

Curriculum Vitae

Personal information

Name: Melián, Carlos, J.

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URL for web site: <http://www.eawag.ch/en/aboutus/portrait/organisation/staff/profile/carlos-melian/show/>

Education

2005 PhD in Biology and Environmental Sciences.
Department of Ecology, *University of Alcalá*, Madrid, and *Biological Doñana Station*, Seville, Spain. Supervisor: Prof. Jordi Bascompte (February 2005).

Professional Experience

2015-Present EAWAG and Lecturer *University of Bern*, Switzerland.

2010-2015 EAWAG (Tenured since end 2015),

Fellowships

2022-2024 **Maria Zambrano Fellowship**, *IFISC*, Spain

2019-2022 **The August T. Larsson Fellowship**, *SLU*, Sweden.

2008-2010 **Postdoctoral Fellow**, *Microsoft Research Ltd.* UK, (Unrestricted Gift).

2005-2007 **Postdoctoral Fellow**, *National Center of Ecological Analysis and Synthesis (NCEAS)*, University of California Santa Barbara, USA.

2001-2004 **PhD. Fellowship**, *Spanish Ministry of Science and Technology*, Spain

1999 **Student research fellowship**, *Ministry of Foreign Affairs. Spanish Agency for International Cooperation*, Spain and *University of Granma*, Bayamo, Cuba.
Title: Linking Agroecology, Conservation and Theoretical Ecology.

1997 **Student research fellowship**, *Department of Ecology, Alcala University*, Spain
Title: Complex Systems: Theory and its Application to Ecology.

Leadership international scientific meetings (From 2018)

2022 Session chair “Eco-evolutionary dynamics of multilayer networks: From lakes to oceans.”
INTECOL, Geneva, Switzerland

2019 2nd Reproducible research workshop “Open source science in a new reproducible research era”,
Eawag, Kastanienbaum, Switzerland.

2018 International exploratory workshop “Biodiversity dynamics in coevolutionary metaecosystems”,
Swiss National Science Foundation, Switzerland.

2018 1st Reproducible research workshop “The reproducible research ecosystem.” Eawag,
Kastanienbaum, Switzerland.

2018 Scientific event “Biodiversity Dynamics in Coevolutionary Metaecosystems”,
SNSF IZSEZO_183489, Switzerland.

Supervision Postdocs (From 2018: 6 females [Argentina, Brazil, Colombia and China]; 2 males [Switzerland and Italy])

2021-2023 Catalina Chaparro (**Marie Curie Fellowship**, EU)

2022-2023 Leonardo Aguirre (**Joint research**, *SNSF-CNPq Brazil*)

2022 Gian Marco Palamara (**Joint research**, *SNSF-CNPq Brazil*)

2020 Pengjuan Zu (**Spark**, *SNSF*)

2019 Malena Sabatino (**Spark**, *SNSF*)

2019 Catalina Chaparro (**Spark**, *SNSF*)

2018 Julia Astegiano (*SNSF IZSEZO_183490*, Research visit grant)

2018 Cecilia Andreazzi (*SNSF IZSEZO_183490*, Research visit grant)

Editorial and Boards

2022-Present Subject editor *Frontiers in Ecology and Evolution*

2018-Present Recommender for *PCI Ecology*

2017-Present Research commission board, *NaXys* complex system research institute, U. Namur, Belgium

2011-Present Subject editor journal *Oikos*

Teaching activities

2022 2nd Multilayer Networks hands-on course, Mallorca, *IFISC* (Maria Zambrano Fellowship)

2021 1st Multilayer Networks hands-on course, Mallorca, *IFISC* and *Imedeia*

2013-present “Introduction to literature analysis” *Institute of Ecology and Evolution, Uni. Bern*, Switzerland.

2013 Course “Speciation models” to undergrad. and PhD students. *Eawag, Kastanienbaum*, Switzerland.

- 2012** Course on “Evolutionary biodiversity dynamics” with Prof. Ole Seehausen. *Institute of Ecology and Evolution, U. Bern, Switzerland.*
- 2007-2009** “Kids Do Ecology” program. *National Center for Ecological Analysis and Synthesis (NCEAS).* Univ. California Santa Barbara, USA.
- Invited National and International Talks (2018-2023, 8 countries)**
- 2023** *Trait Architecture and coexistence in spatially-explicit food webs.* CSIC-Zonas aridas, Almeria, Spain.
- 2022** *A multilayer framework for Archipelago sustainability.* WBF, Davos, Switzerland.
- 2022** *Integration of theory and empirical data.* Univ. Madeira, Portugal.
- 2021** *Multilayer food webs.* Fritz Müller Seminar Series, Sao Paulo, Brazil.
- 2021** *Diversification and biodiversity dynamics in eco-evolutionary networks.* Symposia *Ecological Networks*, Mallorca, Spain
- 2020** *Biodiversity and radiations on networks.* IFISC, Mallorca, Spain.
- 2020** *Biodiversity multitrait dynamics in exploited ecosystems.* WBF, Davos, Switzerland.
- 2019** *Biodiversity Multitrait Dynamics in Rapidly Changing Seascapes.* Symposia “From species diversity to marine ecosystem functions” IFREMER, Boulogne-sur-Mer, France.
- 2019** *Tangling the webs of life.* Symposia “Causes and consequences of temporally fluctuating selection in the wild”, Evolution AMS meeting, *Providence*, June, USA.
- 2018** *Fluctuating selection in e-co-evolutionary networks.* *Networks on Networks* workshop, University Darmstadt, February, Germany.
- 2018** *Tangling the webs of life.* NaXys Research Institute, *Namur*, Belgium.
Keynote speaker Kick-off meeting

Publication summary

I have 43 publications in international peer reviewed journals, h-index: 26, i-10 index: 37, total citations: 6516 (Google scholar, Oct 2023). I have 22 papers as first/senior author with a mean 5YIF equals to 8.924. I have obtained funding as a PI or Co-PI from six countries, Germany, Portugal, Spain, Switzerland, UK, USA and the EU with a total of approx. 1,750,000EUR.

Grant summary (2018-2023)

- 2021-2023** Melián, C. J. (PI), and Ferrão, A. S. Brazilian-Swiss Joint Research Programme, SNSF, Switzerland. Title: *Feedbacks between coevolving predator-prey interactions and the functioning of aquatic ecosystems.* Period: 2 years (Postdoc), 228,583 CHF.
- 2020** Pengjuan, Z., and Melián, C. J. (Co-PI). Spark, SNSF, Switzerland. Title: *Information processing traits as drivers of ecological networks.* Period: 1 year, 100,000 CHF.
- 2019** Chaparro, C., and Melián, C. J. (Co-PI). MSCA Fellowship, Horizon 2020, EU. Title: *Origin and maintenance of biodiversity: An ecological, evolutionary and developmental theory of organisms' interactions.* Period: 2 years, 191,141EUR
- 2019** Chaparro, C., and Melián, C. J. (Co-PI). Funding Agency: Spark, SNSF, Switzerland. Title: *Eco-evolutionary dynamics of ecosystems resilience.* Period: 1 year, 100,000 CHF.
- 2019** Sabatino, M. C., and Melián, C. J. (Co-PI). Funding Agency: Spark, SNSF, Switzerland. Title: *Eco-evolutionary dynamics of trait variation in rapidly changing mutualistic interaction landscapes.* Period: 1 year, 100,000 CHF.
- 2018** Melián, C. J. Funding Agency: Swiss National Science Foundation, Scientific Exchange program. Title: *Biodiversity Dynamics in Coevolutionary Metaecosystems.* Period: 3 Months, 20,500 CHF.

Prices and awards

- 2008-2010** **Fellowship** granted by Microsoft Research Ltd. (Unrestricted Gift).
Place: NCEAS, University of California, Santa Barbara, USA.
Title: *Unifying Theories of Molecular, Community and Network Evolution.*
Period: 2 Years, 200,000\$.
Project page: <https://www.nceas.ucsb.edu/projects/12306>
- 2005-2007** **Fellowship** granted by the *National Center of Ecological Analysis and Synthesis (NCEAS)*, University of California, USA.
Place: NCEAS, University of California, Santa Barbara, USA.
Title: *The Evolution of Behavior and the Structure of Complex Ecological Networks.*
Period: 3 Years, 120,000\$.
Project page: <https://www.nceas.ucsb.edu/projects/9280>