

# 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. Recently, I also joined the IUCN SSC Species Monitoring Specialist Group.

# **EDUCATION**

2017 – 2021	Ph.D., Life Sciences Evolution and Ecology Research Group, School of Life Scien formatics and macroecological patterns of biodiversity: Uruç Daniel Pincheira-Donoso	•
2013 – 2015	M.Sc., Biological Sciences (Genetics) Department of Biodiversity and Genetics, Clemente Estable Estables Sertation: Contributions of molecular ecology to the study of Susana González and Mariana Cosse	
2006 - 2012	B.Sc. (Hons), Biological Sciences Department of Biodiversity and Genetics, Clemente Estab Project: Development of molecular tools for the taxonomic ic species. Advisor: Mariana Cosse	•

# PROFESSIONAL EXPERIENCE

04/2021 - present	Postdoc Range dynamics of Neotropical carr	Czech University of Life Sciences (Czech Republic) nivores in the MOBI Lab, Department of Spatial Sciences.
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> Demonstrating for courses of Zoo School of Life Sciences	University of Lincoln (Lincoln, United Kingdom) logy, Paleontology, and Biological Anthropology at the
01/2017 - 07/2017 part time	<b>Project Manager</b> Co-coordination of the project 'Conservation in private protected areas of Uruguay'	
11/2016 - 03/2017	<b>Research Assistant</b> Bioinformatics and genomics at the	Universidad de la República (Montevideo, Uruguay) Department of Animal Genetics, School of Veterinary
10/2016 - 11/2016	<b>Field Assistant</b> Sampling plots of vascular plants fo	<b>Technische Universität Berlin (Uruguay)</b> r the project 'Rural Futures'
11/2015 - 10/2016 part time	<b>Technician</b> Livestock pedigree data manageme	Rural Association of Uruguay (Montevideo, Uruguay) ent
11/2015 - 10/2016 part time	Research Assistant Bioinformatics and comparative ger Medicine	Universidad de la República (Montevideo, Uruguay) nomics of Salmonella at the Institute of Hygiene, School of
01/2012 - 12/2015	Research Assistant Research and teaching at the Depart	Clemente Estable Biological Research Institute (Montevideo, Uruguay) tment of Biodiversity and Genetics
05/2012 - 04/2014 part time	<b>Teaching Assistant</b> Organization of outreach ativities at	Universidad de la República (Montevideo, Uruguay) the Extension Unit, School of Science

#### **PEER-REVIEWED ARTICLES**

- 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 Uruquay. *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]

# **PRE-PRINT ARTICLES**

- 2. <u>Grattarola F.</u>, Bowler E.D. & Keil P. (2022) Integrating presence-only and presence-absence data to model changes in species geographic ranges: An example of yaguarundi 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]

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> Selowship POS_EXT_2016_1_136663 (Lincoln, United Kingdom)  National Agency for Research and Innovation (ANII)	
2017	<b>Travel Grant for Postgraduate Students</b> 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	Posgraduate 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**

two editions

2022	Spatial Ecology and Macroecology Practical classes in the posgraduate coulomber Leroy and led by Dr. Petr Keil [syllabus]	Faculty of Environmental Sciences, CZU (Czech Republic) rse for 6-8 students. Taught together with François
2017 - 2019	Modern Mammals	School of Science, Universidad de la República (Uruguay)

Lecture in the graduate course of Palaeontology, for 15-20 students. Invited by Dr. Richard

Fariña [slides]

2018	Management and analysis of camera trap records using R Course for NGOs, researchers and government people. Tar reneche and Gabriel Perazza [syllabus]	Ministry of Environment (Uruguay) ught together with Juan M. Bar-
2016 – 2017 two editions	Introduction to Python Lecture at posgraduate course 'Introduction to command lin matic analysis', for 25-30 students in Biological Sciences. Invi	
2013 – 2017 four editions	Relationships between Society and Nature Graduate course for 10-20 students of Anthropology, Biology Taught together with Carlos Santos, Javier Taks, Magdaler Bergós and Gabriel Perazza [link to S&N Group]	9 . ,
2014	Environmental education and community involvement Lecture at posgraduate course 'Conservation biology' for 15-2 Invited by Dr. Susana González.	<b>Universidad de la República, Uruguay</b> O students in Biological Sciences.
2014	Introduction to Biology	Universidad de la República, Uruguay

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

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

#### SERVICE FOR JOURNALS ACADEMIC MEMBERSHIPS Frontiers of Biogeography. 2021 - International Biogeography Society. **Biodiversity Data Journal** 2020 - GBIF Biodiversity Open Data Ambassador. Global Ecology and Biogeography 2019 - Organization for Women in Science for the Developing World (OWSD). Journal of Biogeography 2018 - British Ecological Society (BES). 2018 - Research Data Alliance (RDA) - SHARC Interest Group. **CITATION METRICS** 2018 - Uruguayan Consortium of Biodiversity Data (Biodiversidata). 2013 - Interdisciplinary Group on Society-Nature Relationships (RETEMA). 2012 - Latin American Network for Conservation Genetics (REGENEC). Google Scholar (01/2023) 2010 - Zoological Society of Uruguay (SZU). 101 citations. h-index = 5

TRAIN	NING	
2023	NIMBLE short course NIMBLE	Virtual
2022	<b>Joint Species Distribution Modelling with Hierarchical Modelling of Species Communities</b> Jyväskylä University	Jyväskylä, Finland
2022	Research Data Science Summer School CODATA-RDA	Trieste, Italy
2020	Using Python to Access Web Data Coursera	Virtual
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



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 Biodiversidata: el Consorcio de Datos de Biodiversidad

Sevilla, España

- Grattarola F.\* / Jornada sobre Estrategia Latino Americana, Caribeña e Iberoamericana para la Información de Biodiversidad (GBIF, LifeWatch ERIC) [slides]
- 2022 **Open data, community science and environmental education in Uruguay**Rosario, Argentina Online

  Invited 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]
- 2020 **Hotspots of biodiversity and the challenges of open-data scarcity**Online
  Invited Grattarola F.\* / Seminar of the Department of Spatial Sciences, Czech University of Life Sciences Prague
- 2019 **Biodiversity hotspots in Uruguay: real or fabricated?**Belfast, Northern Ireland
  Grattarola F.\* & D. Pincheira-Donoso / British Ecological Society Annual Meeting [slides]
- 2019 **Biodiversidata**: a collaborative initiative towards open data availability in Uruguay

  Leiden, The Netherlands

  Grattarola F.\* & D. Pincheira-Donoso / Biodiversity Next Conference [abstract]
- 2019 **Biodiversity data in Uruguay: a long way to go**Leiden, The Netherlands

  Grattarola F.\* / Biodiversity Informatics 101 Workshop at Biodiversity Next Conference
- 2019 **Biodiversity hotspots in Uruguay**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**<u>Grattarola F.</u>\* / 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 **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 [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 [radiocut]

#### 2019 The Uruguayan Consortium of Biodiversity Data, Biodiversidata, published the first open data set

Press note by Leo Lagos for La Diaria [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)

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

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

#### 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]