

## Ecología

**Áreas de conocimiento:** Ecología

**Director:** José Antonio Hódar Correa

**Secretario:** Juan Manuel Medina Sánchez

**Página web:** <https://ecologia.ugr.es/>

**Profesorado:** CU: 8, PTU: 7, PDI Contratado y Otros: 43

### Grupos de Investigación.

RNM125 Ecología Global

- Responsable: LUIS JOSE CRUZ PIZARRO

RNM220 ECOLOGIA TERRESTRE

- Responsable: JOSE ANTONIO HODAR CORREA

RNM367 ECOLOGÍAFUNCIONAL

- Responsable: PRESENTACION CARRILLO LECHUGA

RNM918 Restauración Ecológica

- Responsable: JORGE CASTRO GUTIERREZ

### Dirección y participación en Proyectos I+D

- 2023 Biogenic Refuges as modulators of Climate Change in mountain ecosystems, Plan de Recuperación, Transformación y Resiliencia, 01/01/2023-31/12/2024

Investigador/a JOSE ANTONIO HODAR CORREA

- 2022 Ventanas de oportunidad: DEPREdación, clima, o ambas, como determinantes de la dinámica poblacional de la PROcesionaria del pino a lo largo de un gradiente altitudinal (PRODEPRE), Programa Estatal de Generación de Conocimiento y Fortalecimiento Científico y Tecnológico del Sistema de I+D+I, 01/09/2022-31/08/2025

Investigador JOSE ANTONIO HODAR CORREA

- 2022 Anthropogenic eutrophication and emergent pollution in a Mediterranean wetland in a context of climate change: restoration of water quality by using magnetic adsorbents (ECRAM), Proyectos Generación del Conocimiento, 01/12/2022-30/11/2025

Investigador/a ELOÍSA ANA RAMOS RODRÍGUEZ

Investigador/a MARIA CARMEN PEREZ MARTINEZ

Investigador JOSE MARIA CONDE PORCUNA

Investigador INMACULADA DE VICENTE ALVAREZ MANZANEDA

- 2022 Laboratory optimization and in-situ assessment of using magnetic nanomaterials for environmental remediation in a Mediterranean wetland (NANOREM), Proyectos de Transición Ecológica, 01/12/2022-30/11/2024

Investigador/a MARIA CARMEN PEREZ MARTINEZ

Investigador/a ELOÍSA ANA RAMOS RODRÍGUEZ

Investigador JOSE MARIA CONDE PORCUNA

Investigador INMACULADA DE VICENTE ALVAREZ MANZANEDA

- 2022 HERRAMIENTAS AVANZADAS PARA LA EVALUACION DEL ESTADO ECOLOGICO DE RIOS TEMPORALES MEDITERRANEOS DURANTE LA FASE SECA: DINAMICA DE METACOMUNIDADES PARA MEJORAR EL BIOMONITOREO, Proyectos de Generación de Conocimiento 2021, 01/09/2022-01/09/2026

Investigador/a MANUEL JESÚS LÓPEZ RODRÍGUEZ

- 2022 Consorcios mixótrofos-bacterias: bio-herramientas para la mitigación de contaminación por plásticos bajo un escenario de cambio climático global en ecosistemas acuáticos, PROYECTOS DE TRANSICIÓN ECOLÓGICA Y TRANSICIÓN DIGITAL 2021, 01/12/2022-30/11/2024

Investigador/a MANUEL VILLAR ARGAIZ

Investigador PRESENTACION CARRILLO LECHUGA

Investigador JUAN MANUEL MEDINA SANCHEZ

### Contratos de investigación

- 2023 CONTRATO DE SERVICIOS CIENTIFICO-TÉCNICOS, ART. 68-83, 20/03/2023-

Investigador/a FRANCISCO JAVIER OCAÑA CALAHORRO

Coordinador RAFAEL RUBIO DE CASAS

### Publicaciones en revistas

- 2023 Articulo: The temporary effect of weed-cover maintenance on transpiration and carbon assimilation of olive trees, Agricultural and Forest Meteorology, 329, , -

PENÉLOPE SERRANO SERRANO ORTIZ

- 2023 Articulo: Aggregative oviposition varies with population density in social processionary moths ¿

- implications for insect outbreak propensity, *Ecological Entomology*, 48, , 102-111  
JOSE ANTONIO HODAR CORREA
- 2023 Artículo: Revegetation through seeding or planting: A worldwide systematic map, *Journal of Environmental Management*, 337, 117713, 1-14  
JORGE CASTRO GUTIERREZ
- 2023 Artículo: Fish Beta Diversity Patterns across Environmental Gradients in 63 European Shallow Lakes: Effects of Turbidity, Nutrient Enrichment, and Exotic Species, *Water*, 15, 10, 1831-  
JOSE MARIA CONDE PORCUNA
- 2023 Artículo: An evaluation of freshwater monitoring programs in ILTER nodes and mountain national parks: identifying key variables to monitor global change effects, *Biodiversity and Conservation*, 32, , 65-94  
MARIA CARMEN PEREZ MARTINEZ
- 2023 Artículo: Succession of bacteria and archaea involved in the nitrogen cycle of a seasonally stratified lake, *Fems Microbiology Letters*, 370, , 1-13  
MARÍA SUÁREZ MUÑOZ
- 2023 Artículo: Efficiency of reactive nitrogen removal in a model Mediterranean high-mountain lake and its downwater river ecosystem: Biotic and abiotic controls, *Science of the Total Environment*, , , -  
JUAN MANUEL MEDINA SANCHEZ
- 2023 Artículo: A new method to estimate aerosol radiative forcing on photosynthetically active radiation, *Atmospheric Research*, 291, , -  
ISMAEL LÓPEZ LOZANO
- 2023 Artículo: Ecotoxicological assessment of the effects of fluoxetine on *Daphnia magna* based on acute toxicity, multigenerational reproduction effects, and attraction-repellence responses, *Chemosphere*, 312, , 137028-  
ELOÍSA ANA RAMOS RODRÍGUEZ
- 2023 Artículo: Population dynamics hide phenotypic changes driven by subtle chemical exposures: implications for risk assessments, *Ecotoxicology*, , , -  
INMACULADA DE VICENTE ALVAREZ MANZANEDA
- 2023 Artículo: Estado trófico y características morfométricas como factores reguladores de las tasas de sedimentación en embalses mediterráneos, *Ingeniería del Agua*, , , -  
INMACULADA DE VICENTE ALVAREZ MANZANEDA
- 2023 Artículo: Hybridization and introgression are prevalent in Southern European *Erysimum* (Brassicaceae) species, *Annals of Botany*, 131, 1, 171-184  
JOSE MARIA GOMEZ REYES
- RAFAEL RUBIO DE CASAS
- 2022 Artículo: Multiple-stressors effects on Iberian freshwaters: A review of current knowledge and future research priorities, *Limnetica*, 41, , 245-268  
JUAN MANUEL GONZÁLEZ OLALLA
- 2022 Artículo: Analysis of cloud effects on long-term global and diffuse photosynthetically active radiation at a Mediterranean site, *Atmospheric Research*, 268, , -  
ISMAEL LÓPEZ LOZANO
- 2022 Artículo: Evolution of fruit and seed traits during almond naturalization, *Journal of Ecology*, 110, 3, 686-699  
FRANCISCO JAVIER OCAÑA CALAHORRO
- JOSE MARIA GOMEZ REYES
- RAFAEL RUBIO DE CASAS
- 2022 Artículo: Phenotypic plasticity guides *Moricandia arvensis* divergence and convergence across the Brassicaceae floral morphospace, *New Phytologist*, 233, , 1479-1493  
JOSE MARIA GOMEZ REYES
- 2022 Artículo: The human connection: First evidence of microplastics in remote high mountain lakes of Sierra Nevada, Spain, *Environmental Pollution*, 311, October, 119922-  
MANUEL VILLAR ARGAIZ
- 2022 Artículo: Ecosystem CO<sub>2</sub> release driven by wind occur in drylands at global scale, *Global Change Biology*, 28, 17, 5320-5333  
PENÉLOPE SERRANO SERRANO ORTIZ
- 2022 Artículo: Microbial plankton responses to multiple environmental drivers in marine ecosystems with different phosphorus limitation degrees, *Science of the Total Environment*, 816, , 151491-  
JUAN MANUEL GONZÁLEZ OLALLA
- JUAN MANUEL MEDINA SANCHEZ
- PRESENTACION CARRILLO LECHUGA
- 2022 Artículo: New Insights for the Renewed Phytoplankton-Bacteria Coupling Concept: the Role of the Trophic Web, *Microbial Ecology*, , , -

ISMAEL LÓPEZ LOZANO  
JUAN MANUEL GONZÁLEZ OLALLA  
JUAN MANUEL MEDINA SANCHEZ

- 2022 Artículo: A Non-Stressful Temperature Rise and Greater Food Availability Could Increase Tolerance to Calcium Limitation of Daphnia cf. pulex (Sensu Hebert, 1995) Populations in Cold Soft-Water Lakes, *Biology*, 11, 10, 1539-  
ELOÍSA ANA RAMOS RODRÍGUEZ  
JOSE MARIA CONDE PORCUNA  
MARIA CARMEN PEREZ MARTINEZ  
- 2022 Artículo: Lack of ITS sequence homogenization in Erysimum species (Brassicaceae) with different ploidy levels, *Scientific Reports*, 12, 16907, -  
JOSE MARIA GOMEZ REYES  
RAFAEL RUBIO DE CASAS

#### Capítulos de libros (con ISBN)

- 2022 Titulo Capítulo: Aquatic Animal Communities of Watercourses from Sierra Nevada, Titulo Libro: The Landscape of the Sierra Nevada. A Unique Laboratory of Global Processes in Spain: Elsevier, , 2022, 9783030942199  
MANUEL VILLAR ARGAIZ  
MANUEL JESÚS LÓPEZ RODRÍGUEZ  
- 2022 Titulo Capítulo: High-mountain lakes as remote sensors of global change, Titulo Libro: The landscape of the Sierra Nevada: Springer-Nature, Swit, 2022, 978-3-030-94219-9  
MANUEL VILLAR ARGAIZ  
JUAN MANUEL GONZÁLEZ OLALLA  
JUAN MANUEL MEDINA SANCHEZ  
PRESENTACION CARRILLO LECHUGA  
- 2022 Titulo Capítulo: Responses of animal populations and communities to climate change and land-use shifts, Titulo Libro: The Landscape of the Sierra Nevada. A Unique Laboratory of Global Processes in Spain: Elsevier, , 2022, 9783030942199  
JOSE ANTONIO HODAR CORREA  
- 2022 Titulo Capítulo: Paleolimnological indicators of global change, Titulo Libro: The Landscape of the Sierra Nevada. A Unique Laboratory of Global Processes in Spain: Elsevier, , 2022, 9783030942199  
EMILIO JOSÉ MORENO LINARES  
LAURA JIMÉNEZ LIÉBANAS  
JOSE MARIA CONDE PORCUNA  
ELOÍSA ANA RAMOS RODRÍGUEZ  
MARIA CARMEN PEREZ MARTINEZ

#### Contribuciones en congresos

- 2023 Poster en Congreso: Soil respiration in a traditional olive grove in the southeast of Spain, EGU General Assembly 2023, 24/04/2023, Viena (Austria), Congreso  
PENÉLOPE SERRANO SERRANO ORTIZ  
- 2023 Poster en Congreso: CO2 and CH4 soil exchanges in managed woody species of Sierra Nevada mountains (Spain), EGU General Assembly 2023, 24/04/2023, Viena (Austria), Congreso  
PENÉLOPE SERRANO SERRANO ORTIZ  
- 2023 Poster en Congreso: Analysing the capacity of two Mediterranean semiarid ecosystems located in the southeast Spain as methane sinks, EGU General Assembly 2023, 24/04/2023, Viena (Austria),  
PENÉLOPE SERRANO SERRANO ORTIZ  
- 2023 Comunicación en congreso: Dust interacts with temperature shaping microbial communities in high mountain lakes, American Society of Limnology and Oceanography (ASLO) Conference, 05/06/2023, Palma de Mallorca, - Almería, - Almeria, España, Spain, Congreso  
PRESENTACION CARRILLO LECHUGA  
JUAN MANUEL MEDINA SANCHEZ  
MANUEL VILLAR ARGAIZ  
JUAN MANUEL GONZÁLEZ OLALLA  
- 2023 Comunicación en congreso: Mesocosm experiments highlight the decisive role of dust and temperature as global change drivers in Mediterranean high mountain lakes, Symposium for European Freshwater Sciences, 19/06/2023, NEWCASTLE UNIVERSITY, NEWCASTLE UPON TYNE, REINO UNIDO, Congreso  
PRESENTACION CARRILLO LECHUGA  
JUAN MANUEL MEDINA SANCHEZ  
MANUEL VILLAR ARGAIZ

**JUAN MANUEL GONZÁLEZ OLALLA**

- 2023 Poster en Congreso: Studying the Atmospheric Boundary Layer influence on the Surface Energy Balance Closure combining eddy covariance and Doppler lidar, EGU General Assembly, 24/04/2023, Viena (Austria), Congreso

**PENÉLOPE SERRANO SERRANO ORTIZ**

- 2023 Poster en Congreso: Broadening the perspective of environmental stress in aquatic ecosystems due to contamination: An approach using the habitat selection response based on a cost-benefits balance, Broadening the perspective of environmental stress in aquatic ecosystems due to contamination: An approach using the habitat selection response based on a cost-benefits balance, 30/04/2023, DUBLIN (IRLANDA), Congreso

**ELOÍSA ANA RAMOS RODRÍGUEZ**

- 2022 Poster en Congreso: Acceptance, knowledge, and teaching of evolutionary theory: Currently overview and the future can we prospect through the world demographic data, VIII Congreso de la Sociedad Española de Biología Evolutiva, 02/02/2022, Vigo, Spain, Congreso

**LUCIA TORRES MUROS**

- 2022 Poster en Congreso: Knowledge and acceptance of the theory of evolution: design of an interregional comparative study in Ecuador, VIII Congreso de la Sociedad Española de Biología Evolutiva, 02/02/2022, Vigo, Spain, Congreso

**LUCIA TORRES MUROS**

- 2022 Comunicación en congreso: Viability of Below-Canopy Eddy Covariance Measurements in Herbaceous-free and Herbaceous-cover Mediterranean olive crop, EGU General Assembly 2022, 23/05/2022, Viena, Austria, Congreso

**PENÉLOPE SERRANO SERRANO ORTIZ**

- 2022 Comunicación en congreso: Temperature and pH affect the phytoplankton sensitivity to aerosol nutrients, Joint Aquatic Sciences Meeting 2022, 14/05/2022, Grand Rapids, MI (Estados Unidos), Congreso

**JUAN MANUEL GONZÁLEZ OLALLA**

- 2022 Poster en Congreso: Functional diversity of macroinvertebrate communities in River Nature Reserves of Spain, SIBECOL AIL Meeting 2022, 03/07/2022, AVEIRO (PORTUGAL), Congreso

**MANUEL JESÚS LÓPEZ RODRÍGUEZ**

- 2022 Poster en Congreso: Histological evaluation of the digestive tract of two species of Plecoptera with different feeding habits during their life cycle, - 2022 XVIth International Conference on Ephemeroptera and XXIst International Symposium on Plecoptera, 26/07/2022, Illinois, EE.UU. (Virtual conference), Congreso

**MANUEL JESÚS LÓPEZ RODRÍGUEZ**

- 2022 Poster en Congreso: The genus *Tyrrhenoleuctra* Consiglio, 1957 in the Iberian Peninsula: behavioural and molecular approaches, - 2022 XVIth International Conference on Ephemeroptera and XXIst International Symposium on Plecoptera, 26/07/2022, Illinois, EE.UU. (Virtual conference), Congreso

**MANUEL JESÚS LÓPEZ RODRÍGUEZ**

- 2022 Comunicación en congreso: Spatial and temporal variability of soil respiration in an irrigated olive grove in southeastern Spain, EGU General Assembly 2022, 23/05/2022, Viena, Austria, Congreso

**PENÉLOPE SERRANO SERRANO ORTIZ**

- 2022 Comunicación en congreso: Monitoring Carbon and Water exchanges in experimental forest and olive grove plots under different management strategies, Arqus Research Focus Forum on Climate Change and Biodiversity, 30/05/2022, Lyon (Francia), Congreso

**PENÉLOPE SERRANO SERRANO ORTIZ**

- 2022 Poster en Congreso: Comprehensive monitoring and adaptive management of mountain forest, Arqus Research Focus Forum on Climate Change and Biodiversity, 30/05/2022, Lyon (Francia),

**MARÍA SUÁREZ MUÑOZ****JORGE CASTRO GUTIERREZ****PENÉLOPE SERRANO SERRANO ORTIZ****JOSE ANTONIO HODAR CORREA**

- 2022 Comunicación en congreso: Monitoring Carbon (CO<sub>2</sub> and CH<sub>4</sub>) exchanges in the main dominant woody species in Sierra Nevada mountains (Spain) located at different ecological environments, International Mountain Conference 2022, 11/09/2022, INNSBRUCK - AUSTRIA, Congreso

**PENÉLOPE SERRANO SERRANO ORTIZ**

- 2022 Poster en Congreso: Analysing the aerosol radiative effects at Granada during 2008-2018, 11th International Aerosol Conference, 04/09/2022, Athens, ATHEN, GREECE, Congreso

**ISMAEL LÓPEZ LOZANO**

- 2022 Comunicación en congreso: A wavelet analysis of the soil CO<sub>2</sub> dynamic in two semiarid grasslands affected by Subterranean Ventilation and Pressure Tides processes, MedGU 2nd annual meeting, 27/11/2022, Marrakech, Marruecos, Congreso



PENÉLOPE SERRANO SERRANO ORTIZ

- 2022 Poster en Jornada: Seguimiento de intercambios de gases de efecto invernadero entre ecosistemas terrestres y atmósfera, Reunión anual del IISTA 2022: "Explorando sinergias en el IISTA", 11/11/2022, - JAÉN, - UNIVERSIDAD DE JAÉN, Jornada

PENÉLOPE SERRANO SERRANO ORTIZ

- 2022 Poster en Congreso: Monitoring chlorophyll-a dynamics from Sentinel-2 imagery in high mountain lakes, - 2022 ESA Living Planet Symposium, 23/05/2022, BONN, Congreso

MARIA CARMEN PEREZ MARTINEZ

- 2022 Poster en Congreso: Diatom and cladocera diversity changes over time in alpine lakes: A paleolimnological study of sediment records, International Mountain Conference, 14/09/2022, Innsbruck, Congreso

MARIA CARMEN PEREZ MARTINEZ

- 2022 Poster en Congreso: Estimation of photosynthetic pigments in high mountain lakes through remote sensing satellite imagery, International Mountain Conference, 14/09/2022, Innsbruck, Congreso

MARIA CARMEN PEREZ MARTINEZ

- 2022 Poster en Congreso: Light and Shade: beneficial and detrimental impacts of Saharan dust on high mountain lakes, International Mountain Conference, 14/09/2022, Innsbruck, Congreso

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JUAN MANUEL MEDINA SANCHEZ