

## CURRICULUM VITAE ABREVIADO (CVA)

**IMPORTANT** – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

### Part A. PERSONAL INFORMATION

First name	Cayetano		
Family name	Gutiérrez Cánovas	Date of Birth	23/05/1982
Gender	Male		
ID number	23038511D	URL Web	<a href="https://tanogutierrezcanovas.weebly.com/">https://tanogutierrezcanovas.weebly.com/</a>
e-mail	cayetano.gutierrez@urjc.es		
Open Researcher and Contributor ID (ORCID) (*)		<a href="https://orcid.org/0000-0002-6785-4049">0000-0002-6785-4049</a>	
Other scientific profiles: <a href="#">Google Scholar</a>   <a href="#">WOS (Referee activity)</a>   <a href="#">GitHub (code)</a>   <a href="#">ImpactStory</a>			

#### A.1. Current position

Position	'La Caixa' Postdoctoral Junior Leader Fellowship		
Initial date	1/09/2022		
Institution	King Juan Carlos University (URJC)		
Department/Centre	Area of Biodiversity and Conservation		
Country	Spain	Phone number	+34634570441
Keywords	Biodiversity   Ecosystem functioning   Functional diversity   Global change   Rivers		

#### A.2. Previous positions (research activity interruptions)

Period	Position/Institution/Country/Cause of the interruption
9/2020-8/2022	Juan de la Cierva-Incorporación Fellow/Doñana Biological Station-CSIC/Spain
10/2020 – 12/2020	Paternity leave (3 months)
5/2019 – 8/2020	Postdoctoral researcher at FCT-Streameco / CBMA-Univ. Minho/ Portugal
3/2017 – 4/2019	Juan de la Cierva-Formación Fellowship/ Univ. Barcelona (UB) / Spain
1/2015 – 2/2017	Postdoctoral researcher at EU MARS / Cardiff University / UK
8/2014 – 12/2014	Part-time technician / UMU / Spain
12/2011 – 6/2013	Educator-researcher, Lessons from Nature (EUComenius) / Spain
11/2007 – 11/2011	PhD student, funded by Fundación Séneca / UMU / Spain
5/2007 – 11/2007	Research contract / UMU / Spain
10/2004 – 7/2005	Introductory research grant ("Beca-Colaboración") / Univ. Murcia (UMU) / Spain

#### A.3. Education

Degree	University/Country	Year
PhD thesis: ' <a href="#">Ecosystem responses to natural and anthropogenic stress: from biomonitoring tools to predictive ecology</a> ' (extraordinary PhD award). Supervisors: J. Velasco and A. Millán.	University of Murcia (UMU)	2014
3-yr BS Business Sciences	UMU	2010
2-yr MSc Biodiversity conservation	University of Alicante	2007
5-yr degree in Environmental Sciences	UMU	2005



## Part B. CV SUMMARY (max. 5000 characters, including spaces)

I investigate the causes of **biodiversity change**, and its consequences for ecosystems, biogeochemistry and people. The biodiversity crisis poses risks to ecosystems and **societies** owing to their reliance on the fluxes of energy and matter that living organisms support (e.g. primary production and nutrient cycling). Understanding the links between biodiversity and **ecosystem functioning** and their joint responses to **global change** represents an urgent challenge for scientists and decision-makers to promote long-term sustainability. To this end, my research integrates techniques and knowledge from biodiversity science, community ecology, macroecology and biogeochemistry to support policies that mitigate the impacts of the biodiversity crisis and global change.

### Research lines

1. Multiple stressor impacts across ecological and spatiotemporal scales
2. Biodiversity - Ecosystem functioning relationships under global change
3. Conceptual and methodological tools to estimate functional diversity
4. Biomonitoring and conservation of naturally saline and non-perennial rivers

### Scientific production

- I have published **57 papers** in JCR journals (1<sup>st</sup> author:14\*; 2<sup>nd</sup> author:18\*\*; senior author:5). 3 more papers under review in JCR journals (1<sup>st</sup> author:2, senior author:1); *\*includes 2 papers as joint 1<sup>st</sup> author; \*\*does not include the 2 articles as joint 1<sup>st</sup> author*
- **Citations: 2,395, h-index=26.** ~50% of these citations were concentrated in the 2021-22 period, reflecting a strong growing trend and a highly promising potential. 7 papers with > 100 citations
- **I3 certificate** [call 2021-22](#)

**Outreach.** I have a strong interest in science communication, which I have developed through my own platform ([Ecomandanga](#)), contributions to other blogs and regular participation in national and international media (see my [website](#) for more details).

**Internationalization.** I worked **3.5 years abroad** as a postdoc at Cardiff University and University of Minho and performed **three international stays** (6.5 months). I participated in international research networks (e.g. SMIREs COST Action) and created IberRios, the first network to explore multiple stressor impacts on Iberian rivers. As a result of my international activities, I have published **20 papers**. I was invited to participate as a **plenary speaker** at the [AIL 2020 conference](#) and contributed to the organization of special sessions and international conferences. I have recognized international activity as a **referee** for >30 JCR journals, for which I provided [122 reviews](#). [Top Reviewer Award](#) in Environment and Ecology - September 2018. **Reviewer of 5 research projects** for international funding agencies: EU Biodiversa, Argentinian FONCyT, Austral University of Chile, German DFG and Peruvian FONDECYT. I reviewed 4 projects for the **Spanish ANEP**.

**Independence and leadership.** I obtained two competitive fellowships that allowed me to develop **new ideas** and become an **independent researcher**. First, I was awarded with a 3-yr fellowship within the prestigious program **JdC-Incorporación** (success rate: 13.8%) at the EBD-CSIC, offering my first opportunity to manage own funding (6,000€). Second, I obtained an extremely competitive '**La Caixa**' **Junior Leader fellowship**, which offered me the first opportunity to lead a research project (budget:115,000€). Success rate in this call was 4.6%, being the only grant funded in the Ecology category. Recently, I obtained a Generación de Conocimiento 2022 project (TrophicStress) with a research budget of 120,000€. These grants provided me with the necessary resources to establish a research group at URJC and initiate independent research lines through the creation of the [Iberian River Observatory](#), the first large-scale observatory to investigate multiple stressor impacts on river biodiversity and ecosystem functions.

I played a **major role** as the first, second or senior author in 65% (37) of my JCR publications. In these papers, I made a key contribution to study conceptualization, literature review, fieldwork, data-analysis and manuscript writing. As a direct result of my **mentorship** activity of early career researchers, I published 13 articles (role: 2<sup>nd</sup> or senior author): [Carbonell et al. 2011](#), [2017](#); [Guareschi](#)



[et al. 2012](#); [Bruno et al. 2016a, 2016b](#); [Zamora et al. 2016](#); [Herrero et al. 2018](#); [Granados et al. 2020](#); [Soria et al. 2020](#); [Arias-Real et al. 2021, 2022a, 2022b](#), [Lourenço et al. 2023](#).

I **supervised** 2 final degree projects at University of Minho and 4 MSc thesis (Univ. Minho: 1, UPO: 1, URJC: 2). Member of 2 PhD thesis juries ([Juan D González Trujillo ICRA, 30 Jul 2020](#) and Juan Rubio Ríos UAL, 20 Feb 2023) and 1 Follow-up PhD Thesis panel (Vanessa Céspedes, EBD-CSIC).

I **organized** 4 workshops for early career researchers (e.g. [international course on functional ecology](#)) and contributed >320h to teaching in BSc and MSc (UMU, UB, URJC). I was a PhD student representative in the Council of Ecology and Hydrology Department (UMU, 2013) and the President of the Association of Young Researchers of UMU-AJIUM (2014).

## **Part C. RELEVANT MERITS** (*sorted by typology*)

### **C.1. Publications**

#### **Selected publications in JCR journals** (CA: corresponding author)

**10. Gutiérrez-Cánovas, C.** (1/9), Worthington, T. A.,... & Durance, I. (CA) (2021). [Populations of high-value predators reflect the traits of their prey](#). *Ecography*, 44(5), 690-702.

**9. Gutiérrez-Cánovas, C.** (CA), Moleón, M., Mateo-Tomás, P., Olea, P.P., Sebastián-González, E., & Sánchez-Zapata, J.A. (2020). [Large home range scavengers support higher rates of carcass removal](#). *Functional Ecology*, 34(9), 1921-1932.

**8. Múrria, C.** (CA), Iturrarte, G. & **Gutiérrez-Cánovas, C.** (2020). [A trait space at an overarching scale yields more conclusive macroecological patterns of functional diversity](#). *Global Ecology and Biogeography*, 29, 1729-1742.

**7. Gutiérrez-Cánovas, C.** (CA), Arribas, P., Naselli-Flores, L., Bennis, N., Finocchiaro, M., Millán, A. & Velasco, J. (2019). [Evaluating anthropogenic impacts on naturally stressed ecosystems: Revisiting river classifications and biomonitoring metrics along salinity gradients](#). *Science of the Total Environment* 658, 912–921.

**6. Gutiérrez-Cánovas, C.** (CA, 1/10), Sánchez-Fernández, D., Cañedo-Argüelles, M. *et al.* (2019). [Do all roads lead to Rome? Exploring community trajectories in response to anthropogenic salinization and dilution of rivers](#). *Phil. Trans. R. Soc. B* 374: 20180009.

**5. Velasco, J.** (CA), **Gutiérrez-Cánovas, C.** (2/8), Botella-Cruz, M., Sánchez-Fernández, D., Arribas, P., Carbonell, J. A., Millán, A. & Pallarés, S. (2019). [Effects of salinity changes on aquatic organisms in a multiple stressor context](#). *Philosophical Transactions of the Royal Society B: Biological Sciences* 374, 20180011.

**4. Feld, C. K.** (CA), Fernandes, M. R., Ferreira, M. T., Hering, D., Ormerod, S. J., Venohr, M. & **Gutiérrez-Cánovas, C.** (7/7) (2018). [Evaluating riparian solutions to multiple stressor problems in river ecosystems — A conceptual study](#)

**3. Feld, C.K.** (CA), Segurado, P., & **Gutiérrez-Cánovas, C.** (2016). [Analysing the impact of multiple stressors in aquatic biomonitoring data: A ‘cookbook’ with applications in R](#). *Science of the Total Environment* 573: 1320-1339.

**2. Gutiérrez-Cánovas, C.** (CA), Sánchez-Fernández, D., Velasco, J., Millán, A. & N. Bonada. (2015). [Similarity in the difference: changes in community functional features along natural and anthropogenic stress gradients](#). *Ecology* 96(9): 2458 - 2466.



1. **Gutiérrez-Cánovas, C.** (CA), Millán, A., Velasco, J., Vaughan, I.P., & Ormerod, S.J. (2013). [Contrasting effects of natural and anthropogenic stressors on beta diversity in river organisms](#). *Global Ecology and Biogeography*, 22(7), 796-805.

## C.2. Congresses

1. I presented **>60 works** at national and international conferences (AIL, SEFS, ASLO, IALE, SIBECOL).
2. **Invited plenary speaker** at Iberian Association of Limnology-[AIL 2020 conference](#) (28 Oct 2020). **Invited speaker** at [Breakfast Seminar: Exploring the Water-Food-Energy Nexus](#). Manchester Museum (9 Sep 2013 - [seminar summary](#)).
3. Invited speaker at seminar series of different universities (e.g. Univ. Montpellier – Oct 2016, Univ. Cottbus – Jan 2019)
4. **Organization of scientific activities.** I contributed to the organization of two international conferences (SIBECOL 2019, PLPF 2022). I co-organized four special sessions at international conferences ([IALE 2013](#), SEFS 2015, AIL 2018, [SIBECOL2022](#)).

## C.3. Research projects

I obtained **>620,000 €** to develop my research through **7 fellowships** awarded in competitive programs, resulting in an overall **research budget** of 241,000€:

7. **Generación de Conocimiento 2022.** (Ministry of Science and Innovation, research budget: 120,000€, 2023-2025, Ref: [PID2022-141732NA-I00](#)). Project: “A food web perspective to better understand the impacts of multiple stressors on multitrophic riverine ecosystems (TrophicStress)”. **Role: PI**
6. **‘La Caixa’ Junior Leader fellowship** (Success rate: 4.6%. ‘La Caixa’ Foundation, 301,500€; salary: 186,000€ + research: 115,000 €, 2022-2025. Ref: LCF/BQ/PR22/11920005). Project: “Exploring large-scale impacts of multiple stressors and biodiversity change on river functioning and biogeochemistry”. **Role: PI**
5. **‘Juan de la Cierva-Incorporación’ fellowship** (Success rate: 14.8%. MINECO, 93,000€; salary: 87,000€ + research: 6000€, 2020-2023. Ref: Ref. JC2018-036642-I).
4. **Mobility grant** (EU COST action CA15113 - SMIRES, stipend: 900€ – hosting institution Pyrenean Institute of Ecology-CSIC, Jan-2020; Ref. ECOST-STSM-Request-CA15113-46222)
3. **‘Juan de la Cierva-Formación’ fellowship** (Success rate: 12.5%. MINECO, salary: 50,000€; 2017-2019. Ref. FJCI-2015-25785)
2. **PhD fellowship** ([Regional Agency of Research - Séneca Foundation](#), salary: 57,600€, 2007-2011)
1. **Introductory scholarship to research** (‘Beca-colaboración’), Ministry of Science and Education, University of Murcia, stipend: 2,400€, 2004-2005.

I participated in the **research team of 17 research projects. 3 selected projects:**

3. **STREAMECO:** Biodiversity and ecosystem functioning under climate change: from the gene to the stream. Ref: PTDC/CTA-AMB/31245/2017. Funding body: FCT. 2018-2021. PI: Cláudia Pascoal. 198,308 €.
2. [The MARS project](#) (Managing aquatic ecosystems and water resources under multiple stress). EU 7th Framework Programme, contract no. 603378. 2014-2018. PI: Daniel Hering. 9,000,000€
1. **DURESS** (Diversity of upland rivers for ecosystem service sustainability). Natural Environment Research Council (NERC, Ref. NE/J014818/1). 2012-2015; PI: Isabelle Durance; 3,000,000 £

## C.4. Technology/Knowledge transfer

Not applicable