

Email: asun.rodriguez@bc3research.org

Website: www.bc3research.org/en/asun_rodriguez

Phone: +34 944 014 690 ext. 135

Education

- 12/2016 - 06/2021** **Ph. D., Biodiversity, Functioning and Management of Ecosystems.**
Summa cum Laude. International PhD. Universidad del País Vasco (Spain).
- 10/2014 - 09/2015** **M.Sc., Ecosystem Restoration.** 8.82/10. Universidad de Alcalá, U. Rey Juan Carlos, U. Complutense de Madrid, U. Politécnica de Madrid (Spain).
- 10/2008 - 07/2013** **B.Sc., Environmental Sciences.** 8.02/10. Universidad Autónoma de Madrid.
09/2010 - 07/2011 *Erasmus+* grant at Wageningen University (the Netherlands).

Research experience

- 06/2021 – 08/2021** **Research Assistant.** Basque Centre for Climate Change-BC3 (Spain)
Supervisor: Teresa Gimeno
- 12/2016 - 05/2021** **Ph. D. student.** Basque Centre for Climate Change-BC3 (Spain)
“*Measuring the long-term recovery of forest ecosystems after anthropogenic disturbances to improve restoration strategies and outcomes*”.
Supervisors: David Moreno Mateos, Isabel Salcedo Larralde
- 06/2016 - 11/2016** **Research Assistant.** Basque Centre for Climate Change-BC3 (Spain)
Supervisor: David Moreno Mateos
- 02/2016 - 05/2016** **Research Assistant.** Dpt. of Life Sciences, Universidad de Alcalá (Spain)
Supervisors: José María Rey Benayas, Pedro Villar Salvador

Short research stays

- 13/02/2020 - 25/02/2020** **CNRS SETE Moulis** (France). Supervisor: Daniel Montoya
- 11/03/2019 - 25/05/2019** **Bristol University** (UK). Supervisor: Jane Memmott
- 26/02/2018 - 26/03/2018,**
22/10/2018 - 12/11/2018 **Natural History Museum of Denmark.** Supervisor: Tom Gilbert

Scientific publications

- Rodríguez-Uña A**, Salcedo I, Rodríguez-Echeverría S, Moreno-Mateos D. Under review. Centennial recovery of mycorrhizal interactions in European beech forests after mining. *Restoration Ecology*.
- De la Casa J, Barbeta A, **Rodríguez-Uña A**, Wingate L, Ogée J, Gimeno TE. Under review. Revealing a significant isotopic offset between plant water and its sources using a global meta-analysis. *Hydrology and Earth System Sciences*.
- Rodríguez-Uña A**, Cruz-Alonso V, Rohrer Z, Martínez-Baroja L. 2020. Fresh perspectives for classic forest restoration challenges. *Restoration Ecology* 28: 12-15.
- Moreno-Mateos D, Alberdi A, Morriën E, van der Putten W, **Rodríguez-Uña A**, Montoya D. 2020. The long-term restoration of ecosystem complexity. *Nature in Ecology and Evolution*, 4(5), 676–685.
- Rodríguez-Uña A**, Hidalgo-Castañeda, J, Salcedo I, Moreno-Mateos, D. 2019. Recuperación de las interacciones entre el haya (*Fagus sylvatica*) y los hongos ectomicorrícicos 140 años después del fin de la actividad minera. *Ecosistemas* 28(2):61-68.

6. Moreno Mateos D, **Rodríguez Uña A**, Gamio Indakoetxea A. 2019. Historia de la minería, sus impactos y la recuperación forestal en la finca de Artikutza. In *Artikutza. Naturaleza e Historia*, Ayuntamiento de San Sebastián, pp. 112-127.

Manuscripts in progress

Rodríguez-Uña A, Cruz-Alonso V, López-López J A, Moreno-Mateos D. Centennial recovery of restored forests.

Rodríguez-Uña A, Montoya D, Alberdi A, Arbea J, Moreno-Mateos D. Long-term recovery of Collembola-soil fungi interaction networks after mining.

Gimeno TE, **Rodríguez-Uña A**, Matesanz S, Fanin N, Wingate L, Porras J, Moreno-Mateos D. Changes in community composition of ectomycorrhizal fungi along a precipitation gradient in relation to shifts in water-uptake in European beech forests.

Scientific presentations

Invited talk

- 2018** **Rodríguez-Uña A**. Stability recovery of interaction networks in temperate forests after mining impacts caused since the Middle Ages. Center for Macroecology, Evolution and Climate, University of Copenhagen (Denmark).

Conferences (as speaker)

- 2021** **Rodríguez-Uña A**, Cruz-Alonso V, López-López JA, Moreno Mateos D. Centennial recovery of biodiversity and functions in restored forests. *XV Congreso Nacional de la AEET* (Plasencia, Spain).
- 2021** **Rodríguez-Uña A**, Cruz-Alonso V, López-López JA, Moreno Mateos D. Long-term restoration of human-disturbed forests: drivers and time to recovery. *ESA Annual Meeting* (online).
- 2019** **Rodríguez-Uña A**. Recovery of soil interaction networks in temperate forests after a long-term mining impact. *II Jornadas Doctorales de la UPV/EHU* (Bilbao, Spain).
- 2019** **Rodríguez-Uña A**, Moreno Mateos D. Stability recovery of interaction networks in temperate forests after mining impacts caused since the Middle Ages. *1st SIBECOL & XIV AEET Meeting* (Barcelona, Spain).
- 2018** **Rodríguez-Uña A**, Moreno Mateos D. Recuperación de la estabilidad de las redes de interacción en ecosistemas forestales afectados por la minería desde la Edad Media. *IV SECF & AEET Meeting* (Alcázar de San Juan, Spain).

Conferences (as co-author)

- 2021** Cruz-Alonso V, ..., **Rodríguez-Uña A**, ..., Velado-Alonso E. Gender bias in Ecosystem Restoration: from Science to Practice. *12th SERE Conference* (online).
- 2021** De la Casa J, ..., **Rodríguez-Uña A**, ..., Gimeno TE. A global meta-analysis reveals a significant offset in $\delta^2\text{H}$ between plant water and its sources. *EGU General Assembly* (online).
- 2019** Moreno Mateos D, Alberdi A, **Rodríguez-Uña A**. Understanding the long-term assembly of ecosystem complexity to advance a limited restoration. *1st Meeting of the Iberian Ecological Society & XIV AEET Meeting* (Barcelona, Spain).
- 2019** **Poster**: Salcedo I, Cabero J, **Rodríguez-Uña A**, Moreno-Mateos D. The neglected hypogeous ectomycorrhizal fungi of Artikutza (Northern Navarre, Spain). *18th Congress of European Mycologists* (Warsaw, Poland).
- 2017** Martínez-Baroja L, ..., **Rodríguez-Uña A**, ..., Rey-Benayas JM. Acorn dispersal by magpie (*Pica pica*) in a Mediterranean forest and farmland mosaic. An overlooked actor for oak woodland spread? *IUFRO-sponsored 3rd Restoring Forests Congress* (Lund, Sweden).

- 2017** Martínez-Baroja L, ..., **Rodríguez-Uña A**, ..., Leverkus AB. How did I arrive here? Dispersal of holm oak (*Quercus ilex*) acorns by magpie (*Pica pica*) in a forest and farmland mosaic. *MEDECOS XIV International Conference* (Seville, Spain).

Session chair. *XVII EcoFlor meeting*, 2020 (Bilbao).

Volunteer. *III Jornadas Ibéricas de Ecología del Paisaje*, 2016 (Cáceres).

Volunteer. *II Foro Internacional de Restauración Ecológica*, 2015 (Madrid).

Grants and fellowships

2016	Fundación Tatiana Pérez de Guzmán el Bueno – Ph. D. fellowship	70,500€
2016	<i>Awarded but rejected:</i> Universidad del País Vasco – Ph. D. fellowship	65,500€
2016	European Social Fund (European Commission) - Research assistant	25,000€

Participation in research projects

2020 -	<i>Assessing the role of soil diversity on the maintenance of beech forest functioning in a climate change scenario (PIBA 2019-105).</i> Funding Agency: Basque Government (49.481€) Institution: Basque Centre for Climate Change-BC3. PI: Teresa Gimeno
2016 - 2019	<i>Estimating recovery time of temperate forests after historic anthropogenic disturbances along a gradient of complexity (CGL2015-70452-R).</i> Funding Agency: Spanish Ministry of Economy and Competitiveness (172.000€) Institution: Basque Centre for Climate Change-BC3. PI: David Moreno Mateos
2016	<i>Bird services (high mobile link species) in agroforestry mosaics: forest regeneration and plague regulation (CGL2014-53308-P).</i> Funding Agency: Spanish Ministry of Economy and Competitiveness (205.700€) Institution: Universidad de Alcalá. PI: Salvador Rebollo, José María Rey Benayas
2016	<i>Tolerance and physiological strategies of Iberian pines in juvenile stages in response to water stress, low temperatures and nutrient availability (AGL201124296).</i> Funding Agency: Spanish Ministry of Economy and Competitiveness (120.000€) Institution: Universidad de Alcalá. PI: Pedro Villar Salvador
2016	<i>Vulnerability and adaptation of Iberian forests to drought: a multi-scale approximation based on dendrochronology, forest inventories and modelling (CGL2015-69186-C2-2-R).</i> Funding Agency: Spanish Ministry of Economy and Competitiveness (87.000€) Institution: Universidad de Alcalá. PI: Miguel Ángel Zavala

Student supervision

2020	Master's thesis co-supervisor of Mr. <i>Javier De La Casa Sánchez</i> (U. de Alcalá, Spain) Best Master's thesis award from <i>Premios de la Cátedra del Agua y la Sostenibilidad</i>
-------------	--

Skills

Computer	Statistical packages: RStudio, SPSS GIS platforms: QGIS, ArcGIS, gvSIG, GlobalMapper, Idrisi, Envy Biomolecular analysis: Geneious, MEGA, figtree, Seed2 Dendrochronology: CDendro and Coorecorder Design software: GeoFluv-Natural Regrade, AutoCAD, Autocad Map 3D Image processing: Inkscape, Image J, Engauge, Datathief
Data analysis	Generalized and general linear models, mixed models, multivariate analysis Meta-analytic models

	Ecological network analysis Analysis of high-throughput sequencing data
Lab work	Fungal DNA extraction and amplification (PCR) Creation of mycorrhizal fungi cultures and inoculation in plants ¹⁵ N labelling of cultivated plants Extraction and analysis of non-structural carbohydrates in plant tissues
Field work	Southwestern Greenland. Spain: Navarre, The Pyrenees and Central System
Languages	Spanish (mother tongue), fluent English and basic French

Outreach

Mentoring

- 2019, 2020** [Zientzia-Azoka](#): mentoring high-school students to develop research projects.
- 2018, 2019** [Inspira-STEAM](#): encouraging scientific vocations in high-school female students.
- 2018** [BC3 Training Caravan](#): providing science-based answers about climate change, making science careers attractive for young people.

Worldwide media

- 2021** RETEMA: [Día Mundial del Medio Ambiente: Comienza la década de la restauración](#)
- 2020** 18 media publications about *Rodríguez-Uña et al. 2019, Ecosistemas* (e.g. [EFE](#), [Europa Press](#), [SINC](#), [La Vanguardia](#), [COPE](#), [Diario de Navarra](#), [eldiario.es](#))
- 2019** Radio Euskadi, Hágase la luz: [Artikutza, un tesoro medioambiental a preservar](#)
- 2018** Podcast Oikos: [Hablamos con Asun Rodríguez, investigadora predoctoral del BC3](#)

Training

- 2021** *Study of microbiomes using high-throughput sequencing*. 20h. Universidad del País Vasco.
- 2020** *Introduction to multilayer networks*. 7h. Asociación Española de Ecología Terrestre.
- 2019** *Ecological networks analysis*. 40h. Universidad Rey Juan Carlos.
- 2017** *Molecular approaches for biodiversity detection*. 13h. Universidad del País Vasco.
- 2017** *Climate Change in an Era of Uncertainty*. 30h. BC3-Basque Centre for Climate Change & Universidad del País Vasco.
- 2017** *Information resources and tools for PhD students*. 9h. Universidad del País Vasco.
- 2016** *Optimizing the use of R for ecological analysis*. 30h. Asociación Española de Ecología Terrestre.
- 2016** *Exploratory Data Analysis and Linear Models in R*. 24h. Universidad de Alcalá.
- 2014** *On-line course in Environmental Education*. 140h. Centro Nacional de Educación Ambiental.
- 2014** *Socioeconomic development around National Parks with organic agriculture*. 28h. CENEAM-Centro Nacional de Educación Ambiental.
- 2014** *Volunteering, exclusion and development cooperation*. 14h. Universidad Politécnica de Madrid & Universidad Complutense de Madrid.
- 2013** *Communication and Education for Climate Change*. 27h. CENEAM-Centro Nacional de Educación Ambiental.

Academic societies

- | | |
|-------------|--|
| 2021 | Ecological Society of America (ESA)
Society of Ecological Restoration (SER) |
| 2018 | Sociedad Ibérica de Ecología (SIBECOL) |
| 2017 | British Ecological Society (BES) |
| 2016 | Asociación Española de Ecología Terrestre (AEET) |