

## Part A. PERSONAL INFORMATION

CV date

24/09/2018

First and Family name	Emma Martínez López		
Social Security, Passport, ID number	34826565B	Age	41
Researcher numbers	Researcher ID	H-1685-2015	
	Orcid code		

### A.1. Current position

Name of University/Institution	University of Murcia		
Department	Sociosanitary Sciences. Area of Toxicology		
Address and Country	Faculty of Veterinary Medicine. Campus de Espinardo, 30100. Murcia. Spain		
Phone number	868 887517	868 887022	<a href="mailto:emmaml@um.es">emmaml@um.es</a>
Current position	Profesor University (Associate profesor)	Start date	16/11/2016
Espec. cód. UNESCO	3214		
Palabras clave	Toxicology/Ecotoxicology		

### A.2. Education

Bachelor/Master/PhD	University	Year
Degree in Veterinary Medicine	University of Murcia	2000
Degree Thesis	University of Murcia	2001
Magister in Toxicology	University of Sevilla	2002
Doctorate/PhD	University of Murcia	2005

### A.3. General quality indicators of scientific production

- Sexennia: Two granted (2001-2006; 2007-2012). The next in december 2018.
- Thesis Supervised last 10 years: 4 (2 with European/International distinction and extraordinary doctorate prizey).
- Total Cites: (WOS totals: 722; articles: 544), (Scopus 590).
- Publications ISI (WOS): 47
- h index: 15

## Part B. CV SUMMARY (max. 3500 characters, including spaces)

Graduated in Veterinary Medicine from the University of Murcia (2000), she obtained the title of Expert in Toxicology from the University of Seville in 2002 and the degree of doctor from the University of Murcia with mention of European doctorate in 2005. Her thesis was on the evaluation of exposure to environmental pollutants and approximation to the effects on wildlife. In 2006 she obtained a position of Assistant Professor (full time) and two years later that of Contracted Doctor. Accredited since 2012 to Professor (Associate Professor) of University signs the post in November 2016. General Research Coordinator of the University of Murcia from May 2014 to May 2018. Toxicologist accredited by the Spanish Association of Toxicology (AETOX) and the European Society of Toxicology (EUROTOX). Secretary General of AETOX since 2014 (2014-2017, 2017-Present). Member of the Forensic Toxicology Unit of the Forensic Sciences and Techniques Service, of the Toxicology Research Group of the University of Murcia (E008-12) ([www.sertoxmur.com](http://www.sertoxmur.com)) and of the Toxicology Group of the Murcian Institute for Biomedical Research (IMIB-Arrixaca/UMU). She has been an expert elected to the Ethics Committee on Animal Experimentation and Qualified Organ of the University of Murcia.

She has participated in 17 research projects subsidized by competitive competition, of which she currently co-manages one of them. She has also led 4 scientific dissemination projects funded by the Ministry in competitive competition and participated in 15 contracts type OTRI (currently responsible for 1 of them). Responsible for research projects in the American

continent and expert evaluator of the National Agency for Scientific and Technological Promotion of the Ministry of Science of Argentina.

In addition, she is responsible and member of the organizing committee of different scientific congresses and workshops. Member of EURAPMON (European Science Foundation European Network) and of the European Actions COST Action Water\_2020 and European Raptor Biomonitoring Facility. Member of the Management Committee of the CTQ2016-81979-REDC\_CONSOLIDER Network "Evaluation of Innovative Technologies for Water Treatment". She has carried out research stays in Universities and Scientific Institutions of international importance (United Kingdom, Portugal, Mexico, Argentina). She is a reviewer of many international and national scientific journals, being associate editor of The Spanish Journal of Toxicology. Co-author of more than 60 scientific publications including scientific articles, books and book chapters. Among the international publications there are 37 articles published in ISI journals and 3 chapters of the third edition of Elsevier's Encyclopedia of Toxicology. He has presented and published numerous contributions to congresses (more than 100 national and international). Her publications focus mainly on the field of ecotoxicology, environmental toxicology, and veterinary toxicology. Her scientific interest includes the use of wild animals as sentinels of environmental pollution and in biomarkers of exposure and effects to contaminants and other chemicals. She has co-directed 4 Doctoral Theses, 2 of them with mention of European and international doctorate awarded as Extraordinary Doctoral Prizes, as well as more than 25 final works of Master and Final Project. She is currently co-directing 3 Doctoral Theses.

## C.1. Publications. (last five years, a selection of 10 publications).

- Di Marzio A, Gómez-Ramírez P, Barbar F, Lambertucci SA, García-Fernández AJ, **Martínez-López E.** 2018. Mercury in the feathers of bird scavengers from two areas of Patagonia (Argentina) under the influence of different anthropogenic activities: a preliminary study. *Environmental Science and Pollution Research International* 25(14): 13906-13915.
- Gómez-Ramírez P, Jiménez-Montalbán P, Delgado D, **Martínez-López E**, María-Mojica P, Godino A, García-Fernández AJ. 2018. Development of a QUECHERS method for simultaneous analysis of antibiotics in carcasses for supplementary feeding of endangered vultures. *Science of the Total Environment* 626: 319-327.
- Gómez-Ramírez P, **Martínez-López E**, Espín S, Jiménez P, María-Mojica P, Pérez-García J, León-Ortega M, García-Fernández AJ. 2016. Haematocrit and blood biochemical parameters in free-living Eurasian eagle owls (*Bubo bubo*) from Southeastern Spain: study of age and sex differences. *European Journal of Wildlife Research*
- Schröder P, Helmreich B, Skrbic B, Carballa M, Papa M5, Pastore C, Emre Z, Oehmen A, Langenhoff A, Molinos M, Dvaroniene J, Huber C, Tsagerakis K, **Martinez-Lopez E**, et al. 2016. Status of hormones and pain killers in waste water effluents across several European states considerations for the EU watchlist concerning estradiols and diclofenac. *Environmental Science and Pollution Research*. 23(13):12835-12866
- S. Espín, A.J. García-Fernández, D. Herzke, R.F. Shore, B. van Hattum, **E. Martínez-López**, et al. 2016. Tracking pan-continental trends in environmental contamination using sentinel raptors - what types of samples should we use? *Ecotoxicology* 25(4): 777-801
- S. Espín, **E. Martínez-López**, P. Jiménez, P. María-Mojica, A.J. García-Fernández. 2016. Interspecific differences in the antioxidant capacity of two Laridae species exposed to metals. *Environmental Research* 147: 115-124
- **Martinez-Lopez, E.**, Espín, S., Barbar, F., Lambertucci S.A., Gomez-Ramirez, P., Garcia-Fernandez, A.J. 2015. Contaminants in the southern tip of South America: analysis of organochlorine compounds in feathers of avian scavengers from Argentinean Patagonia. *Ecotoxicology and Environmental Safety* 115: 83-92
- Espín S, **Martínez-López E**, Jiménez P, María-Mojica P, García-Fernández AJ. 2015. Delta-aminolevulinic acid dehydratase ( $\delta$ ALAD) activity in four free-living bird species exposed to different levels of lead under natural conditions. *Environmental Research* 5;137C:185-198
- Espín, S., **Martinez-Lopez, E.**, Jimenez, P., Maria-Mojica, P., Garcia-Fernandez, AJ. 2014. Effects of heavy metals on biomarkers for oxidative stress in Griffon vulture (*Gyps fulvus*). *Environmental Research* 129: 59-68.

- Espín, S., **Martínez-López, E.**, Leon-Ortega, M., Calvo, J.F., García-Fernández, A.J. 2014. Factors that influence mercury concentrations in nestling Eagle Owls (*Bubo bubo*). *Science of the Total Environment* 470–471: 1132–1139.
- P. Gómez-Ramírez, R.F. Shore, N.W. van den Brink, B. van Hattum, J.O. Bustnes, G. Duke, C. Fritsch, A.J. García-Fernández, B.O. Helander, V. Jaspers, O. Krone, **E. Martínez-López**, et al. 2014. An overview of existing raptor contaminant monitoring activities in Europe. *Environmental International* 67: 12-21.

## C.2. Research projects and grants

- Ref. European Raptor Biomonitoring Facility, ERBFacility. Entidad financiadora: Cost Action. Principal Investigator: Guy Duke, Environmental Change Institute, Oxford. 2017-2020. **Researcher.**
- Ref. CTQ2016-81979-REDC\_CONSOLIDER "Evaluación de Tecnologías Innovadoras para el Tratamiento de Aguas". Ministerio de Industria, Economía y Competitividad 2017-2019. Principal Investigator: Juan Lema. 41500 €. **Researcher and Member of Committee Management.**
- Ref. MASCA 2014. Mejora de los procesos analíticos toxicológicos para la lucha contra el veneno y la monitorización de contaminantes emergentes (rodenticidas anticoagulantes y fármacos de uso veterinario) en rapaces. **Principal Investigator with** Antonio Juan García-Fernández. Universidad de Murcia. Fundación SENECA. 2015-2018. 106.590 €.
- Ref. 08758/PI/08. Evaluación in Vitro de alteración reproductiva por mezclas de contaminantes ambientales monitorizadas en aves silvestres. Principal investigator: Antonio Juan García Fernández. Universidad de Murcia. Fundación Séneca. CARM. 01/2009-12/2012. 71.500 €. **Researcher**
- Ref. CGL-2008-4318/BOS. MASCA'2008. Biomonitorización de contaminantes ambientales persistentes con muestras no invasivas de rapaces y uso del bioensayo E-screen para evaluar disrupción endocrina inducida por mezclas de contaminantes. Principal Investigator: Antonio Juan García Fernández. Universidad de Murcia. Ministerio de Ciencia e Innovación. Plan Nacional I+D+i. 12/2008-12/ 2011. 92.500 €. **Researcher.**
- Ref. 1.1-411/2005/3-B. Descontaminación de suelos con metales pesados mediante tecnologías in situ con valorización de residuos de la construcción y demolición. Principal Investigator: Carmen Pérez Sirvent. Universidad de Murcia Ministerio de Medio Ambiente. 01/ 2005-03/2006. 205.820 €. **Researcher.**
- Ref. Descontaminación de suelos con metales pesados mediante tecnologías in situ con valorización de residuos de la construcción y demolición. Principal Investigator: Carmen Pérez Sirvent. Universidad de Murcia. Ministerio de Medio Ambiente. 01-01-2006-31-03-2007. 75.441 €. **Researcher.**
- Ref. CSD 2007-00055. NOVEDAR. Concepción integral de la EDAR del siglo XXI. Desarrollo de tecnologías para el tratamiento y recuperación de recursos en aguas residuales. Entidad financiadora: MEC (CONSOLIDER-INGENIO 2010). Principal Investigator: Juan Lema Rodicio. 2007-2013. 4.510.160 €. **Researcher.**
- Ref. CGL2004-5959/BOS. Exposición a contaminantes ambientales en dos especies amenazadas (*M. Angustirostris* y *Ox. Leucocephala*) del P.N. El Hondo: nuevos modelos de monitorización y evaluación de efectos. Investigador responsable: Antonio Juan García Fernández. Universidad de Murcia Entidad financiadora: MEC Plan Nacional I+D+I. 10/2004 - 09/2007. 50.000 €. **Researcher**

## C.3. Contracts

- Implementación del principio de las 3rs en la investigación y desarrollo de nuevos biomateriales, pilares e implantes en modelos animales. Company: UCAM 24/04/2017- 24/04/2022. 91960 €. Principal Investigator
- Estudio en dos fases, una quirúrgica y otra de observación del comportamiento dentro del proyecto "propagación crónica de la patología de la sinucleína: estudio en primate no humano (papio papio)". Université Bordeaux Segalen. 24/10/2013-24/10/2016. 108.582,79 €
- Hábitat del lince ibérico y el buitre negro en el sureste de Portugal. Liga para a protecção da Natureza. 19/12/2013-30/6/2014. Cuantía: 14.500 €.
- Análisis de residuos de antibióticos en cadáveres de ungulados destinados al consumo por aves carroñeras. Liga para a protecção da Natureza. 31/1/2013-30/6/2013. 10.500 €.

- Evaluación del riesgo ecotoxicológico para la flora y la fauna asociado a la restauración ambiental en la rambla de las Moreras. Confederación Hidrográfica del Segura. November 2008-october 2009. 43.000 €.
- Estimación in Vitro de la solubilidad intragástrica de pentobarbital en medios que simulen el fluido gástrico de los buitres. EGMASA-Consejería de Medio Ambiente-Junta de Andalucía. June 2008-december 2008. 9.700 €.
- Estudio toxicológico en muestras biológicas en animales silvestres y domésticos sospechosos de intoxicación o envenenamiento. Consejería de Industria y Medio Ambiente. June 2004-Dicember2008. 51.640 €
- Estudio de la presencia de residuos de barbitúricos (Dolethal), en cadáveres de caballos destinados para la alimentación de aves carroñeras. EGMASA-Consejería de Medio Ambiente-Junta de Andalucía. December 2006-December 2008. 20.184 €.

## C.4. Patents

## C.5. Awards

- Prize for the best Scientific Communication. Ibañez-Aljarilla AF, Maria-Mojica, Mateo R, García-Fernández AJ, **Martínez-López E**. Estudio preliminar sobre la degradación postmortem del Diclofenaco en aves silvestres. XXII Congreso Español de Toxicología y VI Iberoamericano. 28-30 de junio de 2017. Valencia.
- Winner II Edición del Premio MICINN-UNIVERSIA-OCW. Fundación UNIVERSIA, Ministerio de Ciencia e Innovación. Date: 5/5/2009. Métodos Alternativos a la Experimentación Animal. Authors: D. Romero García, A.J. García-Fernández, **E. Martínez-López**, A. Hernández-García

## C.6. Scientific dissemination projects

- UCC-PRINUM PLUS. PROGRAMACIÓN 2014-2015. FECYT Ministerio de Economía y Competitividad. 12/2014 -12/2015 **Principal Investigator**
- Kitaro:La vida es ciencia. FECYT Ministerio de Economía y Competitividad. Entidades participantes: Universidad de Murcia y Onda Regional de Murcia. 12/2014-12/2015. **Principal Investigator**
- Noche de los Investigadores 2014: Investigadores para un futuro mejor. FECYT Ministerio de Economía y Competitividad. Septiembre 2014-January 2015. **Principal Investigator**
- European Researchs night: Researchs´for a better future. European Commission's Research and Innovation Frame work Programme H2020. 09/2014-01/2015. **Principal Investigator**

## C.7. Reviewer

Chemosphere, Ecotoxicology, Ecotoxicology and Environmental Safety, Environmental International, Environmental Pollution, Environmental Research Journal of Geochemical Exploration, Environmental Science and Pollution Research International.

## C.8. Institutional responsibilities

- Secretary of AETOX (2014-Nowdays)
- Board of Management AETOX (2007-Nowadays)
- Research Coordinator of University of Murcia (2014-2018)
- Expert elected to the Ethics Committee on Animal Experimentation and Qualified Organ of the University of Murcia.

## C.9. Memberships of scientific societies

- Member of EURAPMON (Research and Monitoring for and with Raptors in Europe)
- Member of Spanish Society of Toxicology (AETOX)
- Member of Society of Environmental Toxicology and Chemistry (SETAC).
- Member of European Societies of Toxicology (EUROTOX)
- Member of Spanish Society of Cetacean (SEC)