University of Genova

Department of Earth, Environmental and Life Sciences

Doctorate Course in Earth and Environmental Science and Technology

Università degli Studi di Genova

SIAT

Dottorato in Scienze e Tecnologie per l'Ambiente e il Territorio

Curriculum in biology applied to agriculture and the environment

Research theme 1

Titolo: Re-Wild vs Neo-insediamenti in aree montane: implicazioni su biodiversità naturale e antropogenica nelle Alpi occidentali e/o nell'Appennino settentrionale Title: Re-Wild vs Neo-settlement in mountain areas: implications on natural and anthropogenic biodiversity in Western Alps and/or North Apennines.
Tutor (name and email) and eventual co-tutor: Mauro Mariotti m.mariotti@unige.it
Program description including the formation program abroad The abandonment of land and settlements can be considered an opportunity for the renaturation of ecosystems. To what extent? For millennia, mankind has shaped landscapes through agriculture and, in Europe, the centuries-old interaction between humans and ecosystems has strongly influenced cultural heritage, but many agricultural land and settlements are now abandoned, especially in the montane areas. The program focuses on the consequences that the loss of traditional rural landscapes on the one hand and renaturation on the other have on the diversity and richness of plant species, the plant communities, and the ecosystem services. Therefore, the program will question and assess recent and future dynamics of the biodiversity drivers behind abandonment. The PhD student will enter a team of tens of researchers and doctoral students from the Department of Earth, Environment and Life Sciences collaborating with a lot of Natural Protected Areas and contributing to the CLOE interdisciplinary programme (https://cloe.dp.unige.it/en/).
Financial support: H2020-MSCA-COFUND-2020 "CLOE - Training to complexity: multidisciplinary approaches to rural and mountain sustainable development and conservation" GA n. 101034449 https://cloe.dp.unige.it/en/fellowship
Tutor's publications (max 3): Lazzaro L, Bolpagni R, Buffa G, Gentili R, Lonati M, Stinca A, Acosta A T R, Adorni M, Aleffi M, Allegrezza M, Angiolini C, Assini S, Bagella S, Bonari G, Bovio M, Bracco F, Brundu G, Caccianiga M, Carnevali L, Di Cecco V, Ceschin S, Ciaschetti G, Cogoni A, Foggi B, Frattaroli AR, Genovesi P, Gigante D, Lucchese F, Mainetti A, Mariotti M, Minissale P, Paura B, Pellizzari M, Perrino, EV, Pirone G, Poggio L, Poldini L, Poponessi S, Prisco I, Prosser F, Puglisi M, Rosati L, Selvaggi A, Sottovia L, Spampinato G, Stanisci A, Venanzoni R, Viciani D, Vidali M, Villani M, Lastrucci L, 2020. Impact of invasive alien plants on native plant communities and Natura 2000 habitats: State of the art, gap analysis and perspectives in Italy. J. Env. Man. (2020) 274: 111140. https://doi.org/10.1016/j.jenvman.2020.111140. Dagnino D, Guerrina M, Minuto L, Mariotti MG, Médail F, Casazza G, 2020. Climate change and the future of endemic flora in the South Western Alps: relationships between niche properties and extinction risk. Regional Environmental Change (2020) 20: 121. https://doi.org/10.1007/s10113-020-01708- Vassallo P, Turcato C, Rigo I, Scopesi C, Costa A, Barcella M, Dapueto G, Mariotti M, Paoli C, 2021. Biophysical Accounting of Forests' Value under Different Management Regimes: Conservation vs. Exploitation. Sustainability (2021) 13: 4638. https://doi.org/10.3390/su13094638