

Virginia Sciacca*Curriculum vitae*

Gender: Female;
Address:
Phone +39 3282946168;

Date of Birth: 03.12.1989;
Via Cervo, 25, 95024,
Email sciaccav@lns.infn.it;

Nationality: Italian
Acireale (CT), Italy;

Professional experience

(2011 – today). Collaboration in research at INFN-LNS. Analysis of acoustic data recorded by INFN deep sea multidisciplinary observatories for research on cetaceans and noise in the Ionian Sea. INFN – LNS (Istituto Nazionale di Fisica Nucleare – Laboratori Nazionali del Sud), via Santa Sofia 62, 95125 Catania, Italy.

(April 2019 – today). Responsible for the project “M.I.P.A.T. Hydrogeological Mitigation Landscape Environment Territory” for *eConscience - Art of soundscape* nonprofit organization. Funding agency: Fondazione CON IL SUD, Via del Corso, 267, 00186 Roma RM. Project title: 2018-AMB-00077 – “M.I.P.A.T. Hydrogeological Mitigation Landscape Environment Territory”. Duration: 24 months.

(12/06/2019 – 01/10/2019) Project “Interaction between cetaceans and small-scale fisheries in Sicily”. Responsible for acoustic data collection at sea and analysis on behalf of the *eConscience* org. Project leader Ass. Marecamp (Catania, IT). Project supported by: Low Impact Fisher of Europe (LIFE).

(09/10/2017- 08/10/2018). Postdoctoral research fellow. Analysis of underwater noise in accordance with the Marine Strategy Framework Directive - descriptor 11 and study on the impact of noise on cetaceans. Institute for Coastal Marine Environment, National Research Council (IAMC-CNR), spianata S.Raineri, 86, 98122, Messina (IT).

(12/07/2017– 18/07/2017). Responsible for passive acoustic monitoring - cetacean monitoring campaign, Ionian Sea. Acoustic monitoring activities performed as member of *eConscience* organization for the project “*Assessing resilience of beaked whale populations to human impacts: Population structure and genetic diversity in impacted and semi pristine areas*” led by CIMA Foundation, Via Armando Magliotto, 2 – 17100 Savona, Italia.

(01/03/2017– 31/05/2017). Research collaborator at CoNISMa. Fellowship within the project called MARINE STRATEGY II NATIONAL agreement between CoNISMa and CNR-DTA. CoNISMa – Consorzio Nazionale Interuniversitario per le Scienze del Mare, Piazzale Flaminio 9 -00196 Roma.

(15/12/2014 – 28/02/2015). Research internship – visiting student. Ocean Acoustics Lab – OAL. DAAD (German Academic Exchange Service) Program for PhD students. Research project: “Temporal patterns in fin whale (*Balaenoptera physalus*) vocal behavior: exploring geographic differences and potential drivers”. Alfred Wagener Institute for Polar and Marine Research – AWI. Postfach 12 01 61. 27515 Bremerhaven, Germany.

(01/06/2013 – 31/05/2014). Research collaborator. Collaboration in marine acoustic research activities in the Strait of Messina within the PRIAMO project. P.O. FESR 2007-2013 – Sicilia. University of Messina. Viale Ferdinando Stagno d'Alcontres, 31, 98166 Messina, Italy.

(20/10/2011– 01/11/2011). Oceanographic cruise “SIRENA11”. Marine Mammal Observer. 2nd phase of the “SIRENA11” trial, aboard the NATO Research Vessel Alliance. – Ligurian Sea. *Marine Mammals Risk Mitigation Project*: NATO - Underwater Research Centre NURC, Viale S. Bartolomeo, 400, 19126 La Spezia (IT).

(24/02/2011 - 20/05/2011). Visiting student at CIBRA (Centro Interdisciplinare Bioacustica e Ricerche Ambientali). Study and use of specific research tools in marine bioacoustics and ecology of marine mammals.

(31/08/2010- 31/10/2010). Research internship at the Bottlenose Dolphin Research Institute (BDRI). Sampling and analysis of environmental data and acoustic emissions of a wild population of *Tursiops truncatus*, off the North Eastern Sardinia coast. Bottlenose Dolphin Research Institute. <http://thebdri.com/>.

(30/10/2009- 22/11/2009). Oceanographic cruise “*Sicily09*” on board the Research Vessel “Urania”. Department of Animal Biology and Marine Ecology, University of Messina.

Education

20/01/2017. Qualified as Senior Biologist - Section A. University of Messina. Grade: 190/200.

(01/01/2013–22/02/2016). Doctor of Philosophy (PhD). *Marine Environmental Sciences*. Department of Biological and Environmental Sciences, University of Messina. Dissertation: “*Fin whale (Balaenoptera physalus) monitoring in the Ionian Sea: an acoustic approach to evaluate presence and ecological status*”. **Tutors:** Prof. Emilio De Domenico, Dr. Giorgio Riccobene, INFN – LNS, Catania (IT). Prof. Gianni Pavan., CIBRA, Pavia (IT).

(29/09/2014 - 12/12/2014). Advanced training course. “Business development manager”. “Advanced training for the enhancement of multidisciplinary marine research infrastructures in Sicily, Campania and Puglia as a contribution to ESFRI EMSO” – EMSO-MedIT - PAC01_00044_CNR.

(01/01/2010 – 24/10/2012). MSc. degree: *Biology and Ecology of Coastal Marine Environment*. Grade: 110/110 with honors. Thesis: “*Comparative analysis of acoustic methods for Sperm whale size estimation [Data acquired by the NEMO - OvDE station (INFN - LNS Catania)]*”. University of Messina.

(19/06/2011–23/07/2011). International Summer School “*Biodiversity and Conservation*”. Session A – Virginia Commonwealth University – Rice Environmental Center Chesapeake Bay – James River (Richmond, VA, USA). Session B – University of Messina – Alcantara River Park, Castiglione di Sicilia (Catania, Italy).

(01/09/2007 – 17/12/2010). BSc. degree: *Marine Biology and Ecology*. Grade: 110/110. Thesis: “*Vocal production of free-ranging bottlenose dolphins, in relation to groups size and composition*”. University of Messina.

Projects and other titles

- 2011-onwards SMO (Submarine Multidisciplinary Observatory) FIRB 2008. Funded by the Italian Ministry of Education, Universities and Research n. RBFR08NRZE.
- 2013-2016 EMSO (European Multidisciplinary Seafloor and water column Observatory). <http://www.emso-eu.org/>
- 2013-2016 Member of the KM3NeT Collaboration. The KM3NeT project aims at the building and installation of a deep-sea Neutrino Telescope offshore Eastern Sicily (Mediterranean Sea). <http://www.km3net.org/>
- Member of the short list of experts for the monitoring activities foreseen by D.M. 11 February 2015 related to the CNR-CoNISMA agreement about the application of Marine Strategy Framework Directive in Italy.
- Founding member of the nonprofit Association “eConscience - Art of Soundscape”. info@econscience.earth
- Member of the organizing committee of the Workshop "Human noise and its impact on cetaceans", hosted by INFN-LNS, Catania, April 21st, 2017.
- Tutor for the thesis of A. Briguglio: "Analysis of acoustic signals for the study of the behavior of the sperm whale (*Physeter macrocephalus*) in the Gulf of Catania". MSc. in Biology and Ecology of the Coastal Marine Environment, University of Messina, academic year 2018/19.

Selected publications

- Caruso, F., Sciacca, V., Parisi, I., Viola, S., de Vincenzi, G., Bocconcelli, A., ... & Rosso, M. (2019). Acoustic recordings of rough-toothed dolphin (*Steno bredanensis*) offshore Eastern Sicily (Mediterranean Sea). *The Journal of the Acoustical Society of America*, 146(3), EL286-EL292.
- Filiciotto, F., Moyano, M. P. S., de Vincenzi, G., Hidalgo, F., Sciacca, V., Bazterrica, M. C., ... & Gavio, M. A. (2018). Are semi-terrestrial crabs threatened by human noise? Assessment of behavioural and biochemical responses of *Neohelice granulata* (Brachyura, Varunidae) in tank. *Marine Pollution Bulletin*, 137, 24-34.
- Caruso, F., Alonge, G., Bellia, G., De Domenico, E., Grammata, R., Larosa, G., Mazzola, S., Riccobene, G., Pavan, G., Papale, E., Pellegrino, C., Pulvirenti, S., Sciacca, V., Simeone, F., Speziale, F., Viola, S., Buscaino, G., 2017. Long-Term Monitoring of Dolphin Biosonar Activity in Deep Pelagic Waters of the Mediterranean Sea. *Sci. Rep.* 7, 4321. doi:10.1038/s41598-017-04608-6.
- Viola, S., Grammata, R., Sciacca, V., Bellia, G., Beranzoli, L., Buscaino, G., Caruso, F., Chierici, F., Cuttone, G., D’Amico, A., De Luca, V., Embriaco, D., Favali, P., Giovanetti, G., Marinaro, G., Mazzola, S., Filiciotto, F., Pavan, G., Pellegrino, C., Pulvirenti, S., Simeone, F., Speziale, F., Riccobene, G., 2017. Continuous monitoring of noise levels in the Gulf of Catania (Ionian Sea). Study of correlation with ship traffic. *Mar. Pollut. Bull.* 1–7. doi:10.1016/j.marpolbul.2017.05.040.
- Sciacca, V. Viola, S. Pulvirenti, S. Riccobene, G. Caruso, F. De Domenico, E. and Pavan, G. (2016). Shipping noise and seismic airgun surveys in the Ionian Sea: Potential impact on Mediterranean fin whale. In: *Proceedings of Meetings on Acoustics*. Vol. 27, 040010 (2016); doi: 10.1121/2.0000311.
- Sciacca V, Caruso F, Beranzoli L, Chierici F, De Domenico E, Embriaco D, Favali P, Giovanetti G, Larosa G, Marinaro G, Papale E, Pavan G, Pellegrino C, Pulvirenti S, Simeone F, Viola S, Riccobene G. (2015). Annual Acoustic Presence of Fin Whale (*Balaenoptera physalus*) Offshore Eastern Sicily, Central Mediterranean Sea. *PLoS ONE* 10(11): e0141838. doi:10.1371/journal.pone.0141838.
- Caruso F, Sciacca V, Bellia G, De Domenico E, Larosa G, Papale E, et al. (2015) Size Distribution of Sperm Whales Acoustically Identified during Long Term Deep-Sea Monitoring in the Ionian Sea. *PLoS ONE* 10(12): e0144503. doi:10.1371/journal.pone.0144503
- Viola, S., Aiello, S., Ameli, F., Anghinolfi, M., Barbagallo, G., Barbarino, G., ... Sciacca, V et al. (2014). Underwater acoustic positioning system for the SMO and KM3NeT-Italia projects. In *6th International Workshop On Very Large Volume Neutrino Telescopes: VLVT 13* (Vol. 1630, pp. 134-137). AIP Publishing.

Co-author of more than 10 peer-reviewed publication as member of the KM3NeT collaboration. Presenter and co-author of more than 30 talks and posters at international conferences in the field of marine bioacoustics and cetacean ecology.