

## Alessandro Chiarucci – Curriculum Vitae

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### Biosketch

I am Full Professor at the *Alma Mater Studiorum* - University of Bologna from 2014, where I lead the BIOME Lab (BIODiversity and MacroEcology) and work as head of the Department of Biological, Geological & Environmental Sciences. I am Botanist and ecologist with research activities focusing species diversity patterns within the frame of biogeography, biodiversity assessment and conservation biology. My research mission is to understand the patterns and processes of species coexistence in relation to the spatial and temporal scales and to improve the approaches adopted for biodiversity conservation. My management approach is to promote a community-based decision making for strategic development. I like to collaborate with national and international colleagues, in the frame of theoretical, empirical and applied research projects, with a logic of friendly environment and exchange. I consider Science as a contribution to a better world, peaceful and healthy for the human beings and the other organisms living on the Earth.

### Education

1997: PhD in *Environmental Sciences* at the University of Siena, Italy, with a thesis on "*Ecology, Diversity and conservation of 'serpentine' plant communities of Tuscany*" (National Evaluation Committee of Ecology at the University of Genova).

1990: MS Degree in Natural Science at the University of Siena (maximum vote cum Laude).

### Professional Career

2014-ongoing: Full Professor of *Applied and Environmental Botany*, *Alma Mater Studiorum* - University of Bologna.

- 2016-2021: Scientific Director of the Botanical Garden of the *Alma Mater Studiorum* - University of Bologna;
- 2021-2024: Head of the Department of *Biological, Geological and Environmental Sciences* at the *Alma Mater Studiorum* - University of Bologna;

2005: Associate Professor of *Applied and Environmental Botany*, University of Siena.

2001: University Researcher in *Plant Ecology*, University of Siena.

1995: Herbarium Curator, University of Siena.

## Additional Qualifications and Awards

2024: Member elected of the Academia Europaea (<https://ae-info.org/>)

2023: Member elected of the *National Academy of Agriculture* (<https://www.accademia-agricoltura.it/>)

2023: Awarded as *Italian Knowledge Leader*

2021-2024: President of the Italian Botanical Society (<https://www.societabotanicaitaliana.it/>)

2020: Member of the *WWF Scientific Community* (<https://www.wwf.it/chi-siamo/organizzazione/comunita-scientifica/>)

2016-2019: Awarded as *University of Bayreuth Senior Fellow*

2016: *National Scientific Qualification* as Full Professor of Ecology

2015: Awarded as *Top Italian Scientist* by VIA-Academy (<http://www.topitalianscientists.org/>)

2009: Awarded as *Supported Visiting Professor* at the *University of La Laguna*, Spain

## Research Topics

Biodiversity Assessment; Macroecology; Conservation biology; Biogeography

## Scientometric Data (Sept 2024)

*Scopus*: 245 papers, 5,899 citations, *h-index* = 42.

*Web of Science*: 224 papers, 5,143 citations, *h-index* = 39;

## Selected Research Projects

Coordinator with Carlo Rondinini of the Activity 4.4 “*Scenarios of Area-based conservation planning and management*“ of the National Biodiversity Future Center ([www.nbfc.it](http://www.nbfc.it), site under construction). Funding: 3.7M EUR.

National Agency for Environmental Research and Protection (ISPRA). 2020. *Development of a National Plan for Biodiversity Monitoring*. Project P.I. Funding 200K EUR. (<http://reportingdirettivahabitat.isprambiente.it/piano-di-monitoraggio>)

PNIR 2019 *LifeWatch-Plus for enforcing the human capital*. Responsible for five plant biodiversity projects. Funding 360K EUR.

PON 2018 *LifeWatch-Plus for enforcing the national infrastructure*. Responsible for the plant biodiversity hub. Funding 590K EUR.

National Park of Casentinesi Forests. 2018. *Project for studying forest structure and dynamics*. Project P.I. Funding 80K EUR.

PRIN 2015 (National Funding for Basic Research) *Biodiversity and ecosystem services in Sacred Natural Sites (BIOESSaNS)*. Project P.I. Funding 250K EUR. (<https://site.unibo.it/bioessans/en>)

FP6 RECONDES *Conditions for Restoration and Mitigation of Desertified Areas Using Vegetation*

(36 months), Member Staff within CNR-IRPI.

2005 CRUI / DAAD bilateral cooperation project on "*Predictivity of large scale species richness from plot data: a methodological comparison*" (24 months), Project Leader. Funding 2.5K EUR

British Council - Researcher Exchange Programme Awards, University of Durham, on "*Novel methods for regional climate change risk assessments*" (24 months), Project Partner. Funding 5K GBP

FP7 EU BON "*Building the European Biodiversity Observation Network*" (54 months), Partner P.I.

University of Siena PAR 2005 "*Development of Methods for Biodiversity Assessment and Monitoring in Network of Protected Areas*" (24 months), Project Coordinator. Funding 12K EUR.

University of Siena PAR 2003 "*Cross-Taxon Congruence of Biodiversity in Key Taxa*" (24 months), Project Coordinator. Funding 10K EUR.

University of Siena PAR 2001 "*Assessment and Analysis of Biodiversity Indicators in Forest Ecosystems*" (24 months), Project Coordinator. Funding 10K EUR.

VI Bilateral Agreement of Scientific Cooperation Italy-Greece 2000-2001, Project "*Plant Biodiversity in Greek Serpentine. Contribution to the conservation and management of spontaneous flora*" (24 months), Project Coordinator.

## Teaching

University of Bologna: "*Biogeography and Macroecology*" (International MSc in Global Change Ecology & Sustainable Development Goals), "*Biogeography*" (MSc in Biodiversity and Evolution), "*Elements of Conservation Biology*" (BSc in Biological Sciences).

Founder and first Coordinator of the International MSc in "*Global Change Ecology & Sustainable Development Goals*" at the University of Bologna.

Formerly Coordinator of the section "*Biodiversity and Conservation*" of the PhD School in "Life Sciences" of the University of Siena.

Formerly President of the teaching Committee of the MSc Teaching Course in "*Biodiversity and Conservation of Nature*" of the University of Siena.

Coordinator of Erasmus Exchange programs between the University of Siena (before) and Bologna (now) and the Universities of La Laguna (Spain), Bremen (Germany), Coimbra (Portugal), Brno (Czech Republic) and Copenhagen (Denmark).

Co-Organiser and teacher at the Greek Summer School in Conservation Biology

Tutor of >60 Bachelor and Master Students; tutor of 9 PhD students.

## Selected teaching and research periods spent abroad

Center for Theoretical Studies, University Charles of Prague, Praga, Czech Republic. Exchange Program University of Siena – Charles University Prague (April 2013);

Departamento de Ecología, Universidad de La Laguna, La Laguna, Tenerife, Spain, Erasmus Teaching Mobility (April 2008; March 2012; August – September 2010); Invited Professor (June – September 2009);

Department of Botany and Zoology, Faculty of Science, Masarykova Univerzita, Brno, Czech Republic, Erasmus Theaching Mobility (March 2010; September 2013);

EDYSAN - Ecologie et dynamique des systèmes anthropisés, Université de Picardie Jules Verne, Amiens, Francia. Invited Professor (February-March 2013);

Greek Summer School in Conservation Biology, Papingo / Ano Pedina, Greece. (June-July 2011; June-July 2012; June-July 2014; June-July 2015);

Institut für Ökologie und Evolutionsbiologie, Universität Bremen, Bremen, Germany, Erasmus Theaching Mobility. (May 2009);

Master Universitario en Biodiversidad, Funcionamiento y Gestión de Ecosistemas, Universidad del Pais Vasco, Bilbao, Spain (May 2010; May 2011; May 2012) ;

La Palma Science School - University of Bayreuth, Germany / La Palma, Spain. (April 2011; February-March 2014; March 2018; April 2022; April 2023).

## **Project Evaluator**

Academy of Finland; Estonian Research Council; European Science Foundation; Georgian National Science Foundation; Grant Agency of the Czech Republic; Hungarian Scientific Research Fund (OTKA); Ikerbasque Foundation; Italian Government - MIUR (PRIN, Futuro in Ricerca, VQR); Natural Sciences and Engineering Research Council of Canada; National Science and Technological Foundation of Portugal; South African Research Foundation; Swedish Formas, Swiss Science Foundation.

## **Editorial Activity**

*Journal of Vegetation Science*: Chief Editor (2006-2021); previously Associate Editor from 02/2002 to 06/2006

*Applied Vegetation Science*: Chief Editor (2006-2021);

*Community Ecology*: Subject Editor from 09/2009 to 06/2013

*Plant and Soil*: Guest Editor for a special issue in 2007 on "Advances in the ecology of Serpentine Soils",.

Referees for more than 50 international journals

## **Other Scientific roles and recognitions**

Member of the Advisory Council of the "*International Association for Vegetation Science*"

Keynote speaker at international congresses, such as *International Association for Vegetation Science* (Chania, Greece, 2009), *International Biogeographical Society* (Heraklion, Greece, 2011), *Biodiversity and Wildlife Conservation: Ecological Issues* (Tsaghkadzor, Armenia, 2018), *European Vegetation Survey* (Madrid, Spain, 2019), *Hellenic Ecological Society* (Ioannina, Greece, 2021); *Italian Association for Andrology* (Courmayer, Italy, 2023 - An opening lecture on the value of Nature to a Medical Meeting!).

## 10 Selected publications

1. Lussu, M., Zannini, P., Testolin, R., Dolci, D., Conti, M., Martellos, S., & Chiarucci, A. (2024). Biogeography of orchids and their pollination syndromes in small Mediterranean islands. *Journal of Biogeography*, 51, 869–877. <https://doi.org/10.1111/jbi.14792>
2. Cazzolla Gatti, R., Zannini, P., Piovesan, G., Alessi, N., Basset, A., Beierkuhnlein, C., Di Musciano, M., Field, R., Halley, J. M., Hoffmann, S., Iaria, J., Kallimanis, A., Lövei, G. L., Morera, A., Provenzale, A., Rocchini, D., Vetaas, O. R., & Chiarucci, A. (2023). Analysing the distribution of strictly protected areas toward the EU2030 target. *Biodiversity and Conservation*, 32, 3157–3174. <https://doi.org/10.1007/s10531-023-02644-5>
3. Chiarucci, A., Guarino, R., Pasta, S., Rosa, A. L., Cascio, P. L., Médail, F., Pavon, D., Fernández-Palacios, J. M., & Zannini, P. (2021). Species–area relationship and small-island effect of vascular plant diversity in a young volcanic archipelago. *Journal of Biogeography*, 48, 2919–2931. <https://doi.org/10.1111/jbi.14253>
4. Zannini, P., Frascaroli, F., Nascimbene, J., Persico, A., Halley, J. M., Stara, K., Midolo, G., & Chiarucci, A. (2021). Sacred natural sites and biodiversity conservation: A systematic review. *Biodiversity and Conservation*, 30, 3747–3762. <https://doi.org/10.1007/s10531-021-02296-3>
5. Chiarucci, A., & Piovesan, G. (2020). Need for a global map of forest naturalness for a sustainable future. *Conservation Biology*, 34, 368–372. <https://doi.org/10.1111/cobi.13408>
6. Chiarucci, A., Di Biase, R. M., Fattorini, L., Marcheselli, M., & Pisani, C. (2018). Joining the incompatible: Exploiting purposive lists for the sample-based estimation of species richness. *The Annals of Applied Statistics*, 12, 1679–1699. <https://doi.org/10.1214/17-AOAS1126>
7. Hoffmann, S., Beierkuhnlein, C., Field, R., Provenzale, A., & Chiarucci, A. (2018). Uniqueness of Protected Areas for Conservation Strategies in the European Union. *Scientific Reports*, 8, 6445. <https://doi.org/10.1038/s41598-018-24390-3>
8. Chiarucci, A., Fattorini, S., Foggi, B., Landi, S., Lazzaro, L., Podani, J., & Simberloff, D. (2017). Plant recording across two centuries reveals dramatic changes in species diversity of a Mediterranean archipelago. *Scientific Reports*, 7, 5415. <https://doi.org/10.1038/s41598-017-05114-5>
9. Chiarucci, A., Bacaro, G., & Scheiner, S. M. (2011). Old and new challenges in using species diversity for assessing biodiversity. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 366, 2426–2437. <https://doi.org/10.1098/rstb.2011.0065>
10. Rocchini, D., Hortal, J., Lengyel, S., Lobo, J. M., Jiménez-Valverde, A., Ricotta, C., Bacaro, G., & Chiarucci, A. (2011). Accounting for uncertainty when mapping species distributions: The need for maps of ignorance. *Progress in Physical Geography: Earth and Environment*, 35, 211–226. <https://doi.org/10.1177/0309133311399491>