# **University Academic Curriculum Vitae**

Personal Name: Mita Drius

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**Current** position

Researcher with a fixed-term contract (RTDj), Faculty of Education, Free University of Bozen-Bolzano, Campus Bressanone

Education since leaving school

- 2008 Bachelor's Degree in Science and Technology for Nature and the Environment; University of Udine (Italy)
- 2010 1-year Master's Course in Management Planning and Control of Water and Waste;
   University of Siena (Italy)
- 2011 Master's Degree in Management and Conservation of Natural Heritage; University of Siena (Italy)
- 2016 International PhD degree in Management and conservation issues in changing landscapes; University of Molise (Italy)

Professional experience (last 12 years)

List of previous scientific employments:

From / to	Job title	Name of Institution	Academic level	Responsibilities	
Jan 2021/May 2021	Consultant	University of Natural Resources and Life Sciences - Institute of Landscape Development, Recreation and Conservation Planning, Vienna (Austria)	Post Doc	Literature research, preparation of a scientific article on the analysis of green infrastructure elements in the openland of the Wienerwald Biosphere Reserve (AT)	
Sept 2020/Feb 2021	Teaching assistant	Free University of Bozen- Bolzano - Faculty of Science and Technology, Bolzano (Italy)	Post Doc	Assistance in the course of Landscape Ecology WS 2020-2021	
Mar 2017/ Dec 20	Contract Lecturer	University of Vienna - Department of Botany and Biodiversity Research, Vienna (Austria)	Post Doc	Short stand-alone course about systematic conservation planning and ecosystem services. Occasional lectures on ecosystem services.	
Jan 2020/Feb 2020	Consultant	University of Vienna - Department of Botany and Biodiversity Research, Vienna (Austria)	Post Doc	Production of a manual for creating evidence-based strategies and action plans, as a tool for Green Infrastructure planning, in the framework of the INTERREG Central Europe project MaGICLandscapes (Managing Green Infrastructure in Central European Landscapes).	

Mar 2018/May 2019	Post Doc Researcher	University of Vienna - Department of Botany and Biodiversity Research, Vienna (Austria)	Post Doc	Fine-scaled analysis of the main ecosystem services offered by the open habitats of the Wienerwald Biosphere Reserve, to contribute a set of indicators for the environmental monitoring of the reserve, within the Man and the Biosphere (MaB) project BRIMSEN (Biosphere Reserve Integrated Monitoring based on Social and ENvironmental ecosystem services). Project management activities. Preparation and submission of a follow-up project proposal.
Jan 2017/May 2019	Research Fellow	ISMAR Institute of Marine Sciences - National Research Council, Venice (Italy)	Post Doc	Research activities and management/technical support within the INTERREG MED project CO-EVOLVE (Promoting the co-evolution of human activities and natural systems for the development of sustainable coastal tourism) focused on the analysis of the main anthropogenic risk factors for ecosystems, based on an ecosystem approach and within the main legislation and policies for environmental management and protection. Production of deliverables, and of progress and final reports. Support to project communications and coordination of the consortium's tasks.
Oct 2016/Jan 2017	Project Assistant	University of Vienna - Department of Botany and Biodiversity Research, Vienna (Austria)	Post Doc	Assistance in the preparation of a COST Action proposal, and of two nationally funded research project proposals (MaB and WWTF calls), both dealing with sustainable development and landscape connectivity.

Oct 2016/Nov 2016	Project Assistant	University of Vienna - Department of Botany and Biodiversity Research, Vienna (Austria)	Post Doc	Assistance in completion and submission of an INTERREG Central Europe project proposal (MaGICLandscapes: Managing Green Infrastructure in Central European Landscapes); planning of budget and activities; liaison with project partners and associated partners; support and coordination of partners' activity plans.
May 2015/Nov 2015	Visiting scientist	University of Vienna - Department of Botany and Biodiversity Research, Vienna (Austria)	PhD student	Spatial prioritization of Natura 2000 sites along the Adriatic coast based on a threat approach: literature review on spatial conservation planning, spatial analyses in GIS environment, and preparation of manuscripts.
Jan 2015/Apr 2015	Visiting scientist	Environment and Sustainability Institute, University of Exeter, Corwall Campus, Penryn (United Kingdom)	PhD student	Spatial prioritization of Natura 2000 sites along the Adriatic coast based on a threat approach: spatial data preparation, literature review on systematic conservation planning, analyses with the decision-support software MARXAN.
Nov 2013/Dec 2014	Visiting scientist	Centre for Ecology and Hydrology, Bangor (Gwynedd) (United Kingdom)	PhD student	Experimental study on the carbon storage and sequestration and on the recreational value of the coastal dune habitats along Adriatic Sea: studies design and planning; extensive fieldwork for soil samples collection; samples treatments (physical and chemical analyses); design and coordination of a survey to investigate the recreational value of coastal dunes; statistical analyses and manuscript preparation.
Jan 2012/Oct 2013	Teaching Assistant	University of Molise, Dept of Bioscience and Territory, Pesche (Italy)	PhD student	Assistance during examinations and marking; preparation and conducting of seminars on how to assess the conservation status of a species according to Red Lists criteria and categories.
Feb 2012/Aug 2012	Intern	ISPRA - ex INFS CRA 16, Ozzano dell'Emilia (Italy)	PhD student	Creation and update of bird species distribution maps in a GIS environment. Collation of lacking information on their conservation status. Assistance in the implementation of the reporting activities due under Art. 12 of Birds Directive.

Jan	Erasmus	Freshwater	Masters	Collation of information on
2011/Apr	Junior	Biodiversity Unit	student	taxonomy, distribution and use
2011	Professional	- IUCN Species		of species of the Indo-Burma
	Associate	Programme, Cambridge		region; consistency checking of Red List conservation
		(United		assessments; learning and
		Kingdom)		applying of the IUCN Red List criteria and categories;
				creation and checking of
				species distribution maps in a
				GIS environment.

## Academic teaching (last 6 years)

- WS 2021/2022; 2022/2023; 2023/2024: Responsible of the course:
  - Course title: Didactics of Biology and Chemistry: In-depth Analysis of Selected Topics
  - Employer: Free University of Bozen-Bolzano Faculty of Education, Bressanone (Italy) Subject area: biology education

  - Teaching language: German
  - Academic level: under-graduate level
  - Results of evaluations: very good
- WS 2021/2022; 2022/2023; 2023/2024: Responsible of the course:
  - Course title: Didactics of Biology and Chemistry with an Emphasis on the Age Range 5-12 (Lab.)
  - Employer: Free University of Bozen-Bolzano Faculty of Education, Bressanone (Italy)
  - Subject area: biology education
  - Teaching language: German
  - Academic level: under-graduate level
  - Results of evaluations: very good
- WS 2020/2021: Teaching assistant
  - Course title: Landscape Ecology. Course leader: Prof. Stefan Zerbe
  - Employer: Free University of Bozen-Bolzano Faculty of Science and Technology, Bolzano (Italy)
  - Subject area: ecosystem services
  - Teaching language: English
  - Academic level: post-graduate level
- SS 2017; SS 2018; SS 2019, WS 2020: Contract Lecturer
  - Course title: Conservation Planning tools for mainstreaming biodiversity management.
  - Employer: University of Vienna, Department of Botany and Biodiversity Research, Vienna (Austria).
  - Subject area: conservation planning, ecosystem services
  - Teaching language: English
  - Academic level: under and post-graduate level
  - Results of evaluations: very good
- WS 2017; WS 2018, WS 2019, WS 2020: Contract Lecturer
  - Course title: Nature Conservation Strategies, Programmes, Demonstration cases. Course leader: Ass.-Prof. Dr. Thomas Wrbka
  - Employer: University of Vienna, Department of Botany and Biodiversity Research, Vienna (Austria).
  - Subject area: nature conservation through ecosystem services
  - Teaching language: English
  - Academic level: under and post-graduate level

## Other academic responsibilities (2021-present)

- Supervisor or co-supervisor of seven Master's theses between 2021-2023
- Chair at the session "Educazione ambientale per la riconnessione con la Natura" of the XXXII Congresso della Società Italiana di Ecologia, Università degli Studi di Catania, 6-8 September 2023

- Reviewer for the scientific journals: Science of the Total Environment;
   Journal of coastal conservation; Global Ecology and Conservation
- Member of the scientific and organizing Committees in the following seminars/workshops/conferences:
  - "Brixen Education Workshop on Storytelling in STEM disciplines at the crossroads of science and humanities – BrEWMath 01", MultiLab. Libera Università di Bolzano – Bressanone. 40 participants. 8-10 November 2022
  - 'International Exploratory Workshop "Complexity and Narrative -Integrating Sciences and Humanities for Science Education".
     Libera Università di Bolzano – Bressanone. 40 participants. 27-29 June 2022
  - Series of workshops "Systems thinking for Education", MultiLab.
     Libera Università di Bolzano Bressanone. 15 participants.
     October-December 2022
  - Series of seminars "Dalle api ai tardigradi: spunti per l'insegnamento delle scienze naturali - Von Bienen bis zu Bärtierchen: Ideen für den naturwissenschaftlichen Unterricht" MultiLab. Libera Università di Bolzano – Bressanone. 90 participants. 5-6 May 2022
  - Workshop "Ambiente Suono Rumore. Identità sonore e paesaggi ricostruiti". MultiLab. Libera Università di Bolzano – Bressanone.
     9 participants. 18 December 2023

#### Memberships

- Member of the MultiLab at the Faculty of Education, Free University of Bozen-Bolzano, Campus Bressanone https://multilab.projects.unibz.it/
- Member of the national working group "Docenti BIO attivi a Scienze della Formazione"
- Member of the Advisory Board of the Interreg Central Europe project "ReCo - Restoring degraded ecosystems along the Green Belt to improve and enhance biodiversity and ecological connectivity"
- Member of the Società Italiana di Ecologia https://www.ecologia.it/
- Guest Editor for the Journal MDPI Education Sciences
- Guest Editor for the Journal MDPI Land
- Member of the working group MedECC Mediterranean Experts on Climate and Environmental Change https://www.medecc.org/

Research and scholarships (last 6 years)

Date	Role in the	Funding	Title	Amount
granted	project	Body		received
01.09.2023	Co- Investigator	Erasmus+	SHINE - mainstreaming Systems tHinking In Natural sciences and Environmental	Total: €400,000.00 Unibz (Project Partner): €80,000.00
		_	education	
15.03.2023	Principal Investigator	Interreg Alpine	FRACTAL (FosteRing	Total: €445,786.00
		Space	green	,
		'	infrAstruCTure in the Alps	Unibz (Lead Partner): €161,000.00
01.09.2017	Post Doc	Man and	BRIMSEN:	Total:
	Researcher	the	Biosphere	€79,300.00
		Biosphere	Reserve	

(MaB)	Integrated	
Programme	Monitoring	
- Austrian	based on	
Academy of	Social and	
Sciences	ENvironmental	
	ecosystem	
	services	

**Main research topics**: Ecosystem services and green infrastructure, sustainable development, analysis of the main anthropogenic risk factors for ecosystems generated by human activities, biology and ecology education.

### **Current main responsibilities:**

- Project manager of the FRACTAL project: internal communication, financial and project management, coordination of work plan and of partners' tasks.
- Co-Investigator of the SHINE project: involvement in the internal communication, financial and project management, coordination of work plan and of partners' tasks.
- Lecturer responsible for three courses at the Free University of Bozen-Bolzano Faculty of Education, Bressanone (Italy)

#### **Publications**

Journal articles in refereed academic journals

- Canedoli C., Rota N., Vogiatzakis I., Zanchi A., *Drius M.*, Nagendra H., Padoa-Schioppa E. Assessing mountain ecosystem services: a comprehensive indicator review and quality evaluation. *In prep. (expected publication date: spring 2024)*
- Drius M., Sams K.T., Knopper F., Brandenburg C., and Wrbka T., 2020. Assessing landscape services as foundation for Green Infrastructure functionality: the case of the Wienerwald Biosphere Reserve. Landscape Online 84, 1-39
- Carranza M.L., *Drius M.*, Marzialetti F., Malavasi M., de Francesco M.C., Acosta A.T.R.,
   2020. Urban expansion depletes cultural ecosystem services: an insight into a
   Mediterranean coastline. Rendiconti Lincei. Scienze Fisiche e Naturali 31,103-111
- \*Drius M., Jones L., Marzialetti F., de Francesco M.C., Stanisci A., Carranza M.L., 2019. Not just a sandy beach. The multi-service value of Mediterranean coastal dunes. Science of the Total Environment 668, 1139-1155
- \*Drius M., Bongiorni L., Depellegrin D., Menegon S., Pugnetti A., Stifter S., 2019.
   Tackling challenges for Mediterranean sustainable coastal tourism: An ecosystem service perspective. Science of the Total Environment 652, 1302-1317
- Carranza M.L., *Drius M.*, Malavasi M., Frate L., Stanisci A., Acosta A.T.R., 2018.
   Assessing land take and its effects on dune carbon pools. An insight into the Mediterranean coastline. Ecological Indicators 85, 951-955
- \*Drius M., Carranza M.L., Stanisci A., Jones L., 2016. The role of Italian coastal dunes as carbon sinks and diversity sources. A multi-service perspective. Applied Geography 75, 127-136
- Drius M., Malavasi M., Acosta A.T.R., Ricotta C., Carranza M.L., 2013. Boundary-based analysis for the assessment of coastal dune landscape integrity over time. Applied Geography 45, 41-48

Official reports and other publications

- Drius M., Silveri L. Fostering green infrastructure for ecosystem resilience in Alpine regions. The FRACTAL model: a bottom-up all-round approach. Open Access Government Accepted for publication (expected publication date: January 2024)
- Bevk D., Böhm T., *Drius M.*, Kablar D., Koderman B., Lautze K., Pintar M., Silveri L. 2024. Report: the state of art of local GI implementation in the Alps. Deliverable 1.3.1 FRACTAL
- Rossi G.L., Ciadamidaro S., Neubert M., Danzinger F., Marrs C. (eds., 2020). Manual for creating evidence-based green infrastructure strategies and action plans - A tool supporting local planning. Interreg Central Europe Project MaGICLandscapes. Output

- O.T3.2, Torino. With contributions from: G.L. Rossi, S. Ciadamidaro, M.R. Minciardi, C. Marrs, S. Alberico, G. Bovo, F. Danzinger, M. **Drius**, M. Erlebach, D. Freudl, S. Fuchs, A. Hahn, Z. Jała, H John, M. Neubert, S. Riedl, T. Slach, H. Skokanová, P. Vayr, D. Wojnarowicz, T. Wrbka. Published online: https://www.interregcentral.eu/Content.Node/MaGICLandscapes.html#Outputs
- Danzinger F., Drius M., Fuchs S., Wrbka T., Marrs C. (eds., 2020). Manual of Green Infrastructure Functionality Assessment Decision Support Tool. Interreg Central Europe Project MaGICLandscapes. Output O.T2.1, Vienna. With contributions from: F. Danzinger, M. Drius, S. Fuchs, T. Wrbka, C. Marrs, S. Alberico, G. Bovo, S. Ciadamidaro, M. Erlebach, D. Freudl, S. Grasso, Z. Jała, H. John, M. Minciardi, M. Neubert, G.L. Rossi, H. Skokanová, T. Slach, S. Riedl, P. Vayr, D. Wojnarowicz. Published online: https://www.interreg-central.eu/Content.Node/MaGICLandscapes.html#Outputs
- Drius M., Sams K.T., Knopper F., Brandenburg C., and Wrbka T., 2019. Biosphere Reserve Integrated Monitoring based on Social and Environmental Ecosystem Services – BRIMSEN. Final Report.
- Drius M., V. Evers, S. Bellacicco, L. Petrić, M. Prem, A. Barbanti, 2018. Threats and Enabling Factors to co-evolution - Mediterranean scale: synthesis. CO-EVOLVE Project - Activity 3.7-3.13. INTERREG MED Programme.
- Drius M., Bongiorni L. and Pugnetti A., 2017. Review on the current status of coastal ecosystem services. CO-EVOLVE Project - Deliverable 3.5.1. INTERREG MED Programme.
- Drius M., Bongiorni L. and Pugnetti A., 2017. Ecosystem threats from tourism and future trends. Effects of ecosystem quality. CO-EVOLVE Project - Deliverables 3.5.2-3.5.3.
   INTERREG MED Programme.
- Drius M., Bongiorni L. and Pugnetti A., 2017. Atlas of Maps of ecological risks related to main tourism typologies. CO-EVOLVE Project - Deliverable 3.5.4. INTERREG MED Programme.
- Drius M., Campanaro A., Bongiorni L. and Pugnetti A., 2017. Analysis on existing strategies and measures facing relevant threats to ecosystems. CO-EVOLVE Project -Deliverable 3.9.1. INTERREG MED Programme.
- Bongiorni L., *Drius M.*, and Pugnetti A., 2017. Key pressures and tools to estimate their cumulative impacts and support decision-making. Tradeoffs in ecosystem protection and tourism sustainability. CO-EVOLVE Project - Deliverables 3.9.2-3.9.3. INTERREG MED Programme.
- Campanaro A., *Drius M.*, Bongiorni L. and Pugnetti A., 2017. Guidelines to involve tourists in citizen science activities. CO-EVOLVE Project - Deliverable 3.9.4. INTERREG MED Programme.

#### Conference papers

- Rinaldi, S., Carranza, M.L., De Francesco, M.C., *Drius*, *M.*, Presenza, A., Stanisci, A., 2018. Punta Aderci: spiaggia o riserva? Turismo e natura nell'area protetta. Atti delle giornate della ricerca scientifica. Dipartimento di Bioscienze e Territorio. Volume degli atti: 73-74. ISBN 9788896394236 https://www.unimol.it/wp-content/uploads/2018/03/Atti-GRS-2018.pdf.
- Lucchesi M., *Drius M.*, Mauri J., Di Vittorio I. & Bottacci A., 2012. Analisi sulla tecnica del fototrappolaggio per tre specie target in Appennino settentrionale. (Analysis on the camera trapping technique focused on three target species in Northern Apennine). In Fabrizio M., (eds). Proceedings of the Congress "Il foto-video trappolaggio in Italia: primi risultati di una nuova tecnica di ricerca scientifica per la fauna selvatica". I quaderni del Centro Studi per le Reti Ecologiche. Volume 4: 30-33.

## Chapters in books

Moncada S., Djoundourian S., **Drius M.**, Camilleri Fenech M., Kholeif S., Spagnuolo F. Sustainable Development Pathways. In: Cramer W., Driouech F., Guiot J. (Eds.). MedECC Special Assessment Report: Climate and Environmental Coastal Risks in the Mediterranean. *Under review (expected publication date: spring 2024)* 

**Drius M.**, Pugnetti A., Bongiorni L. 2022. Disentangling trade-offs between the state of coastal ecosystems with human well-being and activities as a strategy addressing sustainable tourism. In: Misiune I., Depellegrin D., Egarter Vigl L. (eds.). Exploring the Multiple Values of Nature - Connecting Ecosystems and People across Landscapes. Springer Nature ISBN 9783031019807

# Publications about the applicant

The Ecosystem-Service Values of Italy's Coastal Dunes. OCTO (2019). DOI: 10.31230/osf.io/sqnbr

#### **Further data**

Presentations at scientific conferences over past 5 years:

- Silveri L., Gelmi A., *Drius M.* Combining Sustainability education and game-based learning at primary school – the YouTopia experience. Conference "Schule als Spielraum" "Scuola Spazio Ludico" Bressanone, 23-24 November 2023
- Drius M., Silveri L. Developing serious games for ecology teaching: how to put ecological principles in game format. XXXII Congresso della Società Italiana di Ecologia, Università degli Studi di Catania, 6-8 Settembre 2023
- Silveri L., *Drius M.* Game-based learning in environmental and sustainability education.
   ESERA 2023, Cappadocia, 28 August 1 September 2023
- Drius M. Learning about ecosystem services by means of capacity matrices. XXXI Congresso della Società Italiana di Ecologia, Presidio di San Francesco – Università degli Studi di Siena, 13-15 Settembre 2022
- Drius M., Sams K.T., Knopper F., Brandenburg C., Wrbka T. Assessing landscape services as foundation for Green Infrastructure functionality: the case of the Biosphere Reserve Wienerwald. IALE 2019 World Congress, Milano, 1-5 July 2019
- Depellegrin D., *Drius M.*, Menegon S., Farella G., Zaggia L., Falchi F., Pugnetti A., Bongiorni L. Incorporating light pollution into cumulative effects assessment in coastal areas of the Italian Adriatic Sea. Symposium on promotion and protection of the night sky, Capraia Isle, 13-14 September 2018.

# Statement of interest

I define myself as an ecologist with a polyhedric profile, very strong project management skills and a profound interest in nature conservation. I can work and teach in three languages, due to my international background, which I started building up since my Bachelor studies in natural sciences. Over the doctoral studies and then over the post-doctoral research activities I worked in various research institutes, strengthening my skills in project management and project communication. I worked in a multicultural environment, dealing also with non-academic partners and stakeholders. I prepared and submitted several project proposals, and I created my own course on systematic conservation planning, assessing at least 50 students every academic year. At the Faculty of Education in Bressanone, which I have been serving since 2021, I had the opportunity to address new research strands in the field of biology and ecology education. I am currently responsible for three courses where I teach in German, transferring my enthusiasm and knowledge to the students of Primary Education. I manage an Interreg Alpine Space project on the topic of Green Infrastructure and I am involved as Co-Investigator in an Erasmus+ project on system thinking in environmental education.

# Language competence

Language	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
German	C1	C1	C1	C1	C1

Date 28/12/2023