

# 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 University of Lincoln, United Kingdor Evolution and Ecology Research Group, School of Life Sciences. Dissertation: Biodiversity in formatics and macroecological patterns of biodiversity: Uruguay as a model region. Adviso 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 carnivo	Czech University of Life Sciences (Czech Republic) res in the MOBI Lab, Department of Spatial Sciences.
01/2021 - 04/2021		ogramme - World Conservation Monitoring Centre (Cambridge, UK) the Conserving Land and Seascapes Team
08/2018 - 12/2020 part time	<b>Demonstrator</b> Demonstrating for courses of Zoolog School of Life Sciences	University of Lincoln (Lincoln, United Kingdom) y, Paleontology, and Biological Anthropology at the
01/2017 - 07/2017 part time	<b>Project Manager</b> Co-coordination of the project 'Conserv	Vida Silvestre NGO (Montevideo, Uruguay) ration in private protected areas of Uruguay'
11/2016 - 03/2017	Research Assistant Bioinformatics and genomics at the De	Universidad de la República (Montevideo, Uruguay) partment of Animal Genetics, School of Veterinary
10/2016 - 11/2016	<b>Field Assistant</b> Sampling plots of vascular plants for th	<b>Technische Universität Berlin (Uruguay)</b> e project '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	<b>Research Assistant</b> Bioinformatics and comparative genome Medicine	Universidad de la República (Montevideo, Uruguay) ics of Salmonella at the Institute of Hygiene, School of
01/2012 - 12/2015	Research Assistant cle Research and teaching at the Departmen	mente Estable Biological Research Institute (Montevideo, Uruguay) ent of Biodiversity and Genetics
05/2012 - 04/2014 part time	<b>Teaching Assistant</b> Organization of outreach ativities at the	Universidad de la República (Montevideo, Uruguay) Extension Unit, School of Science

### PEER-REVIEWED ARTICLES

- 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 of jaguarundi in the Neotropics. *Journal of Biogeography*. *[in press*]
- 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 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 Uruquay. *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 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**

1. 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. *Servicio 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)
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 Students  Santander - 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	Ph.D. International Fellowship  \$49,000   Postgraduate Fellowship POS_EXT_2016_1_136663 (Lincoln, United Kingdom)
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'

## **STUDENTS**

2011 - 2012

2012

(Chillán, Chile)

**Mobility Grant** 

**Undergraduate National Fellowship** 

**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]

£2,000 | A semester at Universidade Estadual de Jaboticabal (UNESP) (Jaboticabal, SP, Brazil)

£2,000 | Initiation in Research Fellowship BE\_INI\_2010\_1961 (Montevideo, Uruguay)

Association of Universities of the Montevideo Group (AUGM)

National Agency for Research and Innovation (ANII)

**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]

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2022 Spatial Ecology and Macroecology Faculty of Environmental Sciences, CZU (Czech Republic) Practical classes in the posgraduate course for 6-8 students. Taught together with François Leroy and led by Dr. Petr Keil [syllabus] 2017 - 2019 **Modern Mammals** School of Science, Universidad de la República (Uruguay) two editions 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 Ministry of Environment (Uruguay) Course for NGOs, researchers and government people. Taught together with Juan M. Barreneche and Gabriel Perazza [syllabus] 2016 - 2017 Introduction to Python Universidad de la República, Uruguay two editions Lecture at posgraduate course 'Introduction to command line and programming for bioinformatic analysis', for 25-30 students in Biological Sciences. Invited by Dr. Andrís Iriarte [syllabus] 2013 - 2017 Relationships between Society and Nature Universidad de la República, Uruguay four editions

Relationships between Society and Nature
Universidad de la República, Uruguay
Graduate course for 10-20 students of Anthropology, Biology, Geography and Social Sciences.
Taught together with Carlos Santos, Javier Taks, Magdalena Chouhy, Andrea Garay, Lucía
Bergós and Gabriel Perazza [link to S&N Group]

2014 Environmental education and community involvement Universidad de la República, Uruguay Lecture at posgraduate course 'Conservation biology' for 15-20 students in Biological Sciences. Invited by Dr. Susana González.

2014 **Introduction to Biology**Discussion group for the course Introduction to Biology School or 15-20 undergraduate students of Biological Sciences. Taught together with Dr. Juan Cristina.

# SERVICE FOR JOURNALS ACADEMIC MEMBERSHIPS

Frontiers of Biogeography 2021 - International Biogeography Society. 2020 - GBIF Biodiversity Open Data Ambassador. **Biodiversity Data Journal** 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. 2018 - Uruguayan Consortium of Biodiversity Data (Biodiversidata). CITATION METRICS 2013 - Interdisciplinary Group on Society-Nature Relationships (RETEMA). 2012 - Latin American Network for Conservation Genetics (REGENEC). Google Scholar (04/2023) 2010 - Zoological Society of Uruguay (SZU). 115 citations, h-index = 6

## **TRAINING**

2023 **NIMBLE course**University of California, Berkeley

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

2022 Research Data Science Summer School
CODATA-RDA
Trieste, Italy

2022 **Taller Avanzado de Formación en Comunicación Científica**Bardo Científico - Academia de Ciencias de América Latina

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 Glasgow, Scotland PR Statistics

2017 Bioinformatics Tools for RNA-Sequence Data Analysis Petrópolis, Brazil

Laboratório Nacional de Computação Científica

- From Complex Networks to Social Networks: Introduction to the Use of Big Data Montevideo, Uruguay Espacio Interdisciplinario, Universidad de la República 2016 WGCAC Human and Vertebrate Genomics: Bioinformatics Tools and Resources Montevideo, Uruguay Wellcome Trust, UK 2015 Next Generation Sequencing Strtegies Belo Horizonte, Brazil Universidad Federal de Minas Gerais **CONFERENCE TALKS** 2022 Data integration to model species geographic range dynamics. The yaguarundi (Herpailurus yagouaroundi) in Latin America as a case study Edinburgh, Scotland 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 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 Montevideo, Uruguay <u>Grattarola F.</u>\* / 4th Conference on Digital Citizenship [video] 2021 The value of open education policies to promote environmental education Online <u>Grattarola F.</u>\* / CILAC Latin American Open Science Forum [video] 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] 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**Lincoln, United Kingdom
  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**

2022	ciamaia	participativa:	Maturalista	I luccouract

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]