

Cristiano Vernesi
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Prof. Cristiano Vernesi's main research interests include the application of molecular tools for studying patterns and processes of biodiversity - at gene level - with particular emphasis on species of montane ecosystems. Study organisms range from plants (mainly through molecular-based pollen analysis), invertebrates to reptiles, amphibians, birds and mammals.

Cristiano's background is in evolutionary biology with an emphasis on phylogeography, population genetics and genomics, conservation genetics. He is also skilled in ancientDNA (aDNA) analysis, with detailed knowledge of the main limitations related to molecular analysis of ancient specimens, regardless the starting biological tissue where aDNA is extracted from.

He has recently started projects aimed at assessing biodiversity by means of environmental DNA (eDNA) analysis. Mostly focussing on altitudinal gradient in mountain habitats, through metabarcoding of plants and invertebrates targeting eDNA in ice cores from Alpine glaciers. In this case, the chronological stratigraphy of ice cores is exploited for inferring how biodiversity has changed through time in response to land use and climate change.

