

Curriculum vitae

MARGARITA MULERO PÁZMÁNY

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PROFESSIONAL EXPERIENCE

- 1/3/2022-present. Investigador distinguido. Programa de atracción del talento internacional María Zambrano. Department Animal Biology. Universidad de Málaga. Spain
- 22/1/2018-28/2/2022. Senior Lecturer in UAVs Applications in Natural Sciences. School of Biological and Environmental Sciences. Liverpool John Moores University. UK
- 3/11/2015-7/6/2019. Associated Lecturer for the postgraduate course "Specialist on Unmanned Aerial Vehicles (RPAS) and its civil applications". University of Cádiz, Spain.
- 10/ 2016. Scientific consultant: "Use of drones equipped with thermal cameras for wildlife detection". EBUILDING, S.L, Madrid, Spain
- 20/6/2016-20/12/2016- Contract Postdoctoral Internacional. Universidad Técnica Particular de Loja, Ecuador. Project: "Análisis de la multifuncionalidad de los ecosistemas secos del Ecuador como herramienta para determinar el estado de conservación y los servicios ambientales". IP. Carlos Ivan Espinosa Iniguez (UTPL), Participants: Universidad Técnica Particular de Loja Ecuador, Universidad Politécnica Nacional Ecuador, Universidad Rey Juan Carlos España, CSIC España, Universidad de Idaho USA, Funding: Dirección general de Investigación y Transferencia de Tecnología. 2015. Programa de investigación: Gestión y conservación de recursos naturales. 131618.25\$. Tasks: Advice on handling UAVs. Processing of data obtained from the use of UAVs; Support in writing scientific material. 20/6-20/12/2016. 6 months (0.5 years).
- 1/6/2015-20/11/2016. Freelance scientific consultant on Chavarra SL, a private company developing a drone for game monitoring. Spain.
- 6/7/2015-5/8/2015; 1/9/2015-31/10/2015; 14/3/2016-14/5/2016.Researcher (full time). Swiss Ornithological Institute-Vogelwarte, Suiza. 5 months. (0.42 years). Tasks: data analysis, reports, paper publishing and dissemination. Mulero-Pázmány M., Jenni-Eiermann S., Strebel N., Sattler T., Negro J.J., Tablado Z. (2017). Unmanned aircraft systems as a new source of disturbance for wildlife: A systematic review. PLoS One 12: 1–17. <https://doi.org/10.1371/journal.pone.0178448> JCR (IF 2017: 2.766, Q1 Multidisciplinary Science)
- 1/2/2015-30/6/2015.Researcher full time (freelance) LOCOSLAB (<http://www.locoslab.com>): spin-off de la Universität Duisburg-Essen (Germany). 1/2/2015-30/6/2015. 5 months (0.41 years). Tasks: research, data analysis, writing of scientific articles about animal movement, use of new technologies (internet of things, drones) to monitor fauna.
- 1/11/2012- 31/12/2014 Biologist (Contrato fuera de convenio). Estación Biológica de Doñana CSIC. Project PLANET (European Commission. Cooperation 7º frame program FP7-257649) Platform for the deployment and operation of heterogeneous networked cooperating objects. Tasks: "Development of biological applications based on the use of unmanned aircraft, (UAS) and cooperative sensor networks. European Project management tasks. Census and monitoring of flora and fauna species through cameras on board in UAS. Statistical data processing, digital mapping and preparation of reports, memories and scientific articles in Spanish and English. Delivery of informative talks and presentation of posters at national and international congresses".
- 21/5/2008-30/9/2012 Biologist. Doñana Biological Station. CSIC. AEROMAB (Andalusian Government, Project for Excellence P07-RNM-03246). Aerospace technologies for biodiversity conservation. UAS applications in conservation biology. Development of aerospace applications based on the use of unmanned aircraft (UAS). Census and monitoring of species through visible video cameras. Typification, evaluation of the danger and monitoring of mortality of birds produced by collision and electrocution in power lines and wind farms using UAS. Data analysis, elaboration of digital cartography and reports in Spanish and English. Dissemination talks at national and international congresses ".

- 1/2/2008-28/2/2008 Scientific advisor. University of Seville. Faculty of Engineering. SADCON (Andalusian Government, TEP-375). Autonomous distributed systems for environmental conservation. UAS adaptations for wildlife monitoring and infrastructures impact assessment.
- 15/1/2007-14/9/2007. Biologist. MIGRES Foundation. SADCON (Andalusian Government, TEP-375). Autonomous distributed systems for environmental conservation. UAS adaptations for wildlife monitoring and infrastructures impact assessment.
- 5/5/2004-15/9/2005 Biologist. EGMASA. Andalusian Environmental Management Agency. Conservation, management and monitoring of Spanish Imperial Eagle *Aquila adalberti* in Doñana National Park and control of non-natural mortality causes: poison, poaching and power lines accidents. Project: Seguimiento de actuaciones en el Parque Natural de Doñana (EXPTE 2243/2003/ A/00) Junta de Andalucía, España

EDUCATION

- Jan 2023 Recognition "I3" I3/2021/221 (Secretaría General de Universidades, Spain).
- Jun 2022 Recognition "Profesor Titular de Universidad" ANECA (Spanish Agency for assessment and evaluation of university teaching personnel).
- Dec 2019. Recognition "Profesor Contratado Doctor" ANECA (Spanish Agency for assessment and evaluation of university teaching personnel). PCD: 2019-7161.
- Dec 2019. Recognition "Profesor de Universidad Privada" ANECA (Spanish Agency for assessment and evaluation of university teaching personnel). PUP: 2019-7162.
- Aug. 2018. Fellow of The Higher Education Academy in recognition of attainment against the UK Professional Standards Framework for teaching and learning support in higher education. Recognition reference: PR14789.
- Sep 2017. Recognition "Profesor Ayudante Doctor" por la ANECA (Spanish Agency for assessment and evaluation of university teaching personnel). PAD: 2017-6211.
- 21/1/ 2015. PhD in Biology. University of Seville, Spain. Doñana Biological Station. CSIC. Supervisor: JJ Negro Balmaseda
2009. Master in Business Administration. MBA. Specialization: International Business. Faculty of Economics. University Pablo de Olavide, Seville, Spain.
2007. Diploma of Advanced Studies in Biology. Specialization: Conservation Biology. Faculty of Biology, University of Seville, Spain.
2003. Bachelor in Biology. Specialization: Zoology. Faculty of Biology. Universidad Complutense de Madrid, Spain
1999. Diploma in Sustainable Tourism. Stewardess School, Madrid, Spain. 360h.

PUBLICATIONS

Articles in JCR indexed Journals

1. Mesquita, G. P., **Mulero-Pázmány, M.**, Wich, S. A., & Rodríguez-Teijeiro, J. D. (2022). Terrestrial Megafauna Response to Drone Noise Levels in Ex Situ Areas. *Drones*, 6(11), 333
<https://doi.org/10.3390/drones6110333> JCR (IF 2021 5.532, Q2 Remote Sensing)
2. **Mulero-Pázmány, M.**, Martínez-de Dios, J.R., Popa-Lisseanu, A.G., Gray, R.J. Alarcón, F., Albo Sánchez-Bedoya, C., Viguria, A., Ibáñez, C., Negro, J. J., Ollero, A. and Marrón, P.J. (2022). "Development of a Fixed-Wing Drone System for Aerial Insect Sampling" *Drones* 6, 8: 189.
<https://doi.org/10.3390/drones6080189> JCR (IF 2021 5.532, Q2 Remote Sensing)
3. **Mulero-Pázmány, M.**, Rollán, L., D'Amico, M., & González-Suárez, M. Road orientation affects the impact of roads on wildlife. (2022) *Wildlife Research*. <https://doi.org/10.1071/WR21149> JCR (IF 2021: 2.178, Q1 Zoology)
4. Mesquita, GP., **Mulero-Pázmány, M.** Wich, S.A., Rodríguez-Teijeiro, J.D. (2022) A practical approach with drones, smartphones, and tracking tags for potential real-time animal tracking, *Current Zoology*,; zoac029, <https://doi.org/10.1093/cz/zoac029> JCR (IF 2021 2.734, Q1 Zoology)
5. Piel, AK., Chalmers, C, Crunchant, A., Fergus, P., Knot, I., **Mulero-Pázmány, M.**, Wich, S. Non-invasive technologies for Primate Conservation in the 21st Century (2021). *International Journal of Primatology* (2021). <https://doi.org/10.1007/s10764-021-00245-z> JCR (IF 2021: 2.578, Q1 Zoology)

6. Mesquita, G. P., Rodríguez-Teijeiro, J. D., de Oliveira, R. R., & **Mulero-Pázmány, M.** (2021). Steps to build a DIY low-cost fixed-wing drone for biodiversity conservation. *PloS one*, 16(8), e0255559. <https://doi.org/10.1371/journal.pone.0255559> JCR (IF 2021: 3.752, Q1 Multidisciplinary Science).
7. Mesquita, G.; Rodríguez Teijeiro, D.; Wich, S.; **Mulero-Pázmány, M.** (2020) Measuring disturbance at swift breeding colonies due to the visual aspects of a drone: a quasi-experiment study. *Current Zoology*, 16 (2): 157-163. <https://doi.org/10.1093/cz/zoaao38>. JCR (IF 2020: 2.624, Q1 Zoology)
8. Duffett D., D' Amico M., **Mulero-Pázmány M**, González-Suárez M. (2020). Species' Traits as Predictors of Avoidance towards Roads and Traffic. *Ecological Indicators* 115:106402, pp 1-8 <https://doi.org/10.1016/j.ecolind.2020.106402> JCR (IF 2020: 4.958, Q1 Environmental Sciences)
9. Laguna E., Barasona J.A., Triguero-Ocaña R., **Mulero-Pázmány M.**, Negro J.J., Vicente J., Acevedo P. (2018). The relevance of host overcrowding in wildlife epidemiology: a new spatially explicit aggregation index. *Ecological Indicators* 84:695–700. <https://doi.org/10.1016/j.ecolind.2017.09.039> JCR (IF 2018: 4.490, Q1 Environmental Sciences)
10. González-Suárez M., D'Amico M., **Mulero-Pázmány M.** (2017). Advancing road ecology in Africa with robust analyses and cautious inferences: a response to Jackson et al. (2017). *Journal of Zoology*; 298; 233–240. <https://doi.org/10.1111/jzo.12484> JCR (IF 2017: 1.955, Q1 Zoology)
11. **Mulero-Pázmány M.**, Jenni-Eiermann S., Strelbel N., Sattler T., Negro J.J., Tablado Z. (2017). Unmanned aircraft systems as a new source of disturbance for wildlife: A systematic review. *PLoS One* 12: 1–17. <https://doi.org/10.1371/journal.pone.0178448> JCR (IF 2017: 2.766, Q1 Multidisciplinary Science)
12. Longmore S.N., Collins R.P., Pfeifer S., Fox S.E., **Mulero-Pazmany M.**, Bezombes F., Goodwin A., De Juan Ovelar M., Knappen, J.H., Wich, S. (2017). Adapting astronomical source detection software to help detect animals in thermal images obtained by unmanned aerial systems. *International Journal of Remote Sensing*. Taylor & Francis; 0: 1–16. <https://doi.org/10.1080/01431161.2017.1280639> JCR (IF 2017: 1.782, Q2 Imaging Science and photographic technology)
13. Figura R., Shih C.Y., Ceriotti M., Fu S., Brockmann F., Nebot H., Alarcón F., Kropp A., Kondak K., Schwarzbach M., Viguria Jiménez A., **Mulero-Pázmány M.**, Dini G., Capitán J., Marrón P.J. (2016) Kassandra: A Framework for Distributed Simulation of Heterogeneous Cooperating Objects. *Journal of Systems Architecture*. ISSN 1383-7621; Vol. 73; pp. 28 – 4. <http://dx.doi.org/10.1016/j.sysarc.2016.11.012> JCR (IF 2016: 1.579, Q2 Computer science, software engineering)
14. Canal D., **Mulero-Pázmány M.**, Negro J.J., Sergio F. (2016). Decoration Increases the Conspicuousness of Raptor Nests. *PLoS ONE* 11(7): e0157440. pp1-15 <https://doi.org/10.1371/journal.pone.0157440> JCR (IF 2016: 2.806, Q1 Multidisciplinary Science)
15. **Mulero-Pázmány, M.**, D' Amico, M. and González-Suárez, M. (2016). Ungulate behavioral responses to the heterogeneous road-network of a touristic protected area in Africa. *Journal of Zoology*. 298, 233–240. <https://doi.org/10.1111/jzo.12310> JCR (IF 2016: 2.186, Q1 Zoology)
16. **Mulero-Pázmány M.**, Barasona J.A., Acevedo P., Vicente J., Negro J.J. (2015). Unmanned Aircraft Systems complement biologging in spatial ecology studies. *Ecology and Evolution* 5 (21): 4808–4818. <https://doi.org/10.1002/ece3.1744> JCR (IF 2015: 2.537, Q2 Ecology)
17. Barasona J.A., **Mulero-Pázmány M.**, Acevedo P., Negro J.J., Torres M.J., Gortázar C., Vicente J. (2014). Unmanned Aircraft Systems for Studying Spatial Abundance of Ungulates: Relevance to Spatial Epidemiology. *PLoS ONE* 9(12): e115608. pp 1-17. <https://doi.org/10.1371/journal.pone.0115608> JCR (IF 2014: 3.234, Q1 Multidisciplinary Science)
18. **Mulero-Pázmány M.**, Stolper R., van Essen L.D., Negro J.J., Sassen T. (2014). Remotely Piloted Aircraft Systems as a Rhinoceros Anti-Poaching Tool in Africa. *PloS ONE* 9(1): e83873. Pp 1-10. <https://doi.org/10.1371/journal.pone.0083873> JCR (IF 2014: 3.234, Q1 Multidisciplinary Science)
19. Rodríguez A., Negro J.J., **Mulero M.**, Rodríguez C., Hernández-Pliego J., Bustamante J. (2012). The Eye in the Sky: Combined Use of Unmanned Aerial Systems and GPS Data Loggers for Ecological Research and Conservation of Small Birds. *PLoS ONE* 7(12): e50336. pp 1-6. <https://doi.org/10.1371/journal.pone.0050336> JCR (IF 2012: 3.730, Q1 Multidisciplinary Science)

Articles in conference proceedings and non JCR indexed Journals

1. Burke C., Wich S., Kusin K., McAree O., Harrison M., Ripoll B., Ermiasi Y., **Mulero Pazmany M.**, Longmore S. (2019). Thermal-Drones as a Safe and Reliable Method for Detecting Subterranean Peat Fires, Drones, 3(23), pp. 1–16. ISSN 2504-446X <https://doi.org/10.3390/drones3010023>.
2. Jiménez López, J., **Mulero-Pázmány, M.** (2019). Drones for Conservation in Protected Areas: Present and Future. Drones, 3(1) 10. pp 1-23. ISSN 2504-446X <https://doi.org/10.3390/drones3010010>
3. Mandujano S., **Mulero-Pázmány M.**, Rísquez-Valdepeña A. (2017). Drones: una nueva tecnología para el estudio y monitoreo de fauna y hábitats. Agroproductividad.;10: 79–84. ISSN Digital: 2594-0252. <http://revista-agroproductividad.org/index.php/agroproductividad/article/view/83>
4. Figura R., Schmitz O., Hagemeyer T., Ceriotti M., Brockmann F., **Mulero-Pázmány M.** and Marrón P. (2016). ICELUS: Investigating strategy switching for throughput maximization to a mobile sink. 2016 12th Annual Conference on Wireless On-demand Network Systems and Services (WONS). pp 17-24. Electronic ISBN:978-3-9018-8279-1
5. Schwarzbach M., Laiacker M., **Mulero-Pázmány M.**, Kondak K. (2014), Remote water sampling using flying robots. ICUAS'14, *Proceedings of the 2014 International Conference on Unmanned Aircraft Systems*. May 27-30 Orlando, Florida, USA.
6. Figura R., Ceriotti M., Yen Shih C., **Mulero-Pázmány M.**, Fu S., Daidone R., Jungen S., Negro J., Marrón P. (2014). IRIS: Efficient Visualization, Data Analysis and Experiment Management for Wireless Sensor Networks. *EAI Endorsed Transactions on Ubiquitous Environments* 14(3): e4. Pp 1-18. ISSN: 2032-9377. <http://dx.doi.org/10.4108/ue.1.3.e4>
7. **Mulero-Pázmány M.**, Negro J.J., & Ferrer M. (2014). A low-cost way for assessing bird risk hazards in power lines: Fixed-wing small Unmanned Aircraft Systems. *Journal of Unmanned Vehicle Systems*, 2(1), 5–15. ISSN 2291-3467 (Online) <https://doi.org/10.1139/juvs-2013-0012>
8. **Mulero-Pázmány M.**, Negro JJ. (2011) “AEROMAB: “Small UAS for Montagu’s Harrier’s Circus pygargus nests monitoring”. RED UAS International Congress. Escuela de Ingenieros, Universidad de Sevilla, España. (Conference Proceedings) ISBN: 978-84-615-6269-5

Books and book chapters

1. **Mulero-Pázmány M.** (2021). Chapter: New technologies to study road impact on biodiversity. In: “Road ecology. Synthesis and perspectives”. Ed: D Amico M, Barrientos R, Ascensao F. Springer. ISBN in process.
2. **Mulero-Pázmány M.** (2021). Chapter: The future of technology in conservation. In: “Conservation Technology”. Ed: Serge Wich, Alex Piel. Oxford University Press. ISBN: 9780198850250.
3. **Mulero-Pázmány M.** (2017). Chapter: Sistemas aéreos no tripulados (UAS o drones) en investigación y gestión medioambiental. Los Drones y sus aplicaciones a la ingeniería civil. Fenercom, editor. Comunidad de Madrid. Spain; 2017. ISBN 978-84-617-7649-8
4. **Mulero Pázmány, M.** Árboles y arboledas singulares de Doñana. 2011. Ed. Junta de Andalucía. Seville. ISBN: 978-84-615-2693-2. A HD documentary included in the book (broadcasted in Spanish TV).

Ph.D.

5. **Mulero-Pázmány M.** Unmanned Aerial Systems in conservation biology. Ph.D. Thesis. *University of Seville*. 2015.

*A record of my publications (with citations) is also available on Google Scholar (<https://scholar.google.es/citations?user=plDJhtcAAAAJ&hl=es>) and ORCID (<http://orcid.org/0000-0002-0303-9360>)

PATENTS

1. Patent Number P201331941 (2013) International Patent Classification: G01N 1/22,A01M 5/00 Publication's International Patent Classification: G01N 1/22,A01M 5/00. Dispositivo de captura de muestras de elementos macroscópicos presentes en el entorno con múltiples cámaras de captura y almacenamiento. (Device for capturing samples of macroscopic elements in the environment with multiple capture and storage cameras). Albo Sanchez-Bedoya C, Viguria Jimenez, LA, Jimenez Bellido A,

Martín Mora V, Anderson Bell Seiler A, **Mulero Pazmany M**, Ibáñez C, Negro Balmaseda, JJ, García Popa-Lisseanu A.

RESEARCH PROJECTS

1. Mar 2022-feb 2024 Lifewatch ERIC-EnBiC2-Lab

IP fauna working team: Raimundo Real Giménez.

Participants: Fauna working team: M Mulero Pazmany, Luis Javier Palomo Muñoz, Jesús Olivero Anarte, Antonio Román Muñoz Gallego, Miguel Ángel Farfán Aguilar. Flora team: Baltasar Cabezudo Artero, Andrés V. Pérez Latorre, Teresa Navarro del Águila, Noelia Hidalgo Triana, Jose García Sanchez. Big Data Working Team: José Francisco Aldana Montes, Antonio Jesús Nebro Urbaneja, Ismael Navas Delgado, María del Mar Roldán García, José Manuel García Nieto. Water Working Team: Bartolomé Andreo Navarro, Juan Antonio Barberá Fornell. Soil Working Team: Jose Damian Ruiz Sinoga, Paloma Hueso González, Marina Lopez Claro. Air Working Team: Mº del Mar Trigo Pérez, Marta Recio Criado, Antonio Picornell Rodríguez, Rocio Ruiz Mata. Virtual Research Environment Working Team (ETC-UMA): Dania Abdul Malak, Christoph Schroder, Emanuele Mancosu, Marco Trombetti. Super computation Working Team (Picasso): Emilio López Zapata, Manuel Gonzalo Claros Díaz, Rafael Larrosa Jimenez, Diego Dario Guerrero Fernandez, Rocío Bautista Moreno

Funding: European Union, FEDER

Amount: total: 11.298.828,14 €, funded FEDER: 9.039.062,50 €

2. 5 oct 2021-31 mar 2023- Proyecto con referencia P20-01063 y denominación “Capacidad del Próximo Parque Nacional Sierra de las Nieves Para Albergar Carnívoros, Grupo Clave Para la Funcionalidad de Sus Ecosistemas” Convocatoria 2020 para la concesión de ayudas para la realización de proyectos de I+D+i, en régimen de concurrencia competitiva, destinadas a Universidades y Entidades Públicas de Investigación calificadas como Agentes del Sistema Andaluz del Conocimiento, en el ámbito del Plan Andaluz de Investigación, Desarrollo e Innovación (PAIDI 2020). IP: Raimundo Real Giménez. Participantes: Alisa Aliaga Samanez, José María García Carrasco, Ana Luz Márquez Moya, Miguel Ángel Farfán Aguilar, Antonio Román Muñoz, Adrián Martín Taboada, Pablo Ferreras de Andrés, Víctor Ruiz Muñoz, David Romero Pacheco, Francisco Díaz Ruiz, Margarita Mulero Pazmany

Funding: European Union, Programa Operativo FEDER Andalucía 2014-2020. «Crecimiento inteligente: una economía basada en el conocimiento y la innovación», Estrategia de Investigación e Innovación para la Especialización Inteligente de Andalucía (RIS3–Andalucía), Plan Andaluz de Investigación, Desarrollo e Innovación (PAIDI 2020).

Amount total: 35.898€

3. Nov 2019-Jul 2020. The role of animal trails in epidemiology. Using drones to detect plant invasive species. ECR Fellowship 2019-20

IPs: M Mulero Pazmany.

Participants: M Mulero Pazmany (Liverpool John Moores University), Jesus Castillo Segura (Universidad de Sevilla), Francisco Ruiz-Fons (IREC-UCLM CSIC)

Funding: Liverpool John Moores University, UK

Amount: 4.800€.

4. Nov 2018-Jul 2019. Study of animal trails as ecological indicators in Doñana National Park. ECR Fellowship 2018-19

IPs: M Mulero Pazmany.

Participants: M Mulero Pazmany (Liverpool John Moores University), Eloy Revilla (Estación Biológica de Doñana, CSIC), Joaquín Vicente y Pelayo Acevedo (IREC-UCLM CSIC)

Funding: Liverpool John Moores University, UK.

Amount: 4.470€.

5. Nov 2018-Jul 2019. Road ecology in South African protected areas. Staff development fund.

IPs: M Mulero Pazmany.

Participants: M Mulero Pazmany.

Funding: Liverpool John Moores University, UK.

- Amount: 1.274€.
6. *Ago 2018-act.* Remote sensing and network theory to understand animal trails. (Project 2018/18). Early Career Researchers Seed Corn Funding.
IPs: M Mulero Pazmany, J Vicente, P Acevedo, JM Galán, R Martínez de Dios.
Participants: Liverpool John Moores University, Espacio Natural Doñana, Universidad de Sevilla, IREC-UCLM CSIC, Estación Biológica de Doñana CSIC.
Funding: Liverpool John Moores University UK.
Amount: 11.764€.
7. *Oct 2016-act.* Utilización de drones de bajo coste en Biología de la Conservación
IPs: M Mulero Pazmany.
Participants: M Mulero Pazmany.
Funding: Parrot Spain en calidad de sponsor.
Amount: 1.700€ (en especie Dron Parrot Bebop E2 con Skycontroller)
8. *Sep 2016-act.* Study of road networks' effects on ungulates in African protected areas. E 5097/02.
IPs: M González Suarez; M Mulero Pazmany; M D'Amico.
Participants: University of Reading, RU, Liverpool John Moores University, UK, Instituto Superior de Agronomía- InBio-CiBio Portugal, Ezemvelo KZN Widllife Sudáfrica.
Funding: University of Reading, United Kingdom.
Amount: 3.000€ (University of Reading, RU), 2.000€ (private funding)
9. *2015-2017 Obtención de panorámicas mediante aerografía digital en vuelos no tripulados: aplicación al conteo de venados. Parte II. PI Mandujano S. Proyecto Estratégico (No.20035-30921) y CONACYT (No. CB2015- 01-256549) Instituto de Ecología A.C. €18571,37. (participant)*
10. *Jun 2015-Jun 2016.* Desarrollo de un UAS (dron) para vigilancia de fincas, censo de especies cinegéticas y ganaderas, detección de incendios y anti-furtivismo.
IPs: JL Vicente; M Mulero Pazmany.
Participants: Chavarra SL.
Funding: Chavarra SL.
Amount: Project 50.000€, consultancy 9401.7€
11. *Ene-dic 2015.* Análisis de la multifuncionalidad de los ecosistemas secos del Ecuador como herramienta para determinar el estado de conservación y los servicios ambientales.
IPs: CI Espinosa; MF Tapia; L Ordóñez; E Gusman; I Arnelas; D Velez; F Reyes; M Iñiguez. (Role M Mulero-Pázmány:Researcher Postdoctoral).
Participants: Universidad Técnica Particular de Loja, Ecuador.
Funding: Dirección general de investigación y transferencia de Tecnología. Gobierno de Ecuador.
Amount: 131.618,25 €.
12. *Ene 2011-dic 2012.* Ayudas a las áreas de influencia socioeconómica de Parques Nacionales: Doñana y Sierra Nevada. Libro Project “Árboles y arboledas singulares de Doñana”. AI/2007/21/00041.
IP: M Mulero Pazmany.
Participants: M Mulero Pazmany.
Funding: Consejería de Medio Ambiente. Junta de Andalucía.
Amount: 14.702€
13. *Ene 2011-dic 2012.* Ayudas a las áreas de influencia socioeconómica de Parques Nacionales: Doñana y Sierra Nevada. Documental “Árboles y arboledas singulares de Doñana”. AI/2007/21/00041.
IP: M Mulero Pazmany.
Participants: M Mulero Pazmany.
Funding: Consejería de Medio Ambiente. Junta de Andalucía.
Amount: 6.702€
14. *Ene 2010-dic 2014.* PLANET (FP7-257649) Platform for the deployment and operation of heterogeneous networked cooperating objects.
IPs: P Marrón; JJ Negro; A Ollero; Gi Dini; D Scarlatti; R Martinez de Dios; E Previnaire; K Kondak; DK Arvin. (Role M Mulero-Pázmány:Researcher fuera de convenio)
Participants: AICIA-Asociación de Investigación y Cooperación Industrial de Andalucía; Boeing

Spain; ETRA INVESTIGACION Y DESARROLLO SA; FADA-CATEC; Flying Cam; SELEX; University of Duisburg AL; University of Edinburgh UK; University of Pisa IT, CSIC.
Funding: Comisión Europea. 7th Frame Program. Large-scale integrating project ICT Call 5
Amount total: 6.951.613 €, funded UE: 4.899.121€

15. *Ene 2009-dic 2010.* Análisis del programa de certificación ecológica de turismo sostenible en Costa Rica.

IP: M Mulero Pazmany.

Participants: M Mulero Pazmany. Universidad Pablo de Olavide, Spain, Universidad de Costa Rica.

Funding: AUIP. Asociación Universitaria Iberoamericana de Postgrado.

Amount: 1.200€

16. *Feb 2008-dic 2012.* AEROMAB (P07-RNM-03246. TEP-375). Tecnologías aeroespaciales para la conservación de la biodiversidad.

IPs: JJ Negro, M Ferrer, L. Merino. (Role M Mulero-Pázmány: Licenciada, Técnico Superior)

Participants: Estación Biológica de Doñana. CSIC. Universidad Pablo de Olavide.

Funding: Junta de Andalucía. Proyectos de Excelencia.

Amount: 394.000 €

17. *Mar 2006-feb 2009.* SADCON (TEP-375) Sistemas autónomos y distribuidos para la conservación del medio ambiente.

IPs: A. Ollero; M. Ferrer. (Role M Mulero-Pázmány: Bióloga, Técnico Superior)

Participants: Estación Biológica de Doñana, CSIC, Universidad de Sevilla.

Funding: Junta de Andalucía, Proyectos de Excelencia. Spain

Amount: 151.160 €

18. *May 2004-may 2006.* Seguimiento de actuaciones en el Parque Natural de Doñana.
(EXPT.2243/2003/A/00).

IP: MA Molina. (Role M Mulero-Pázmány: Bióloga, Técnico Superior)

Participants: EGMASA, Espacio Natural Doñana

Amount: desconocido.

19. *Ene-Dic 2002.* Impacto de la fragmentación del hábitat sobre la avifauna esteparia en la provincia de Almería, Spain.

IP: M Mulero Pazmany.

Participants: M Mulero Pazmany, Mariano Paracuellos, EGMASA.

Funding: Sociedad Española de Ornitología (SEO-Birdlife). Ayudas a la investigación

Amount: 2.000€

GRANTS, FELLOWSHIPS AND AWARDS

2022- 24 Ayudas para la recualificación del Sistema Universitario Español para 2021-2023 Ayudas MARÍA ZAMBRANO para la atracción de talento internacional. Unión Europea Next Generation EU. Contrato de Investigador distinguido (1/3/2022- 1/3/2024)

2018 Awards. Shortlisted for Spotlight Award 2018 Liverpool, UK for the project: "Internet of things for the ancient art of animal tracking"

2009. Secretaría de Estado de educación y formación. Subd. Gral de Becas. Beca 23047 para Master Universitario en Dirección de Empresas. (Awarded 1,159€)

2009. Iberoamerican University Postgraduate Association (AUIP). Annual Travel Grants. Master thesis: Ecological and Sustainable Tourism Certification: Analysis of the certification program for sustainable tourism in Costa Rica" (Awarded 1,200€)

2007. Andalusian Government. Environmental Department. Grants for dissemination projects. "Unique trees and forests of Doñana National Park" (Awarded 20,702€)

2007. FORMADES. Leonardo da Vinci. Centro andaluz de Formación medioambiental para Desarrollo Sostenible. PIFEDES 23/7/2007 to 23/09/2007 (63 days)

2003. Spanish Ornithological Society (SEO-Birdlife) Annual Awards for research in conservation biology. "Impact of habitat fragmentation on steppe birds in Almeria province, Southeast of Spain" (Awarded 2,000€)

STAYS IN INTERNATIONALLY RECOGNIZED CENTRES

- 19/10/2022-20/11/2023 University of Florence, Italy. Erasmus +KH103 teaching programme. (800€)
- 13/12/2021-17/12/2021 Teaching Doctorate programme Diversidad biologica y medio ambiente. (doctoral), Grado Ciencias Ambientales: gestión recursos flora y fauna. (Undergraduate) 8 hours of teaching. Introduction to camera trapping techniques. Master en diversidad biológica y medio ambiente (MSc), 10 hours of teaching. Staff Teaching Mobility Programme Erasmus + KH103 from Liverpool John Moores University UK. Universidad de Málaga, Spain. European Union (960€)
- 1/6/2019-1/7/2019 Estancia como colaborador docente externo. 3º Plan propio de docencia Anexo II – Ejercicio 2019 (Segunda Fase – Curso Académico 2018/19). Apoyo a la calidad de las enseñanzas de posgrado a través de la participación de colaboradores docentes externos. Facultad de Biología. Máster Universitario en Biología Avanzada: Investigación y Aplicación. Universidad de Sevilla, España. (450€).
- 12/6/2019 -21/6/2019 Teaching in Biology and Agricultural Schools 8 hours of teaching. Staff Teaching Mobility Programme Erasmus +KH103 from Liverpool John Moores University to Universidad de Sevilla, Spain. European Union.(960€)
- 23/9/2016-23/10/2016 Hluhluwe iMfolozi National Park, South Africa. Impact of roads in protected areas.
- 1/8/2016-11/9/2016 INECOL Instituto de Ecología A.C. Xalapa, México. Assessment on the use of drones for studying wild ungulates. Cooperation in project design, seminars and paper writing.
- 23/6/2016-2/7/2016 University of Reading, School of Biological Sciences. UK. Cooperation in Project design and seminars
- 1/04-31/04/2016. Instituto de Agronomía. InBio. CiBio Unmanned Aircraft Systems for environmental applications. Cooperation in Project design and seminars
- 21/11/2015-20/12/2015. Universidad Técnica Particular de Loja, Ecuador. Teaching the course on Unmanned Aircraft Systems for environmental applications. Fieldwork in dry forest.
- 10-17/10/2014. University of Edinburgh, Faculty of Informatics, UK. Unmanned aerial systems for gathering data from bio-logged animals.
- 30/7-30/8/2012. Centre for Wildlife Management. University of Pretoria. & CSIR Council for Scientific and Industrial Research. Pretoria, South Africa. Unmanned aerial systems for: rhino anti-poaching in Kwa-Zulu Natal, crocodiles survey in Limpopo River and Game monitoring in Gauteng Province. (30/7/2012-30/8/2012).
- 1-31/12/2009. University of Costa Rica. Faculty of Economics, Costa Rica. MBA Master thesis. "Ecological and Sustainable Tourism Certification: Analysis of the certification program for sustainable tourism in Costa Rica".

SELECTED PRESENTATIONS IN CONGRESSES

1. 11/2021 **Mulero-Pázmány M**, Development of a fixed-wing drone system for aerial insect sampling. International congress 2nd Drone Users Conference: Conservation and Agriculture, Africa Massive, Elsenburg, Stellenbosch, Western Cape (South Africa) (Oral)
2. 7/2021 **Mulero-Pázmány M**, speaker by invitation on the plenary panel: Using drones in biodiversity conservation: Risks, opportunities and futures. Drone ecologies congress. Exploring the opportunities and risks of aerial monitoring for biodiversity conservation. University of Bristol, UK (Oral)
3. 12/2020 González-Suárez, M. Duffett, D, **Mulero-Pázmány M**, D'Amico, M. Using species trait data to predict wildlife behavioural responses towards roads and traffic. Festival of Ecology. British Ecological Society, UK (online-poster)
4. 3/2020 **Mulero-Pázmány M**, Duffett D, D'Amico M, González-Suárez M. Species' traits as predictors of avoidance responses to roads and traffic: a case study on African ungulates. Savanna Science 2020. South Africa. (oral)
5. 12/2019 D'Amico M, Duffett D, **Mulero-Pázmány M**, González-Suárez M. Las características específicas intrínsecas como predictores de los impactos de carreteras y tráfico: un ejemplo con ungulados africanos [Species' traits as predictors of road and traffic impacts: a case study with African ungulates], XIV Congreso de la Sociedad Española para la Conservación y Estudio de los

- Mamíferos (SECEM) [14th Congress of SECEM (Spanish Society of Mammalogists)]. Jaca (Spain). (oral).
6. 9/2019. **Mulero-Pázmány M.** The future of drones in conservation biology. Drone Engagement Day. Liverpool John Moores University, United Kingdom. (Invited talk)
 7. 4/2019. **Mulero-Pázmány M.** Drones and camera traps to study animal trails network in Doñana national park (Invited talk). 4th Natura 2000 congress. EUROSITE. Sanlúcar de Barrameda, Spain
 8. 3/2019. **Mulero-Pázmány M.** Duffett D, D'Amico M., González-Suárez M Species traits as predictors of road-avoidance responses in African ungulates. (oral). ACLIE African Conference for Linear Infrastructure and Ecology. Kruger National Park, South Africa.
 9. 9/2018. **Mulero-Pázmány M.** The future of drones in conservation biology. Drone Engagement Day. Liverpool John Moores University, United Kingdom. (Invited speaker)
 10. 7/2017 Novoa DC, Fattebert J, D'Amico M, **Mulero-Pazmany M**, Hunter L, van Rensburg JJ, González-Suárez M. Temporal patterns in ungulate distribution related to the road-network of a South African protected area. International Congress for Conservation Biology, ICCB, Cartagena de Indias, Colombia. (poster)
 11. 6/2017. **Mulero-Pázmány M**, Martínez de Dios R, Figura R, Shih CY, Schwarzbach M, Alarcón F, Kropp A, Nebot H, Mann J, Radoi E, Dini G, Viguria A, Negro JJ, Ollero JJ, Marrón PJ. The integration of UAS in Internet of Things for Conservation biology. UAS4ENVIRO. Vila Real, Portugal. (oral)
 12. 7/2016. **Mulero-Pázmány M.** Experiences on the use of Unmanned Aircraft Systems in Conservation Biology. Small UAS for Environmental Research Conference. Worcester, UK. (oral)
 13. 2/2016. **Mulero-Pázmány M.** Unmanned Aircraft Systems in environmental research and management. Global Robot Expo. Madrid, Spain. (Oral).
 14. 1/2016 **Mulero-Pázmány M.** Sistemas aéreos no tripulados (UAS o drones) en investigación y gestión del medio ambiente. Civildron 2016. Madrid Spain (Oral)
 15. 12/2015. **Mulero-Pázmány M**, Barasona JA, Acevedo P, Vicente J, Negro JJ. Uso de Sistemas Aéreos no Tripulados (UAS) para el estudio de la ecología espacial de mamíferos: comparación con el seguimiento telemétrico mediante GPS-GSM. XII Congreso de la SECEM. Burgos, Spain (Oral).
 16. 9/2015. Laguna E, Barasona JA, **Mulero-Pázmány M**, Vicente J & Acevedo P. Desarrollo de un índice de agregación de individuos espacialmente explícito: los ungulados de Doñana como caso de estudio. VI Reunión de Ungulados Silvestres Ibéricos (RUSI), Sao Pedro do Sul, Portugal. (Poster)
 17. 8/2015. González-Suárez, M, **Mulero-Pazmany, M**, D'Amico, M. Impalas on the road: assessing ungulate behavioral responses to the heterogeneous road-network of Kruger National Park. 27th International Congress for Conservation Biology. 4th European congress for Conservation Biology. Montpellier, France (Oral).
 18. 11/2014. **Mulero-Pázmány M**, Schwarzbach M, Viguria A, Martínez de Dios JR, Mann JM, Kropp A, Nebot H, Alarcón Romero F, Negro JJ, Kondak K, Yen Shih C, Ollero A, Marrón P. Heterogeneous networked cooperating objects for pollution detection and monitoring. 99th ESA Annual Convention. Sacramento, Ca. USA (Poster)
 19. 9/2014. **Mulero-Pázmány M.** "Use of Unmanned Aerial Systems for gathering data from animals marked with GPS collars in Doñana National Park (Southwest of Spain)". 5th Biologging Symposium (5BLS), Strasbourg, France. (Oral)
 20. 5/2014. Schwarzbach M, Laiacker M, **Mulero-Pázmány M**, Kondak K. "Remote Water Sampling Using Flying Robots". International conference on unmanned aircraft systems (ICUAS'14). Orlando USA. (Oral)
 21. 1/2014. Mann J, **Mulero-Pázmány M.** "Platform for the deployment and operation of heterogeneous networked cooperating objects. Horse marking application". ISAE UK and Ireland Regional Meeting. Edinburgh, Scotland. (Oral),
 22. 10/2013. **Mulero-Pázmány M.** "Experiencias con ALNT en aplicaciones biológicas". Congreso nacional sobre capacidades de aeronaves ligeras no tripuladas. Teruel, Spain. (Conference Proceedings)

23. 9/2013. **Mulero-Pázmány M.** "Small RPAS in Conservation Biology". International congress UAS China 2013. Beijing, China. (Invited talk)
24. 7/2013. Barasona JA, **Mulero-Pázmány M**, Acevedo P, Negro JJ, Gortázar C, Vicente J. "Spatial risk for tuberculosis in relation to domestic and wild ungulate distribution assessed by unmanned aerial systems". The 2013 (62nd) WDA International Conference, Knoxville, USA. (Poster)
25. 3/2013. **Mulero-Pázmány M.** "Unmanned Aerial Systems. Their application for wildlife monitoring in Doñana National Park, Spain." Eurositem/CCW Natura 2000 Monitoring Workshop. Swansea, Wales. (Invited talk)
26. 8/2012. Negro JJ, **Mulero-Pázmány M.** "AEROMAB: Small UAS for wildlife monitoring". 5th North American Ornithological Conference. Universidad of British Columbia, Vancouver, Canada. (Poster)
27. 12/2011. **Mulero-Pázmány M**, Negro JJ. "AEROMAB: "Small UAS for Montagu's Harrier's Circus pygargus nests monitoring". RED UAS International Congress. Universidad of Engineering, Sevilla, Spain. (Poster)
28. 10/2011. **Mulero-Pázmány M.** "UAS for wildlife monitoring". International Congress UAS Latinamerica. Sao Jose dos Campos, Brazil. (Oral)
29. 5/2010. Mulero-Pázmány M. "Reconciling aerospace and biodiversity conservation". **Workshop on new capabilities for unmanned aerial systems (UAS).** ESA European Space Agency. Space Expo, Noordwijk, The Netherlands. (Invited talk)
30. 3/2010. **Mulero-Pázmány M**, Negro J, Puentes L. "UAS, a new tool for tracking migration". 2nd Conference on Bird migration and global change: movement ecology and conservation strategies. Algeciras, Spain. (Poster)
31. 12/2009. Puentes L, **Mulero-Pázmány M**, Negro J, Ferrer M., De Lucas M. "UAS applications for terrestrial mammals studies". IX Jornadas de la Sociedad Española para la conservación y estudio de los mamíferos, SECEM. Bilbao, Spain. (Poster)
32. 12/2008. **Mulero-Pázmány M.** "Introducing AEROMAB project (Aerospace Technologies applied to Biodiversity Conservation). 10th annual TAAC UAS Conference. Albuquerque, New Mexico, USA. (poster)
33. 11/2005. **Mulero-Pázmány M**, Paracuellos M. "Effects of habitat fragmentation in two groups of vertebrates: birds and reptiles in Poniente almeriense (Southeast of Spain)". Conservation Biology Congress. XV Ecology meeting of Mediterranean environments. Almería, Spain. (Oral)
34. 5/2003. **Mulero-Pázmány M**, Paracuellos M. "Impact of habitat fragmentation on the steppe birds of Almeria province". Conservation Biology Congress. XIV Ecology meeting of Mediterranean environments. Almería, Spain. (Oral)

EDITOR AND REVIEWER (Scientific or technological journals)

- 2021-22 Guest Editor. Special Issue "Drones for biodiversity conservation" "Drones", MDPI. ISSN: 2504-446X. (JCR Impact factor 5.532; Remote sensing Q2. 10/34).
https://www.mdpi.com/journal/drones/special_issues/drones_biodiversity_conservation#info
- 6/2021-10/2022 Guest Editor Special Issue "Feature Paper Special Issue on Ecological Remote Sensing". 6/2021-10/2022 Guest editor Special Issue "Feature Paper Special Issue on Ecological Remote Sensing".
https://www.mdpi.com/journal/remotesensing/special_issues/FP_SI_Ecological_Remote_Sensing
Remote Sensing. MDPI, ISSN: 2072-4292. (JCR Impact factor: 4.848; Environmental Sciences Q2 76/274; Geosciences, Multidisciplinary Q1 27/200)
- Remote Sensing. MDPI, ISSN: 2072-4292 (JCR Impact factor: 4.848; Environmental Sciences Q2 76/274; Geosciences, Multidisciplinary Q1 27/200)
- 6/2021-act Section Board member of Remote Sensing. MDPI, ISSN: 2072-4292. (JCR Impact factor: 4.848; Environmental Sciences Q2 76/274; Geosciences, Multidisciplinary Q1 27/200)
- 3/2020-act Associate Editor in Remote Sensing in Earth Systems Sciences. Springer Nature Switzerland. Electronic ISSN: 2520-8209; Print ISSN: 2520-8195
- 12/2019-present. Editorial Board member in "Drones", MDPI. ISSN: 2504-446X. (JCR Impact factor 5.532; Remote sensing Q2. 10/34).

12/2017-present. Associate Editor in "Remote Sensing in Ecology and Conservation". Wiley. London, UK. Impact factor: 5.481. 2020 Journal Citation Reports (Clarivate Analytics): Ecology 23/166 Remote Sensing 7/32 Online ISSN:2056-3485.

-2016-22 Reviewer: Plos One 6; Remote Sensing in Ecology and Conservation 2; Wildlife Biology 1; Animals 1; Frontiers in Ecology and the Environment 1; Biological Conservation 1; Animal Biodiversity and Conservation 1; African Journal of Wildlife Research 1; IEEE Transactions on Computational Social Systems 1; European Journal of Wildlife Research 4; Journal of Unmanned Vehicle Systems 1; Wildlife research 1; Mine Water and the Environment 1; Frontiers of Biogeography 1; Science Robotics 1; Geocarto International 1; Conservation Physiology 1; Drones 1; PeerJ 1; Remote sensing 1; Environmental Conservation 1

The reviews are also accessible at:

<https://publons.com/author/1176010/margarita-mulero-pazmany#profile>

PROJECTS EVALUATION

3/2021-3/2024. Member of the RAPID project External Expert Advisory Board (EEAB). European Commission Horizon 2020 (grant agreement N°861211), led by the University of the West of Scotland, UK.

10/2020-act Advisor Phoenix I Project (UK Phoenix Programme)

<https://dronemajor.net/editorials/liverpool-city-region-set-to-become-a-global-driving-force-in-drone-technology>

3/2017-5/2017. Reviewer for Belgian Remote Sensing Research Programme. STEREO III. Politique scientifique fédéral. Brussels, Belgium. (<https://eo.belspo.be/en/stereo-iii-programme>)

INVITED TALKS, WORKSHOPS AND SEMINARS

10/2020 "Drones in Conservation Biology" CNRS/University of Lyon, France. (Invited talk)

12/2016. "Unmanned Aircraft Systems in environmental research". Facultad de Biología, Universidad de Barcelona, Spain. (Invited seminar)

10/2016 "The use of drones in conservation biology". Percy FitzPatrick Institute of African Ornithology DST/NRF Centre of Excellence. South Africa (Invited talk)

8/2016 "Drones como herramienta para la obtención de datos en ecología animal". INECOL, Instituto de Ecología A.C. Xalapa, México. (Invited seminar)

6/2016 "Unmanned Aircraft Systems and Internet of things in Conservation Biology". University of Reading, UK. (Invited talk)

6/2016 "Experiencias en el uso de Sistemas Aéreos no Tripulados en biología de la conservación". Parque Regional del Curso Medio del río Guadarrama y su entorno. Spain (Invited seminar).

5/2016. "Experiences on the use of Unmanned Aircraft Systems in Conservation Biology" Seminarios CEF/CEABN. Instituto Superior de Agronomía. InBio, CiBio. Lisboa, Portugal. (Invited seminar).

11/2015. "Use of drones (RPAS) for environmental conservation". University of Cádiz, Spain. (Invited seminar)

3/2015. "UAS in Conservation Biology", To Ukrainian Aerospace Delegation. Strengthening of the State Space Agency of Ukraine (SSAU). EGNOS/Galileo and Remote Sensing (GMES). Center for advanced Aerospace technologies (FADA-CATEC), Spain, (Invited talk)

8/2012. "UAS for wildlife monitoring", Centre for wildlife management. University of Pretoria, South Africa, (Invited seminar)

8/2012. "UAS for wildlife monitoring". CSIR, South Africa. (Invited talk)

11/2011. "AEROMAB: Aviones no tripulados en Biología de la Conservación". CABIMER, Sevilla, Spain (Invited seminar)

5/2010. "Reconciling aerospace and biodiversity conservation". Workshop on new capabilities for unmanned aerial systems (UAS). ESA European Space Agency. Space Expo, Noordwijk, The Netherlands. (Invited talk)

10/2009. "Light UAS for wildlife and habitat monitoring". European Hearing on Light UAS. European Commission, Directorate General for Energy and Transport. Brussels, Belgium. (Invited talk)

STUDENTS MENTORING

PhD

2022. Geison Pires Mesquita. Nueva metodología de obtención de datos con sistemas aéreos no tripulados (drones) para estudios de ecología y biología de la conservación de grandes mamíferos en el bioma Cerrado. Univ. Autónoma de Barcelona. Rodríguez-Teijeiro JD, **Mulero-Pázmány M**, Wich S. (*codirector*). PhD Defense 28/2/2022. Excelente cum laude
- 2021 Tasmin Alexander. Addressing big-data challenges in drone ecology. Liverpool John Moores University UK. Ian Walkington (**lead supervisor**), **Mulero-Pázmány M**, Romano, A. (cosupervisors). On her first year.
- 2020 Penelope Rose Hamilton Wellman. Animal trails as indicators of animal populations' spatial ecology. Liverpool John Moores University UK. **Mulero-Pázmány M (lead supervisor)**, González-Suárez M, Nowack J, Triguero Ocaña R (cosupervisors). On her first year.

Master Thesis

- 2019 Joshua Hodgkinson. Drones and networked technologies in anti-poaching. Master thesis. Director: **Mulero-Pázmány M**, Wildlife and UAVs MSc, Liverpool John Moores University, UK.
- 2019 Fern Brown. Study of animal trails using drones and camera traps. Master thesis. Director: **Mulero-Pázmány M**, Wildlife and UAVs MSc, Liverpool John Moores University, UK.
- 2018 Julian Terreros Martin. Use of animal trails as indicators of animal populations' spatial ecology. Master thesis. Director: **Mulero-Pázmány M**, Wildlife and UAVs MSc, Liverpool John Moores University, UK.
- 2018 Alison Jones. Impact of human infrastructures on animal trails' networks. Master thesis. Director: **Mulero-Pázmány M**, Wildlife and UAVs MSc, Liverpool John Moores University, UK.
2017. Diana Carolina Novoa. Temporal patterns in ungulate distribution related to the road-network of a South African protected area. Master thesis. Codirectors: González-Suárez M, **Mulero-Pázmány M**, D'Amico M, Fattebert J. Wildlife Management and Conservation MSc. Univ. of Reading, UK.
2017. Daniela Irene Duffett. Behavioural responses of African ungulates to heterogeneous road-networks: a multi-species approach. Master thesis. Codirectors: González-Suárez M, **Mulero-Pázmány M**, D'Amico M, Fattebert J. Wildlife Management and Conservation MSc. Univ. of Reading, UK.
2013. Jesús Gómez. Censo de especies de interés cinegético mediante aviones no tripulados (UAVs). Master thesis. Codirectors: **Mulero-Pázmány M**, Negro J. Máster en biología de la Conservación. Universidad Pablo de Olavide. Spain
2011. Paloma Cuesta. Respuestas comportamentales de las aves acuáticas al sobrevuelo de aviones no tripulados de pequeño tamaño (SUAS). Master thesis. Director: **Mulero-Pázmány M**. Universidad de Córdoba. Máster en Etología. Spain

Postgraduate thesis

- 2020-21 Alex Green. Animal trails as indicators of animal habitat use. Postgraduate thesis. BSc.Wildlife conservation. Liverpool John Moores University, UK
- 2020-21 Charlotte Hopley. Does grit size and sand humidity affect how geese are distributed on sand dunes? Postgraduate thesis. BSc.Wildlife conservation. Liverpool John Moores University, UK
- 2020-21 James Pybis. Camera traps data to compare animal traffic in different trail types. Postgraduate thesis. BSc.Wildlife conservation. Liverpool John Moores University, UK
- 2020-21 Nick Roberts. Animal trails, a literature review. Postgraduate thesis. BSc.Wildlife conservation. Liverpool John Moores University, UK
- 2020-21 Matt Sanderson. Using social networks to study road ecology in Kruger National Park, South Africa. Postgraduate thesis. BSc.Wildlife conservation. Liverpool John Moores University, UK
- 2019 Gloria Singh. Animal speed in trails. Postgraduate thesis. BSc.Wildlife conservation. Liverpool John Moores University, UK
- 2019 Jadene Galley. Activity patterns in animal trails. Postgraduate thesis. BSc. Animal Behaviour. Liverpool John Moores University, UK
- 2019 Charlotte Lucas. Animal use of trails in relation with environmental factors. Postgraduate thesis. BSc.Wildlife conservation. Liverpool John Moores University, UK

- 2019 John Rankin. Bird reactions to human in Rural vs urban areas in Merseyside, UK. Postgraduate thesis. BSc. Animal Behaviour. Liverpool John Moores University, UK
2016. Enrique Villamarín Alfonso. Uso de RPAS para detección térmica de ungulados en el coto VINATEA M-1068. Trabajo Fin de Grado. Escuela Universitaria de Ingeniería técnica forestal. Universidad Politécnica de Madrid. Spain. Codirector with J. Solana Gutiérrez.

Postgraduate courses non-official (Trabajo de Fin de Curso Experto Universitario).

- 2018 Manuel Antonio Luna. Uso medioambiental de los RPAS sin necesidad de cámaras. Trabajo de Fin de Curso. Experto Universitario en Vehículos Aéreos no Tripulados y sus Aplicaciones Civiles. Universidad de Cádiz. Spain
2017 Jesús Jiménez López. Contribución de los RPAS en investigación y conservación en espacios protegidos: presente y futuro. Trabajo de Fin de Curso. Experto Universitario en Vehículos Aéreos no Tripulados y sus Aplicaciones Civiles. Universidad de Cádiz. Spain
2016 Manuel Vidal López Gracia, Soluciones para la conservación de la fauna salvaje mediante el uso de RPAS. Trabajo de Fin de Curso. Experto Universitario en Vehículos Aéreos no Tripulados y sus Aplicaciones Civiles. Universidad de Cádiz. Spain
2016 María I. Romero Medina. Comparativa de detectabilidad de cocodrilos en fotografía aérea obtenida con cámaras en espectro visible y térmico embarcadas en RPAS. Trabajo de Fin de Curso. Experto Universitario en Vehículos Aéreos no Tripulados y sus Aplicaciones Civiles. Universidad de Cádiz. Spain
2016 José Miguel Vaca Viaña, Contribución de los RPAS en investigación y conservación en espacios protegidos: presente y futuro. Trabajo de Fin de Curso. Experto Universitario en Vehículos Aéreos no Tripulados y sus Aplicaciones Civiles. Universidad de Cádiz. Spain

Tutorship BSc students

- Wildlife Conservation BSc. Liverpool John Moores University, UK
2021-22 7 students in Level 4, 8 students in Level 5, 2 placement students
2019-20. Charlotte Timmerhues, Annabel Walker, Chloe Webb, Katie Williams, Kelsey Williams, Thea Wood.
2018-2020 Mathew Sanderson, Jasmine Simpson, Rebecca Spurdle, Katy Staples, James Talbot Wilkinson, Jade Venezis, Alex Wheaton, Keira Worral.
Animal Behaviour BSc. Liverpool John Moores University, UK
2018-19 Olivia Fiorillo-Hughes, Millie Flannery, Chelsie Hirons-Major, Sian Johnson, Niamh Kelly, Sophie Lancashire, Paige-Marie, Bell Houlder, Wilbur Tiley

Placement tutor

- 2021-22. Annabel Walker. The North of England Zoological Society (Chester Zoo).
2021-22. Charlotte Timmerhues. CSIRO FD McMaster Laboratory, 9308 New England Highway, Armidale, NSW, Australia

TEACHING

Postgraduate teaching

- 10-11/2022 Models and methods for biodiversity conservation. MSc on Science of Nature and Humans (8h 24 Oct, 14, 15, 16 Nov 2022). University of Florence, Italy. Erasmus +103 teaching programme.
11/10/2022. Module Climate Change Impacts Monitoring and Management, program: MSc in Climate Change and Sustainability Liverpool John Moores University, United Kingdom. 1 hour lecture as invited speaker.
16-17/12/2021. Introduction to camera trapping. PhD Program on Biological Diversity and the Environment. Faculty of Sciences. Universidad de Málaga, Spain. 10 hours
9/3/2021. Tecnologías aplicadas al estudio de fauna. Asignatura "Biodiversidad animal de la Cuenca Mediterránea". 4º de Biología. Universidad de Málaga, España. 1 hour
2018-2022 Lecturer full time (teaching and research). Liverpool John Moores University (total: 1675 hours). Programmes: Wildlife Conservation, Animal Behaviour, Zoology. MSc Wildlife conservation technology.

- 2021-22. Module leader: Wildlife conservation; Survey, mapping and fieldskills. MSc Wildlife conservation technology. Liverpool John Moores University, UK.
- 2017-18 Lecture: Utilización de drones en conservación. Asignatura Bases para la restauración de ecosistemas terrestres" Master Universitario en Biología Avanzada: investigación y Aplicación. Universidad de Sevilla, Spain 1.5h
- 2018-19: Module leader: Overseas field experience; Master thesis. Environmental Science and UAVs MSc, Liverpool John Moores University, UK.
- 11/ 2015-sept 2019. Associate lecturer (profesora) Curso de postgrado "Experto Universitario en Vehículos Aéreos no Tripulados y sus Aplicaciones civiles". Universidad de Cádiz, Spain (15 hours *4 editions= 60h)

BSc teaching

- 2021-22 PDI Investigador distinguido. Biodiversidad de la cuenca mediterránea en Grado Biología (6 h); Zoología en Grado CC Ambientales (18 h). Universidad de Málaga, Spain. Total= 24h.
- 2018-2022.: Senior lecturer: Ecology fieldskills; Frontiers of ecology, Conservation technology, Ecology; Research skills and employability; Drone technology and operations; Understanding the environment, Undergraduate research projects (MSc thesis). Liverpool John Moores University, UK.

ACADEMIC MANAGEMENT

- 2021 External advisor/expert on Andrés de la Cruz Muñoz PhD thesis. Modelización de hábitats y poblaciones para la conservación de las aves marinas/ Habitat and population modelling for the conservation of seabirds. Universidad de Cádiz, Spain. 25-3-2021
- 2018-19. Teaching Observation Scheme. Liverpool John Moores University, RU.
- 2018 Member of the committee for Laura Ríos Pena PhD Thesis. "Mapping species distribution range by means of heterogeneus data" Universidad de Santiago de Compostela, Spain, July 4th 2018
- 2017-19. Coordinator for Erasmus Plus programme 2017-18 (UK LIVERPO 02) Liverpool John Moores University UK- IES. Javier García Téllez, Cáceres (Spain)

ACADEMIC MANAGEMENT

- 2021 External advisor/expert on Andrés de la Cruz Muñoz PhD thesis. Modelización de hábitats y poblaciones para la conservación de las aves marinas/ Habitat and population modelling for the conservation of seabirds. Universidad de Cádiz, Spain. 25-3-2021
- 2018-19. Teaching Observation Scheme. Liverpool John Moores University, RU.
- 2018 Member of the committee for Laura Ríos Pena PhD Thesis. "Mapping species distribution range by means of heterogeneus data" Universidad de Santiago de Compostela, Spain, July 4th 2018
- 2017-19. Coordinator for Erasmus Plus programme 2017-18 (UK LIVERPO 02) Liverpool John Moores University UK- IES. Javier García Téllez, Cáceres (Spain)

SCIENTIFIC REPORTS

- 3/2017-5/2017. Quality assessment of scientific projects in STEREO III Programme. Politique scientifique fédéral. Brusels, Belgium.
- 10/2016. Report: "Use of drones with thermal cameras to detect wildlife". EBUILDING, S.L, Madrid, Spain.
- 6/2015. Report: "Development of an UAS to control game in hunting farms" Scientific consultant. Chavarra S.L., Spain.
- 11/2015 Report: "UAS impact in wildlife and reccomendations for a responsible use". Swiss Ornithological Institute-Vogelwarte, Sempach, Switzerland.
- 1/2007: Report: "UAS adaptations for wildlife monitoring and assessment of infrastructures impact". Universidad de Sevilla, Spain.
- 1/2007-9/2007. Reports: "Raptors mortality associated to aero-generators in Cadiz coast"; "Status of the Aphanicus baeticus in Cadiz province"; "Montagus harrier nest monitoring in aero-generators in Cadiz coast"; "Intertidal pools wildlife in Cadiz province"; "Autonomous distributed systems for wildlife conservation"; " Adaptations of unmanned aircraft systems (UAS-drones) for wildlife monitoring and assessing the impact of infrastructures". Fundación MIGRES. Cádiz, Spain.

5/2004-9/2005. Monthly reports of the status of the Spanish Imperial Eagle (*Aquila adalberti*) and the causes of non-natural mortality in Doñana National Park: electrocution and poison". EGMASA – Agencia Andaluza de Medio Ambiente, Spain.

DISSEMINATION ACTIVITIES

Articles

Strel N., **Mulero-Pázmány M.** Oiseaux et drones - comment éviter les conflits?/ Vögel und Drohnen – wie Konflikte vermieden werden. (2016). Avinews pp 9. Vogelwarte. Sempach, Switzerland. ISSN: 1664-9451. (Ressource électronique: 1664-946X).

Webs:

Personal: <http://margaritamulero.wix.com/margaritamulero>

Digital media:

- Diario Sur. Spain El sonido de los drones afecta a los grandes mamíferos. Alba Tenza 31-1-2023
<https://www.diariosur.es/cronica-universitaria/sonido-drones-afecta-grandes-maniferos-20230130180137-nt.html>
- Gente en Málaga. Spain. La UMA muestra que los mamíferos terrestres son más vulnerables al ruido de los drones que a su impacto visual. 30-11-2022.
<http://www.gentedigital.es/malaga/noticia/3515748/la-uma-muestra-que-los-mamiferos-terrestres-son-mas-vulnerables-al-ruido-de-los-drones-que-a-su-impacto-visual/>
- Novaciencia. Así es el impacto de los vuelos de drones sobre los grandes mamíferos. 30-11-2022
<https://novaciencia.es/asi-es-el-impacto-de-los-vuelos-de-drones-sobre-los-grandes-mamiferos/>
- Fundación Descubre. Spain. Los grandes mamíferos terrestres son más vulnerables al ruido de los drones que a su impacto visual. 30-11-2022 <https://fundaciondescubre.es/noticias/losgrandes-mamiferos-terrestres-son-mas-vulnerables-al-ruido-de-los-drones-que-a-su-impacto-visual/>
- El Diario. Spain. El ruido de los drones afecta más a los mamíferos que su impacto visual. 30-11-2022
https://www.eldiario.es/tecnologia/ruido-drones-afecta-mamiferos-impacto-visual_1_9757690.html
- Europa Press. Spain. La UMA muestra que los grandes mamíferos terrestres son más vulnerables al ruido de los drones que a su impacto visual. 30-11-2022
<https://www.europapress.es/andalucia/malaga-00356/noticia-uma-muestra-grandes-mamiferos-terrestres-son-mas-vulnerables-ruido-drones-impacto-visual-20221130141448.html>
- EFE Verde. Spain. El ruido de los drones afecta más a los mamíferos que su impacto visual. 30-11-2022
<https://efeverde.com/ruido-drones-mamiferos-impacto-visual/>
- Málaga hoy. España. La UMA muestra que los mamíferos terrestres son más vulnerables al ruido de los drones que a su impacto visual. 30-11-2022 https://www.malagahoy.es/malaga/UMA-mamiferos-terrestres-ruido-drones-impacto_0_1743427684.html
- La Nación. Argentina. La UMA muestra que los mamíferos terrestres son más vulnerables al ruido de los drones que a su impacto visual. 30-11-2022 <https://www.lanacion.com.ar/agencias/la-uma-muestra-que-los-mamiferos-terrestres-son-mas-vulnerables-al-ruido-de-los-drones-que-a-su-nid30112022/>
- Mirage news. Large terrestrial mammals are more vulnerable to acoustic impact of drones than to visual impact.30-11-2022 <https://www.miragenews.com/large-terrestrial-mammals-are-more-vulnerable-906077/>
- National Geographic. Jason Bittel. Viral bear video shows dark side of filming animals with drones. Nov 2018. <https://www.nationalgeographic.com/animals/2018/11/drone-brown-bear-video-russia-wildlife-harrassment-news/>
- The conversation. Viral bear video shows how drones threaten wildlife – and what to do about it. Nov 2018 <https://theconversation.com/viral-bear-video-shows-how-drones-threaten-wildlife-and-what-to-do-about-it-106903>

- ABC ciencia. El tierno video de la mamá oso y su osezno pudo costarles la vida. Nov 2018
https://www.abc.es/ciencia/abci-tierno-video-mama-y-osezno-pudo-costarles-vida-201811100340_noticia.html
- Smithsonian. Brigit Katz. Why experts are troubled by a viral video of a baby bear's mountain climb. Nov 2018. <https://www.smithsonianmag.com/smart-news/why-experts-are-troubled-viral-video-baby-bears-mountain-climb-180970753/>
- UAS as a new source of disturbance for wildlife. Press. SUAS News. The business of drones. Jun 2017. <https://www.suasnews.com/2017/06/study-uas-new-source-disturbance-wildlife/>
- Drones are setting their sights on wildlife. And they're making science safer for everyone involved. Popular Science. Kate Baggaley. Feb, 2017 <https://www.popsci.com/drones-wildlife-biology-animal-research>
- Blog Aeromab project: <http://aeromab-english.blogspot.com.es/>

Press:

- National Geographic. Eva van der Berg. Mar 2014. Aerial surveillance. Drones for aerial surveillance in anti-poaching.
- La Vanguardia. 2013 Cristina Sáez. Artículo "El despegue de los 'drones'"
<http://www.lavanguardia.com/estilos-de-vida/20131101/54392822049/el-despegue-de-los-drones.html>
- EuroXpress. Los drones que cuidan a los rinocerontes. Maribel Alonso. 10/1/2014
<https://www.euroexpress.es/noticias/los-drones-que-cuidan-a-los-rinocerontes>

Radio: Radio interviews about research work

- Málaga Radio Spain. Impacto del ruido de los drones sobre la fauna. 5-12-2022. Interview min 22.25.
http://canalmalaga-ondemand.flumotion.com/outgoing/audio/mp3/high/20221205100800_LMXJV_1008_1100_ALDIA1_A_1X1_1_T22-23_P046_MAGACIN_MALAGA_AL_DIA_1-CANAL_MALAGA_RADIO.mp3#t=1345
- Cadena SER Spain. Ciencia para todos. T05E12. El vuelo de los drones no es inocuo para la fauna. 8-12-2022. Interview. <https://cadenaser.com/audio/1670502894989/>
- COPE Spain. 30/11/2022 El ruido de los drones afecta más a los mamíferos que su impacto visual. Interview. https://www.cope.es/actualidad/tecnologia/noticias/ruido-los-drones-afecta-mas-los-mamiferos-que-impacto-visual-20221130_2427116
- Onda Cero. News. Ene 2014. Interview "Uso de drones para anti-furtivismo de rinocerontes en África." <https://www.ondacero.es/podcast/>
- Onda Cero. Programa: Como el perro y el gato. Ene 2014. Interview "Project AEROMAB: uso de drones para anti-furtivismo de rinocerontes en África". <https://www.ondacero.es/programas/como-el-perro-y-el-gato/audios-podcast/>
- Radio Andalucía-Todo Noticias. Interview "Drones para el medio ambiente". Jun 2009. https://www.canalsur.es/radio_directo-2014.html
- Canal Sur Radio- Espacio Verde. Interview "Drones para la fauna salvaje". Jun 2009. <https://www.canalsur.es/radio-555.html>

TV interviews and programs about research work

- TVE1 Noticias nacionales. "Rinocerontes: al borde de la extinción por culpa de los cazadores". May 2015. http://www.rtve.es/alacarta/videos/telediario/rinocerontes-borde-extincion-culpa-cazadores/3142361/?ext=SM_FB_TELEDIARIO
- Canal Sur. Espacio Protegido. "Los drones en la vigilancia de la biodiversidad". Mar 2014. (min 10.09). <http://alacarta.canalsur.es/television/video/el-peligro-oculto-de-los-disruptores-endocrinos/1318402/28>
- Canal Sur. Tierra y Mar nº 938. "La teledetección y el cernícalo primilla". Sep 2012. https://www.youtube.com/watch?v=_UiyTU3JM0w
- Canal Sur TV Interview. Historias de Luz. Mar 2012. Shown in various national and regional TV media. "Aviones no tripulados serán los nuevos centinelas desde el aire del Parque Nacional de Doñana" <http://www.historiasdeluz.es/historia-del-dia/sostenibilidad/aeromab>

-TVE2 Programa: Emisión I+D Spain- Andalucía. Minuto 34. Mar 2011.

<http://www.rtve.es/alacarta/videos/de-espana/de-espana-andalucia-inversion-de-futuro/1043974/>

Attendance to dissemination events and other dissemination activities

-Feria de la Ciencia, Seville, Spain 2012-2014

-Supervision of highschool students' research work in IES San Blas (Añover de Tajo, Toledo, Spain. 1º de Bachillerato). 2022-23

TEACHING RELATED COURSES

1. Taller sobre datos abiertos de investigación. 30/03/2022. 1,5 h. Universidad de Málaga, Spain
2. Mobile Device Security. KnowB4. Liverpool John Moores University, UK 8/11/21, 2h
3. Handling and sharing sensitive information. KnowB4. Liverpool John Moores University, UK 25/9/21, 2h
4. Cyber essential series. Working remotely. KnowB4. Liverpool John Moores University, UK 25/9/21, 2h
5. The Conversation media training. The conversation, Liverpool John Moores University, UK 15/9/21, 2h
6. "How to create strong passwords" KnowBe4. Liverpool John Moores University, UK 15/6/21 1h
7. "Join the craze of the passphrase" KnowBe4. Liverpool John Moores University, UK 15/6/21 1h
8. "Privacy basis" KnowBe4. Liverpool John Moores University, UK 15/6/21 1h
9. "Research Supervisor Workshop" Doctoral Academy at Liverpool John Moores University. 12/1/21. 2 h
10. "Understanding and Enhancing student engagement with Active Blended Learning activities and Canvas Enhanced Analytics". Liverpool John Moores University Teaching and Learning Academy, UK. 2/9/20 1h
11. "Outward bound first aid for fieldwork course". Kays medical, UK 24/10/20. 24h
12. "Managing Student Progression training". Liverpool John Moores University, UK. 21/2/19 1.5h
13. "GDPR (General Data Protection Regulation) for students" Liverpool John Moores University, UK. 14/5/18. 2h
14. "Fellowship of the HEA (Higher Education Academy briefing session" Liverpool John Moores University, UK. 14/5/18. 1h
15. "Recruitment & Selection" Liverpool John Moores University, UK. 22/3/2018. 8h
16. "Canvas (online teaching)". Liverpool John Moores University, UK. 21/2/18. 8h.
17. Curso "Moodle" (software para la docencia online). Universidad de Cádiz, España 11/11/2015. 4h
18. "Diversity in the workplace". Liverpool John Moores University, UK 2-2-2021. 3h
19. "Bribery Act" Liverpool John Moores University, UK 2-2-2021. 3h
20. "Building blocks of impact". Liverpool John Moores University, UK. 5-9-2018. 2h.
21. "Introduction to the Prevent Duty". Liverpool John Moores University, UK. Jan-Sep 2018. 2h.
22. "Understanding Modern Slavery". Liverpool John Moores University, UK. 14/2/2018. 2h.
23. "Diversity in the Workplace". Liverpool John Moores University, UK. 13/2/2018. 2h.
24. "Bribery Act". Liverpool John Moores University, UK. 13/2/2018. 2h
25. "Seguridad, emergencias y supervivencia en zonas templadas". Escuela de Supervivencia Deportiva de Madrid, Spain. Apr 2016. 30h.
26. "Seguridad, emergencias y supervivencia en zonas frías". Escuela de Supervivencia Deportiva de Madrid, Spain. Mar 2016. 30h.
27. "Professional Skills for Research Leaders". Liverpool John Moores University, UK. 1/6/2019. 8h
28. "Prevención de Riesgos laborales" EGMASA, Sevilla, Spain. 15/11/2004. 30h

PROFESSIONAL COURSES

1. "Curso rastreo, supervivencia y técnicas primitivas" Escuela de Supervivencia deportiva de Madrid. Parque Nacional de Doñana, Spain. 2-8 dec 2022 (75h).
2. "Curso Prevención de Riesgos Laborales específico puestos de trabajo. Art. 19 ley 31/95-trabajos en laboratorios" 15/11/2021 - 31/05/2022. 5h Universidad de Málaga, Spain
3. "Curso básico de capacitación para sobrevivir en medios inhóspitos y hostiles" Escuela de supervivencia Anaconda I, Ojén, Spain. 14-17/4/2022. 36h
4. "PowerPoint Basics & Intermediate" Liverpool John Moores University, UK. 15/2/2018. 1.5 h
5. "Adobe Acrobat". EGMASA. 30/5-16/6/2005. 16 h
6. "Photoshop C5S completo online" Agencia estatal Consejo Superior de Investigaciones Científicas, Spain. Plan de formación 29/9-14/11/2014. 60h
7. "Excel 2007 Básico online". Estación Biológica de Doñana -CSIC. Sevilla, Spain. 8/3-11/4-2010. 40h
8. "Introduction to Basic Statistics in R". Ross Macleod. Liverpool John Moores University, UK 13/1/2021-29/1/21. 12 h
9. "Advanced statistics in R" Russell Gray. 15/9-20/12/2020. 230h
10. "Flyer ID Drone pilot in UK": FLY-TPR3LY. Dec 2019.
11. "Introduction to African wildlife: identification, tracks, footprints, camera". Ukuhamba guiding. Southafrica. Sep 2016. 35h
12. "Linear Infrastructure Networks with Ecological Solutions". LIFELINES. Évora, Portugal. Jun 2016. 8h.
13. "Advanced certificate-drone pilot" (RPAS) AESA. Universidad de Cádiz, Spain. Apr 2016. 69 h.
14. "Fotogrametría con Photomodeler". Civildron, Madrid, Spain. 26/1/2016. 1h
15. "Termografía infrarroja con drones". Civildron, Madrid, Spain. Jan 27th 2016. 2h
16. "Flujo de trabajo con UAV para la obtención de cartografía". Civildron, Madrid, Spain. Jan 27th 2016. 2h
17. "Experimental design, multivariate statistics, GLM, GLMM, bayesian statistics". Estación Biológica de Doñana, CSIC. Sevilla, Spain. Oct-Dec 2014. 21h
18. "SIG and Quantum GIS". Gabinete de Formación de Agencia Estatal Consejo Superior de Investigaciones Científicas. Sevilla, Spain. Jul 2011. 40h
19. "Introducción al análisis de datos con R". Gabinete de Formación de Agencia Estatal Consejo Superior de Investigaciones Científicas. Sevilla, Spain. Jul 2011. 60h
20. "Taller de gestión y preparación de Projects del Séptimo programa Marco (EU)". Vicepresidencia adjunta del espacio europeo (VRI). Madrid, Spain. 27-28/4/2011. 18h
21. "Curso Práctico de aeromodelismo". Federación andaluza de los deportes aéreos. Sevilla, Spain. 16-20/2/2009. 20h
22. "Curso práctico para el vuelo de helicópteros radiocontrolados". Club Ciutat de Reus, Tarragona, Spain 25-28/5/2009. 20 h
23. "Plan de autoprotección". Estación Biológica de Doñana -CSIC. Sevilla, Spain. Apr 2010. 8h
24. "Francés A2" CECR. Instituto cultural francés. Sevilla, Spain. Jun 2012, 60 h.
25. Project management in environment, game and fishing. Universidad de Córdoba, Spain. 11/2009. 50 h
26. Conservación de aves rapaces en el tercer milenio. Nuevos enfoques, viejos paradigmas. Universidad Internacional de Andalucía. Sede Antonio Machado. Huelva, Spain. Oct 2004. 40h.

LANGUAGE AND COMPUTER SKILLS

- Native language **Spanish**
- Fluent (written and spoken) **English**
- Intermediate (written and spoken) **Portuguese and French**
- Statistical packages:** Spss, R
- GIS:** Quantum GIS, Arc GIS

OTHER SKILLS

- Funder and manager of a local sustainable travel agency operating in Spain: www.localplan.es
- **Available for traveling.**

- Familiar with **other cultures** (travelled to 38 countries in Europe, America, Asia and Africa).
- Used to **work in the field** (and staying in basic camps).
- Professional horse rider and horse-riding trainer. Certified Teacher, FORMADES. 2004-2013.
- A1 Catamaran, Sailing. Escuela de vela de Matalascañas, Huelva, Spain. Aug 2004.
- Driving license. High-level experience on driving in difficult terrains (4x4).
- Experience in managing teams in field campaigns.

Other Collaborations and volunteer work

- Radar monitoring of Giant Noctule (*Nyctalus lasiopterus*) in Doñana Ntl. Park, Spain. 2005.
- Marsh Harrier (*Circus aeruginosus*) annual census in Doñana Ntl. Park. Winter 2003-2004.
- Unique trees of Doñana Ntl. Park. Doñana Biological Station. Spain. Aug 2003-May 2004.
- Reintroduction of Osprey (*Pandion haliaetus*) in Cádiz province, Spain. Doñana Biological Station. Spain. Hacking, radio-tracking, artificial nests building and captures. Cádiz, Spain. Jul-Aug 2003-2004.
- Iberian Lynx (*Lynx pardinus*) project in Doñana Ntl. Park, Spain. Winter 2003-2004.
- Passerine bird-banding campaigns in Doñana Ntl. Park and Odiel Salt factories, Sep 2003-Mar 2004.
- Bird-banding Black Necked Grebe (*Podiceps nigricollis*) in Huelva, Spain. Winter 1999-2004.
- Carnivores' annual census (tracks surveys) in Doñana Ntl. Park, Spain. Winter 2003.
- Aerial censuses in Doñana Ntl. Park, Spain. Winter 2003.
- Nocturnal census of Red deer, Fallow deer, hares and rabbits in Doñana Ntl. Park, Spain. Winter 2003.
- Annual census of Black Ibis (*Plegadis falcinellus*) in Doñana Ntl. Park, Spain. Winter 2003-2004.
- Reintroduction of Spanish Imperial Eagle (*Aquila adalberti*) in Cádiz province, Spain. Doñana Biological Station. Hacking, radio-tracking and captures. Cádiz. Jul-Aug 2003.
- Project "Reproductive success of the White Stork (*Ciconia ciconia*) in Madrid, Spain" University Complutense of Madrid, Spain. Spring 2003.
- National Census of Great Cormorant (*Phalacrocorax carbo*) SEO. Guadalajara, Spain. 2002-2003
- Project "Red deer (*Cervus elaphus*) reproduction studies", University of Extremadura. Doñana Biological Reserve, Spain. Sep 2002.
- MIGRES project. "Raptors and soaring birds migration monitoring in the Strait of Gibraltar, Spain". Aug 2002.
- Least Tern (*Sterna antillarum*) mating season monitoring. San Diego, California, USA. Jul 2002.
- Passerine birdbanding campaigns in Parque del Oeste, Madrid, Spain. Madrid. Spring 2002.
- Project "Reproduction and predation of mediterranean turtles (*Mauremys leprosa*, *Emys orbicularis* and *Testudo graeca*) in Doñana Ntl. Park. Sep 2001, Sep 2002.
- Project BIOASSES. Macrofauna sampling of soil invertebrates and fixation of specimens collected. Cabañeros Ntl Park, Spain. Nov 2001.
- Booted Eagle (*Hieraaetus pennatus*) monitoring. Doñana Biological Reserve, Spain. Sep 1997, 1998, 2001.
- Group for the Recovery of wildlife and its habitat. Voluntary veterinary assistant, wild animal care. GREFA Madrid, Spain. 1997-1999.
- Nocturnal Raptor Recovery Center BRINZAL. Voluntary veterinary assistant, wild animal care. Madrid, Spain. 1997-1999.

ATTENDANCE TO CONGRESSES

- Small UAS for Environmental Research Conference. University of Worcester, UK, Jul 2016
- Linear Infrastructure Networks with Ecological Solutions. LIFELINES. Évora, Portugal, Jul 2016.
- 5th Biologging Symposium (5BLS), Strasbourg, France. Sep 2014.
- International Paris Le Bourget Air Show. Paris, France. Jun 2009.
- VI Congress of the Marine Birds Group (GIAM). Algeciras, Spain. Apr 2008.
- International Congress on Innovation in Unmanned Air Vehicles Systems. Ministerio de Defensa. INTA. ETSII. Universidad Politécnica. Madrid. Spain. Nov 2007.
- International congress of the Programme comitee ICAS. Internaciona council for aeronautical sciences. Sevilla, Spain. Sep 2007.
- Platino Program presentation (Light Platform for aerial innovative technologies). Oportunities for the national industry. Escuela Técnica de ingenieros industriales. Universidad de Sevilla- Instituto Nacional de Técnica Aeroespacial. Seville, Spain. 2006.
- I Congress of Unique trees and island forests of Andalusia. Granada, Spain. Jan 2004.

- I Andalusian congress of Steppe birds and agriculture Osuna, Seville, Spain. Dec 2003.
- XIII Birdbanding Annual Committee. Aznalcázar, Seville, Spain. Dec 2003.