a viral disease in a seabird”
 Vancouver, Canada
- 2017** *European Ornithological Union Congress*, “Oxidative stress markers and administration of antioxidants as tools to describe and treat a viral disease in Magnificent frigatebirds”
 Turku, Finland.
International Conference of Behavior, Physiology and Genetics, “Does administration of antioxidants reduce oxidative stress and clinical signs of a viral disease in Magnificent frigatebirds?”
 Berlin, Germany.
- 2016** *Zoology congress*, “Immunity, inflammation, and stress of a long-lived seabird facing a severe herpesvirus disease”

Antwerp, Belgium.

- 2015** *LIGA Workshop*, “Influence of the Amazon basin on the coast of Guiana”
Cayenne, French Guiana.

List of international publications

- 2020** Soldatini C.*, **Sebastiano M.***, Albores-Barajas Y.V., Abdelgawad H., Bustamante P., Costantini D. 2020 Mercury exposure in relation to foraging ecology and its impact on the oxidative status of an endangered seabird. *Science of The Total Environment* 724, 138131.
*** joint first authorship**
- 2019** **Sebastiano M.**, Eens M., Pineau K., Chastel O., Costantini D. 2019 Food supplementation protects Magnificent frigatebird chicks against a fatal viral disease. *Conservation Letters* e12630.
- 2018** **Sebastiano M.**, Eens M., Messina S., AbdElgawad H., Pineau K., Beemster G.T.S., Chastel O., Costantini D. 2018 Resveratrol supplementation reduces oxidative stress and modulates the immune response in free-living animals during a viral infection. *Functional Ecology* 32, 2509-2519
- 2017** **Sebastiano M.**, Eens M., Angelier F., Pineau K., Chastel O., Costantini D. 2017 Corticosterone, inflammation, immune status and telomere length in frigatebird nestlings facing a severe herpesvirus infection. *Conservation Physiology*. DOI:10.1093/conphys/cow073
- Sebastiano M.**, Eens M., AbdElgawad H., de Thoisy B., Lacoste V., Pineau K., Asard H., Chastel O., Costantini D. 2017 Oxidative stress biomarkers are associated with visible clinical signs of a disease in frigatebird nestlings. *Scientific Reports* 7 (1599)
- Sebastiano M.**, Bustamante P., Costantini D., Eulaers I., Malarvannan G., Mendez-Fernandez P., Churlaud C., Blevin P., Covaci A., Eens M. And Chastel O. 2017 Trophic ecology drives contaminant concentrations within a tropical seabird community. *Environmental Pollution* 227: 183-193.
- Costantini D., **Sebastiano M.**, Muller M.S., Eulaers I., Ambus P., Malarvannan G., Covaci A., Massa B., Dell’Omo G. 2017 Individual variation of persistent organic pollutants in relation to stable isotope ratios, sex, reproductive phase and oxidative status in Scopoli’s shearwater (*Calonnetris diomedea*) from the Southern Mediterranean. *Science of the total environment* 598: 179-187.
- Costantini D., **Sebastiano M.**, Grossens B., Stark D.J. 2017 Jumping in the night: an investigation of leaping activity of western tarsier (*Cephalopachus bancanus borneanus*) using accelerometers. *Folia Primatologica* 88:46-56.
- 2016** **Sebastiano M.**, Chastel O., de Thoisy B., Eens M. and Costantini D. 2016 Oxidative stress favours herpes virus infection in vertebrates: a meta-analysis. *Current Zoology* 62, 325-332
- Sebastiano M.**, Bustamante P., Costantini D., Eulaers I., Malarvannan G., Mendez-Fernandez P., Churlaud C., Blevin P., Dell’Omo G., Covaci A., Eens M. And Chastel O. 2016 High levels of mercury and low levels of persistent organic pollutants in a tropical seabird in French Guiana, the Magnificent frigatebird, *Fregata magnificens*. *Environ. Poll.* 214: 384-393.

Involvement in scientific research projects

- 2016** Persistent organic pollutants in the Scopoli’s shearwaters *Calonnetris diomedea*
Project supervisors: Dr Giacomo Dell’Omo
Genetics and physiology of the western tarsier *Cephalopachus bancanus borneanus*
Project supervisors: Prof. David Costantini
- 2013** Egg-covering in great tits *Parus major* under predatory pressures
Project supervisors: Prof. Jukka T. Forsman

Research expeditions led

- 2017** Data collection from Magnificent frigatebird adults and chicks during the reproductive season in Barbuda Island, Caribbean. I have trained the local staff members of the frigatebird sanctuary for the capture, handling, measurement of skeletal traits and blood sampling of frigatebirds, storage of samples, requests for ethical permits, as well as import/export licenses. I have received external funding through which I have covered all expenses related to this project.

Experimental manipulation of the frigatebird chicks' diet in French Guiana. I was responsible for all the tasks relevant for the planning/conclusion of the field work, storage of samples, requests for ethical permits, as well as import/export licenses. This expedition was related to my PhD project.

- 2016** Experimental manipulation of the frigatebird chicks' diet in French Guiana. I was responsible for all the tasks relevant for the planning/conclusion of the field work, storage of samples, requests for ethical permits, as well as import/export licenses. I applied for external funding through which I could paid all relevant expenses related to the project. This included also travel/accommodation expenses of a student from the University of Antwerp which helped during the field season and for which I was responsible for training and mentoring. This expedition was related to my PhD project.

Obtained certificates

- 2018** Certificate "*Career development, applications and interviews*" issued by the Antwerp Doctoral School, Antwerp, Belgium
- 2015** Certificate "*Statistics with R*" issued by the Antwerp Doctoral School, Antwerp, Belgium
Certificate "*Scientific Writing*" issued by the Antwerp Doctoral School, Antwerp, Belgium
Certificate "*Presentation Skills*" issued by the Antwerp Doctoral School, Antwerp, Belgium

Reviewer Activity

To date, I have reviewed articles for diverse scientific journals: *Conservation Physiology* (1); *Chemosphere* (1); *Current Zoology* (1); *Environmental International* (1); *Environmental Research* (1); *Journal of field Ornithology* (1); *Marine Pollution Bulletin* (1); *Oecologia* (1); *Plos One* (1).

Teaching, supervision, and mentoring

- 2019** At the CNRS of Chizé, I am supervising the work of a young post-graduate student, William Jouanneau, who has recently started a project on stable isotopes, GPS tracking, and mercury levels in four gull species breeding in the natural reserve of Ile de Ré, France. My tasks include his training in both the field and laboratory work, but above all I am responsible of guiding him towards the achievement of a scientific publication (through guidance in article reading, statistical analyses and writing assistance).
- 2018** Teaching assistance for the master degree course "Ornithology" at the University of Antwerp, Belgium.
- 2017** During the 2017 field season of my PhD, I was responsible for the training of a student, Jonathan Simon, for the capture, handling, measurement and blood sampling of frigatebirds.
- 2016** During the 2016 field season of my PhD, I was responsible for the training of a student from the University of Antwerp, Simone Messina, which has been involved in data collection in the field. I was also responsible for his training in the laboratory.

Personal and research-related skills

- Capture, handling, skeletal measurement, and collection of biological samples of birds and mammals
- Laboratory analyses using HPLC, ELISA, Radioimmunoassay, qPCR, automatized liquid handlers, PCR and Southern blotting
- Experimental manipulation of dietary intake of antioxidants and/or food in birds
- Extensive data processing and analyzing using R-core and SPSS, and in-depth knowledge of ImageLab software (Bio-Rad) and Bio-Rad CFX Manager
- Writing and oral skills acquired through the participation to several seminars, conferences, and through scientific article and grant writing
- Ability to integrate into international environments, to communicate and establish long-term relationships and collaborations within or outside the research group