Marion Chatelain – PhD

Center of New Technologies
University of Warsaw
S. Banacha 2c, 02-097 Warsaw, Poland

marion.chatelain@live.fr

RESEARCH EXPERIENCE

2016-
(Marie Curie fellowship)

Trace metal effects on wild great tit *Parus major* oxidative stress and fitness in a gradient of urbanisation.
Center of New Technologies, University of Warsaw (Warsaw, Poland); Marie Sklodowska-Curie cofund grant (Polonez 1); In collaboration with Marta Szulkin

2015-2016
(Assistant Lecturer)

Effects of habitat characteristics on earthworm dispersal and habitat choice.
Institut d'Ecologie et des Sciences de l'Environnement (IEES), Pierre & Marie Curie University (Paris, France); In collaboration with Jérôme Mathieu

2012-2015
(PhD)

Trace metals as a selective pressure on urban birds' physiology and their melanin-based plumage colouration
Institut d'Ecologie et des Sciences de l'Environnement (IEES), Pierre & Marie Curie University (Paris, France); Supervised by Adrien Frantz and Julien Gasparini

2012 (4 months)
(master 2)

Role of predation on the evolution of aposematism and mimicry-behavioral study on the European Starlings
Institute of Neuroscience (Newcastle, UK); Supervised by Candy Rowe

2011 (2 months)
(master 1)

Benefits and trade-offs of the viviparous and oviparous mode of reproduction in the Common Lizard
UMR7625 Ecologie & Evolution (Paris, France); Supervised by Josepha Bleu and Sandrine Meylan

2009 (1 month)
(elective)

Characterize the micro-morphological traits of *Frenelopsis* by scanning electron microscope
UMR5276 Laboratoire de géologie de Lyon Terre, Planète, Environnement (Lyon, France); Supervised by Bernard Gomez

PUBLICATION LIST

2016

Chatelain M., Gasparini J. and Frantz A. 2016. Do trace metals select for darker birds in urban areas? An experimental exposure to lead and zinc. *Global Change Biology*. 10.1111/gcb.13170

2016

Chatelain M., Gasparini J. and Frantz A. 2016. Trace metals, melanin-based pigmentation and their interaction influence immune parameters in feral pigeons (*Columba livia*). *Ecotoxicology*. 10.1007/s10646-016-1610-5

2016

Chatelain M., Gasparini J., Haussy C. and Frantz A. In press. Trace metals affect early maternal transfer of immune components in the feral pigeon. *Physiological and Biochemical Zoology*.

2016

Chatelain M., Frantz A., Gasparini J. and Leclaire S. 2016. Experimental exposure to trace metals affects plumage bacterial communities in the feral pigeon. *Journal of Avian Biology*. 10.1111/jav.00857

2014 Chatelain M., Gasparini J., Jacquin L. and Frantz A. 2014. The adaptive function of melanin-based plumage coloration to trace metals. *Biology Letters.* 10(3): 20140164

2014 Leclaire S., Pierret P., Chatelain M. and Gasparini J. 2014. Feather bacterial load affects plumage condition, iridescent color, and investment in preening in pigeons. *Behavioral Ecology.* 25(5): 1192-1198

2013 Chatelain M., Halpin C. and Rowe C. 2013. Ambient temperature influences birds' decisions to eat aposematic prey. *Animal Behaviour.* 86(4):733-740

Sum up of the publications

Journal	***Year***	***Author***	***5-years impact factor***
Animal Behaviour	2013	1ère	3,423
Behavioral Ecology	2014	3ème	3,350
Biology Letters	2014	1ère	3,670
Ecotoxicology	2016	1ère	2,940
Global Change Biology	2016	1ère	8,708
Journal of Avian Biology	2016	1ère	2,104
Physiological and Biochemical Zoology	2016	1ère	2,480
	7 42 citations	6 in 1st author	

Reviewer for Behavioral Ecology and Sociobiology; Frontiers in zoology; Journal of Toxicology and Risk Assessment

DEGREES

2016 Apt to a position of associate professor in population biology and ecology.

2012-2015 PhD in Evolutionary Ecophysiology (awarded with the highest distinction)
Pierre & Marie Curie University (Paris, France)

2010-2012 Master's degree in Ecology, Biodiversity and Evolution (awarded with high honours)
Muséum national d'histoire naturelle (Paris, France)

2007-2010 Bachelor's degree (three-year university degree) in Biology of Organism and Populations (awarded with honours)
Claude-Bernard Lyon1 University (Lyon, France)

COMMUNICATIONS

2015 How may trace metals exert selective pressures on melanin-based colouration?
The European Society of Evolutionary Biology Conference, Lausanne, Switzerland. Oral presentation.

2015 Trace metals: ecophysiological responses and their influence on melanin-based plumage colouration polymorphism. Synthesis seminar of the Dens'Cité programme (funded by Sorbonne University), Paris, France. Oral presentation.

2014 Does trace metal could explain the higher frequency of darker pigeons in cities? Petit Pois Déridé, Orsay, France. Oral presentation.

2014 Does melanin-based plumage colouration is adaptive to trace metals polluted environments? The International Society for Behavioral Ecology Conference, New York, EU. Poster presentation,

2013 Adaptation to trace metals: an explanation to melanin-based coloration polymorphism in the feral pigeon. Colloque d'Ecophysiologie Animale (animal ecophysiology congress), Lyon, France. Oral presentation.

TEACHING ACTIVITIES

2015-2016 Assistant lecturer (ATER) in ecology and biostatistics (192h)
Pierre & Marie Curie University (Paris, France)

OTHER ACTIVITIES

2015-2016 Organizer of monthly scientific discussions based on recent published research ("Discussions Autour D'un Article"), IEES-Paris (France)

2015-2016 Organizer of monthly meetings between PhD students ("Déjeuners Des Doctorants"), IEES-Paris (France)

2015 Main organizer of a discussion between PhD students and supervisors about "A thesis : its carrying out and supervising", IEES-Paris (France)

2014-2015 Delegate of PhD students in the Institute of Ecology and Environmental Sciences of Paris, and the Ecology & Evolution department, IEES-Paris (France)

2013-2014 Co-organizer of the inter-teams seminars ("Séminaires Inter-Equipes"), IEES-Paris (France)

SKILLS

Languages

French: maternal language
English: read, written, spoken (4 months in England)
German: studied in secondary school
Polish: level A1 of the CECR

Computing

Pack Office, R, Gimp, Image J, GeneMapper, SpectraSuite

Laboratory skills

Sample acid mineralization (blood, feathers, eggs, organs)
Trace metals analysis (ICP-MS, Flame-AAS, Oven-AAS, ICP-OES)
Enzyme-linked immunosorbent assay (ELISA)
Colorimetric spectrometric analysis

Field skills

Level 1 Diploma in Animal Experimentation (2013)
[birds]: capture, livestock keeping, morphometric measurements, reproduction monitoring, blood sampling, under-cutaneous injections, behavioural observations
[lizards]: capture, livestock keeping, morphometric measurements
[earthworms]: capture, livestock keeping, species identification, morphometric measurements behavioural observations