

# Postdoc Researcher





## BIO

I am a Uruguayan biologist (PhD) doing research in Macroecology and Biodiversity Informatics. I currently work as a postdoc researcher at the Czech University of Life Sciences (MOBI Lab), focused on studying spatial and temporal patterns of biodiversity. I am also the founder of Biodiversidata (Uruguayan Consortium of Biodiversity Data), a member of the JULANA NGO, the administrator of NaturalistaUY (the iNaturalist site for Uruguay), and a NatGeoExplorer. I co-chair the RDA Sharing Rewards and Credit Interest Group (SHARC) and I am a GBIF Open Data Ambassador. I am a The Carpentries Instructor. Recently, I also joined the IUCN SSC Species Monitoring Specialist Group.

#### **EDUCATION**

2017 - 2021	Ph.D., Life Sciences  University of Lincoln, United Kingdom Evolution and Ecology Research Group, School of Life Sciences. Dissertation: Biodiversity in- formatics and macroecological patterns of biodiversity: Uruguay as a model region. Advisor Daniel Pincheira-Donoso
2013 – 2015	M.Sc., Biological Sciences (Genetics)  Department of Biodiversity and Genetics, Clemente Estable Biological Research Institute. Dissertation: Contributions of molecular ecology to the study of mammals in Uruguay. Advisors Susana González and Mariana Cosse
2006 - 2012	B.Sc. (Hons), Biological Sciences  Universidad de la República, Uruguay Department of Biodiversity and Genetics, Clemente Estable Biological Research Institute Project: Development of molecular tools for the taxonomic identification of different carnivore species. Advisor: Mariana Cosse

# PROFESSIONAL EXPERIENCE

11/2023 - present	Postdoc Project 'BEAST: Biodiversity dynamics across MOBI Lab, ERC Funding	Czech University of Life Sciences Prague (Czech Republic) a continuum of space, time, and their scales'.
05/2023 - 08/2023	<b>Consultant</b> Open Research Data Incentive Programme	Agencia Nacional de Investigación e Innovación (Uruguay)
04/2021 - 10/2023	Postdoc Project 'Range dynamics of Neotropical carniv	Czech University of Life Sciences Prague (Czech Republic) /ores'. MOBI Lab, REES ČZU Funding
01/2021 - 04/2021	Intern UN Environmental Programme - World Conservation Monitoring Centre (Cambridge, UK) Knowledge Management internship in the Conserving Land and Seascapes Team	
08/2018 - 12/2020 part time	<b>Demonstrator</b> Courses of Zoology, Paleontology, and Biolog	University of Lincoln (Lincoln, United Kingdom) ical Anthropology at the School of Life Sciences
01/2017 - 07/2017 part time	Project Manager Project 'Conservation in private protected area	Vida Silvestre NGO (Montevideo, Uruguay) as of Uruguay'
11/2016 - 03/2017	Research Assistant Bioinformatics and genomics at the Department	Universidad de la República (Montevideo, Uruguay) ent of Animal Genetics, School of Veterinary
10/2016 - 11/2016	<b>Field Assistant</b> Sampling plots of vascular plants for the projection	<b>Technische Universität Berlin (Uruguay)</b> ect 'Rural Futures'
11/2015 - 10/2016 part time	<b>Technician</b> Livestock pedigree data management	Rural Association of Uruguay (Montevideo, Uruguay)
11/2015 - 10/2016 part time	Research Assistant Project 'Bioinformatics and comparative gend	Universidad de la República (Montevideo, Uruguay) omics of Salmonella' at the Institute of Hygiene,

School of Medicine

01/2012 - 12/2015 Research Assistant Clemente Estable Biological Research Institute (Montevideo, Uruguay)

Research and teaching at the Department of Biodiversity and Genetics

05/2012 - 04/2014 Teaching Assistant Universidad de la República (Montevideo, Uruguay)

part time Organization of outreach ativities at the Extension Unit, School of Science

# PEER-REVIEWED ARTICLES

17. Finn C., <u>Grattarola F.</u> & Pincheira-Donoso D. (2023) More losers than winners: investigating Anthropocene defaunation through the diversity of population trends. *Biological Reviews*. [link]

- 16. <u>Grattarola F.</u>, Bowler D.E. & Keil P. (2023) Integrating presence-only and presence-absence data to model changes in species geographic ranges: An example in the Neotropics. *Journal of Biogeography*. [link]
- 15. Moudrý V., Keil P., Cord A.F., Gábor L., Lecours V., Zarzo-Arias A., Barták V., Malavasi M., Rocchini D., Torresani M., Gdulová K., <u>Grattarola F.</u>, Leroy F., Marchetto E., Prošek J., Thouverai E., Wild J. & Šímová P. (2023) Scale mismatches between predictor and response variables in species distribution modelling: a review of practices for appropriate grain selection. *Progress in Physical Geography*. [link]
- 14. Zarzo-Arias A., Penteriani V., Gábor L., Šímová P., <u>Grattarola F.</u>, & Moudrý V. (2022) Importance of Data Selection and Filtering in Species Distribution Models: A Case Study on the Cantabrian Brown Bear. *Ecosphere*, 13(12): e4284. [link]
- 13. Callaghan C.T., Mesaglio T., Ascher J.S, Brooks T.M., Cabras A.A., Chandler M., Cornwell W.K., Ríos-Málaver I.C., Dankowicz E., Dhiya'ulhaq N.U., Fuller R.A., Galindo-Leal C., <u>Grattarola F.</u>, [...], & Young A.N. (2022) The Benefits of Contributing to the Citizen Science Platform INaturalist as an Identifier. *PLOS Biology*, 20(11): e3001843. [link]
- 12. Pincheira-Donoso D., Harvey L.P., <u>Grattarola F.</u>, Jara M., Cotter S.C., Tregenza T. & Hodgson D.J. (2021) The multiple origins of sexual size dimorphism in global amphibians. *Global Ecology and Biogeography*, 30(2): 443-458. [link]
- 11. <u>Grattarola F.</u>, Martínez-Lanfranco, J.A., [...], & Pincheira-Donoso D. (2020) Multiple forms of hotspots of tetrapod biodiversity and the challenges of open-access data scarcity. *Scientific Reports*, 10(1): 1-15. [link]
- 10. <u>Grattarola F.</u>, Mai, P., [...], & Pincheira-Donoso D. (2020) Biodiversidata: A novel dataset for the vascular plant species diversity in Uruguay. *Biodiversity Data Journal*, 8: e56850. [link]
- 9. <u>Grattarola F.</u> & Rodríguez-Tricot L. (2020) Mammals of Paso Centurión, an area with relicts of Atlantic Forest in Uruguay. *Neotropical Biology and Conservation*, 15(3): 267–283. [link]
- 8. D'Alessandro B., Pérez Escanda V., Balestrazzi V., <u>Grattarola F.</u>, [...], & Betancor L. (2020) Comparative genomics of Salmonella enterica serovar Enteritidis ST-11 isolated in Uruguay reveals lineages associated with particular epidemiological traits. *Scientific Reports*, 10: 3638. [link]
- 7. <u>Grattarola F.</u>, Botto, G., [...], & Pincheira-Donoso D. (2019) Biodiversidata: an open-access biodiversity database for Uruguay. *Biodiversity Data Journal*, 7: e36226. [link]
- 6. <u>Grattarola F.</u> & Pincheira-Donoso D. (2019) Data-sharing in Uruguay, the vision of collectors and data users. *Boletín de la Sociedad Zoológica del Uruguay*, 28(1): 1-14. [link]
- 5. Bergós L., <u>Grattarola F.</u>, Barreneche J.M., Herández D., & González S. (2018) Fogones de Fauna: an experience of participatory monitoring of wildlife in rural Uruguay. *Society & Animals*, 26(2), 171-185. [link]
- 4. Chouhy M., Santos C., Gaucher L., <u>Grattarola F.</u>, [...], & Perazza, G. (2017) At the frontiers of knowledge: the quest for an integral training course on society-nature. *Integralidad Sobre Ruedas*, 4(1): 62–77. [link]
- 3. Cosse M., <u>Grattarola F.</u> & Mannise N. (2017) A novel real-time TaqMan™PCR assay for simultaneous detection of Neotropical fox species using noninvasive samples based on cytochrome C oxidase subunit II. *Mammal Research*, 62(4): 405-411. [link]
- 2. <u>Grattarola F.</u>, Hernández D., [...], & Rodríguez-Tricot R. (2016) First record of jaguarundi (Puma yagouaroundi) (Mammalia: Carnivora: Felidae) in Uruguay, with comments about participatory monitoring. *Boletín de la Sociedad Zoológica del Uruguay*, 25(1): 85-91. [link]
- 1. <u>Grattarola F.</u>, Cosse M. & González S. (2015) A novel primer set for mammal species identification from feces samples. *Conservation Genetic Resources*, 7: 57–59. [link]

- 4. <u>Grattarola F.</u>, Rodríguez-Tricot L., Zarucki M. & Laufer G. (2023) Status of the invasion of Carpobrotus edulis in Uruguay based on community science records. *Research Square PREPRINT*. [link]
- 3. Tschernosterová K., Trávníčková E., <u>Grattarola F.</u> & Keil P. (2023) SPARSE 1.0: a template for databases of species inventories, with an open example of Czech birds. *ARPHA Preprints*. [link]
- 2. <u>Grattarola F.</u>, Bowler D.E. & Keil P. (2022) Integrating presence-only and presence-absence data to model changes in species geographic ranges: An example of yaguarundí in Latin America. *EcoEvoRxiv*. [link]
- 1. Pincheira-Donoso D., Harvey L.P., Guirguis J., Goodyear L.E.B., Finn C., Johnson J.V., <u>Grattarola F.</u> (2022) Temporal and spatial patterns of vertebrate extinctions during the Anthropocene. *bioRxiv*. [link]

## BOOKS

 Chouhy M., Bergós L., Garay A., <u>Grattarola F.</u>, Perazza G., Santos C. & Taks J. (2022) Relaciones Sociedad-Naturaleza en Paso Centurión. Aportes desde una trayectoria integral universitaria en la frontera noreste de Uruguay. *Servi*cio Central de Extensión y Actividades en el Medio Universidad de la República. [link]

## **GRANTS, FUNDING**

2022	Capacity Enhancement Support Programme Global Biodiversity Information Facility (GBIF) £14,000   Project 'Extending knowledge on biodiversity data quality and publication in the Spanish-speaking community' CESP2021-007 [link]	
2021 – 2022	Citizen Science for Species Discovery Grant National Geographic Society £25,000   Project 'Naturalista UY – The iNaturalist community for Uruguay' (Uruguay)	
2019	<b>College of Science Grant for Postgraduate Students</b> £750   Attend the conference 'Biodiversity Next' (Leiden, The Netherlands)  University of Lincoln	
2019	<b>Travel Grant for Postgraduate Students</b> £500   Attend the course 'Advancing in statistical modelling for evolutionary biologists and ecologists using R' (Glasgow, Scotland)	
2018	Mobility Fund for Postgraduate Research StudentsSantander - University of Lincoln£500   Deliver the 'First meeting of the members of Biodiversidata' (Montevideo, Uruguay)	
2018	Travel Grant for Early Career European Researchers & Scientists £1,500   Attend the '11th RDA Plenary Meeting' (Berlin, Germany)	
2017 - 2020	<b>Ph.D. International Fellowship</b> Separational Agency for Research and Innovation (ANII) Postgraduate Fellowship POS_EXT_2016_1_136663 (Lincoln, United Kingdom)	
2017	Travel Grant for Postgraduate Students Centro Brasileiro-Argentino de Biotecnologia (CBAB/CABBIO) £1,800   Attend the Course 'Bioinformatics Tools for RNA-Sequence Data Analysis' at Laboratório Nacional de Computação Científica (Petrópolis, RJ, Brasil)	
2015	Internship Grant for Postgraduate Students Association of Universities of the Montevideo Group (AUGM) £1,500   Internship stay at the Laboratório de Biodados, Universidade Federal de Minas Gerais (UFMG) (Belo Horizonte, Brazil)	
2013	Internship Grant for Postgraduate Students Program for the Development of Basic Sciences (PEDECIBA) £1,500   Internship stay at Bioinformatics at the Department of Biochemistry and Molecular Biology, University of Mississippi (Starkville, United States)	
2013 – 2015	Posgraduate National Fellowship National Agency for Research and Innovation (ANII) £8,500   Postgraduate Fellowship POS_NAC_2012_1_8976 (Montevideo, Uruguay)	
2012	Travel Grant Latin American Network for Conservation Genetics (REGENEC) £1,500   Attend the 'VIII Genetic Workshop for Conservation: new tools and new concepts' (Chillán, Chile)	
2012	Mobility Grant Association of Universities of the Montevideo Group (AUGM) £2,000   A semester at Universidade Estadual de Jaboticabal (UNESP) (Jaboticabal, SP, Brazil)	
2011 - 2012	Undergraduate National Fellowship National Agency for Research and Innovation (ANII) £2,000   Initiation in Research Fellowship BE_INI_2010_1961 (Montevideo, Uruguay)	

#### **STUDENTS**

Enzo Cavalli, BSc (Honours) in Biological Sciences, School of Science, Universidad de la República. Project: 'Effects of livestock on the mammal community of Paso Centurión, Cerro Largo'. Advisor, finished in 2019. [thesis]

**Rodrigo Montiel**, BSc (Honours) in Biological Sciences, School of Science, **Universidad de la República**. Project: 'NaturalistaUY as a community science tool to improve biodiversity knowledge in Uruguay'. Advisor, ongoing. [github repo]

# LECTURING

2022 – 2023 two editions	Spatial Ecology and Macroecology Practical classes in the posgraduate course f Leroy and led by Dr. Petr Keil [syllabus]	Faculty of Environmental Sciences, CZU (Czech Republic) or 10 students. Taught together with François	
2017 – 2019 two editions	Modern Mammals Lecture in the graduate course of Palaeontolo Fariña [slides]	School of Science, Universidad de la República (Uruguay) ogy, for 15-20 students. Invited by Dr. Richard	
2018	Management and analysis of camera trap records using R Ministry of Environment (Uruguay) Course for NGOs, researchers and government people. Taught together with Juan M. Barreneche and Gabriel Perazza [syllabus]		
2016 – 2017 two editions		Universidad de la República, Uruguay o command line and programming for bioinfor- Sciences. Invited by Dr. Andrés Iriarte [syllabus]	
2013 – 2017 four editions		Universidad de la República, Uruguay pology, Biology, Geography and Social Sciences. Taks, Magdalena Chouhy, Andrea Garay, Lucía	
2014	Environmental education and community inv Lecture at posgraduate course 'Conservation b Invited by Dr. Susana González.	<b>Volvement</b> Universidad de la República, Uruguay iology' for 15-20 students in Biological Sciences.	
2014	Introduction to Biology	Universidad de la República, Uruguay	

# SERVICE FOR JOURNALS

#### ACADEMIC MEMBERSHIPS

dents of Biological Sciences. Taught together with Dr. Juan Cristina.

Frontiers of Biogeography Biodiversity Data Journal Global Ecology and Biogeography Journal of Biogeography Global Change Biology

2023 - Ecological Society of America.
2021 - International Biogeography Society.
2020 - GBIF Biodiversity Open Data Ambassador.
2010 - Organization for Woman in Spinner for the Economic Spinner for the Economic

**2019** - Organization for Women in Science for the Developing World (OWSD).

2018 - British Ecological Society (BES).

2018 - Research Data Alliance (RDA) - SHARC Interest Group.

Discussion group for the course Introduction to Biology School or 15-20 undergraduate stu-

**2013** – Interdisciplinary Group on Society-Nature Relationships (RETEMA). **2012** – Latin American Network for Conservation Genetics (REGENEC).

2010 - Zoological Society of Uruguay (SZU).

Google Scholar (11/2023) 158 citations, h-index = 7

CITATION METRICS

#### **TRAINING**

2023 Instructor Training: Data Carpentry, Library Carpentry, and Software Carpentry
The Carpentries

Virtual

2023 NIMBLE course

Virtual

University of California, Berkeley

2022 **Joint Species Distribution Modelling with Hierarchical Modelling of Species Communities**Jyväskylä University

Jyväskylä University

2022 Research Data Science Summer School CODATA-RDA

Trieste, Italy

2022	Advanced Training Workshop on Science Communication	Virtual	
2020	Bardo Científico & Academia de Ciencias de América Latina  Using Python to Access Web Data	Virtual	
	Coursera		
2019	Species Distribution Modelling: Fundamentals and the Future University of Nottingham, British Ecological Society	Nottingham, UK	
2019	Advancing in statistical modelling for evolutionary biologists and ecologists using R PR Statistics	Glasgow, Scotland	
2017	Bioinformatics Tools for RNA-Sequence Data Analysis Laboratório Nacional de Computação Científica	Petrópolis, Brazil	
2017	From Complex Networks to Social Networks: Introduction to the Use of Big Data Espacio Interdisciplinario, Universidad de la República	Montevideo, Uruguay	
2016	<b>WGCAC Human and Vertebrate Genomics: Bioinformatics Tools and Resources</b> Wellcome Trust, UK	Montevideo, Uruguay	
2015	Next Generation Sequencing Strtegies Universidad Federal de Minas Gerais	Belo Horizonte, Brazil	
CON	FERENCE TALKS		
2023 Invited	The open-data tale of the yaguarundí Grattarola F.* / Simposium - Datathon Latin America 2023 [slides]	Online	
2023	Assessing hotspots of geographic range changes for charismatic carnivores in the Neotropics using Integrated Species Distribution Models (ISDM)  Portland, USA  Grattarola F.*, Bowler E. D. & Keil P. / Ecological Society of America Annual Meeting (ESA) [abstract]		
2023	<b>Towards implementable recommendations (SHARC)</b> Shmagun H., <u>Grattarola F.</u> *, Erdmann C., Cambon-Thomsen A., Thomsen M. & Mabile L. / 20th Plenary of the Research Data Alliance (RDA) [session notes]		
2022	Data integration to model species geographic range dynamics. The yaguarundi (Herpailurus yagouaroundi) in Latin America as a case study  Grattarola F.*, Bowler E. D. & Keil P. / British Ecological Society Annual Meeting 2022 [slides]		
2022 Invited	Biodiversidata: el Consorcio de Datos de Biodiversidad  Grattarola F.* / Jornada sobre Estrategia Latino Americana, Caribeña e Iberoamericana para la Información de Biodiversidad (GBIF, LifeWatch ERIC) [slides]		
2022 Invited	Open data, community science and environmental education in Uruguay  Rosario, Argentina - Online  Grattarola F.* / I Encuentro Internacional sobre Educación Abierta Ambiental: enseñanza, activismo e investigación [slides]		
2022	How Open Science activities are perceived and recognised in Research and the Research career Seoul, Korea Grattarola F.*, Shmagun H., Mabile L. & Cambon-Thomsen A. / International Data Week 2022 - RDA Plenary Breakout [conference]		
2021	As a naturalist in my country, where are there more opportunities to fill in information gaps?  Online  Grattarola F.* & Barreneche J.M. / LatinR Conference [code repo]		
2021	Roundtable: Activism through digital media  Grattarola F.* / 4th Conference on Digital Citizenship [video]	Montevideo, Uruguay	
2021	The value of open education policies to promote environmental education Grattarola F.* / CILAC Latin American Open Science Forum [video]	Online	
2019	Biodiversity hotspots in Uruguay: real or fabricated? <u>Grattarola F.*</u> & D. Pincheira-Donoso / British Ecological Society Annual Meeting [slides]	Belfast, Northern Ireland	
2019	Biodiversidata: a collaborative initiative towards open data availability in Uruguay  Grattarola F.* & D. Pincheira-Donoso / Biodiversity Next Conference [abstract]		
2019 Invited	Biodiversity data in Uruguay: a long way to go  Grattarola F.* / Biodiversity Informatics 101 Workshop at Biodiversity Next Conference	Leiden, The Netherlands	

- 2019 **Biodiversity hotspots in Uruguay**Lincoln, United Kingdom
- Invited Grattarola F.\* & D. Pincheira-Donoso / School of Life Sciences Postgraduate Symposium, University of Lincoln
- 2019 **iNaturalist** as a tool to enhance the conservation of biodiversity in Uruguay

  Grattarola F.\* / Rufford Conference Uruguay [video]

  Maldonado, Uruguay (online)
- 2017 Landscape genetics of the crab-eating fox Cerdocyon thous (Carnivora: Canidae) Montevideo, Uruguay Grattarola F.\*, Bartesaghi L., Hernández D., Soutullo A., Mannise N., González S. & Cosse M. / IV Uruguayan Zoology Congress
- 2016 **Humans and fauna in Paso Centurión (Cerro Largo) from an interdisciplinary perspective** La Paloma, Uruguay Chouhy M.\*, Garay A., Bergós L., Gaucher L., Perazza G., <u>Grattarola F.</u> & Santos C. / III Interdisciplinary Conference on Biodiversity and Ecology
- 2016 **Democratization of information in the context of territorial management**Gaucher L.\*, Hernández D., <u>Grattarola F.</u>, Rodriguez-Tricot L., Duarte A., Perazza G. & González, S. / III Interdisciplinary Conference on Biodiversity and Ecology
- 2016 Molecular detection of species and sex determination in road killed foxes in Uruguay

  Mannise N.\*, Cosse M., <u>Grattarola F.</u>, Repetto L. & González S. / First Ibero-American Congress on Biodiversity and Road Infrastructure

# SCI COMM

2023 Uruguay nomá

TV interview for the program Ciudad Viva of Tv Ciudad [video]

2023 ISDMs to assess the range dynamics of Neotropical carnivores

Presentation at the seminar series Spatial Analysis of Biodiversity [slides] [video]

2023 Ciencia participativa: Naturalista Uruguay

Presentation at the Foro Mujeres NaturaListas en México y Latinoamérica [slides] [video]

- 2023 **iNaturalist the app with which anyone can provide information on flora and fauna in Uruguay**Radio interview by Gastón González for En Perspectiva, Radiomundo 1170 AM [video] [soundcloud]
- 2022 Workshop in preparation for the Greatern Southern Bioblitz 2022 in NaturalistaUY Live talk streamed on YouTube for NaturalistaUY users [video]
- 2022 **Community science outreach with JULANA and NaturalistaUY**Radio interview by Diego Varela and Fernanda Cabrera for Radio Fénix [video]
- 2022 Scientific Pokemon Go

Podcast episode by Soledad Machado for Medios Públicos [episode]

- 2020 **Biodiversidata began to digitize the herbarium of the National Museum of Natural History**Press note by Leo Lagos for La Diaria [article]
- 2021 **iNaturalist What is it and what can it do for our project?**Talk with students of the Polo Educativo Tecnológico Arrayanes (Park Rangers) [slides]
- 2020 Getting started with iNaturalist Project RACATÚ

Online talk with primary school students from rural school N102 of Berachi (Cerro Largo, Uruguay) [slides]

2020 Uruguayans are wanted to participate in a platform that helps scientists

Press note by Analía Filosi for Diario El País [press article]

2019 iNaturalist: a bet on citizen science

Talk at Museum of Natural History Torres de la Llosa [slides]

2019 iNaturalist a citizen science tool to improve biodiversity knowledge in Uruguay

Radio interview by Juan Vique in Radio Uruguay [audio clip]

- 2019 The Uruguayan Consortium of Biodiversity Data, Biodiversidata, published the first open data set Press note by Leo Lagos for La Diaria [press article]
- 2019 Series 'Gender and IT' Pan Ceibal

Online talk with students from Canelones, Paysandú, Tacuarembó and Treinta y Tres' primary schools in Uruguay

## 2019 Biodiversidata: Biodiversity Open Data

Online talk at the Third Edition of 'Datos y Cogollos: Open Data in Uruguay'. La Diaria Media Lab (Montevideo, Uruguay) [slides]

# 2019 Exhibition 'A Computer of One's Own'

Art exhibition about pioneer women in Computer Science at CSSconf and JSConf (Berlin, Germany) [project's website]

#### 2018 Big data in biodiversity

Radio interview with Federico Weinstein in the science segment of the program Justicia Infinita, Radio Océano (93.9 FM) (Montevideo, Uruguay)

## 2017 The Marsh Seedeater

Video production for PROBIDES organization [video]

## 2016 Drawn news: First record of a jaguarundi in Uruguay

Video production for JULANA NGO [video]