

# Noémie Erin

## EVOLUTIONARY BIOLOGIST

### RESEARCH FIELDS

Host-Parasite Coevolution, Within-Host Parasite Interaction, Parasite-Mediated Selection, Ecological Adaptation, Ecological Speciation, Local Adaptation

CONTACT / PERSONAL DATA	ACADEMIC EXPERIENCES
<p>☎ Phone +49 1520 421 8668</p> <p>@ Email <a href="mailto:erin@evolbio.mpg.de">erin@evolbio.mpg.de</a></p> <p>✉ Address Scheerstraße 9 24 306 Plön, Germany</p> <p>🖱 Personal Website <a href="https://noemieerin.github.io">noemieerin.github.io</a></p> <p>Citizenship French Place &amp; Date of Birth Saint-Michel, France / 28.11.1984</p>	<p><b>POSTDOCTORAL RESEARCHER</b> <i>Max Planck Institute for Evolutionary Biology, Plön, Germany</i> June 2017-Feb 2018</p> <p><b>Ph.D RESEARCHER</b> <i>Max Planck Institute for Evolutionary Biology, Plön, Germany</i> <i>Thesis: "Multiple ecological scales of host-parasite interactions using the three-spined stickleback and <i>Schistocephalus solidus</i> model system"</i> <i>Advisor: Dr. Martin Kalbe</i> Sept 2009-May 2017</p> <p><b>MASTER 2</b> <i>Laboratoire Ecologie et Evolution CNRS UMR-7625, Host-Parasite Interaction Group, UPMC, Paris // Bacterial Zoonoses Unit, French Agency for Food, Environmental &amp; Occupational Health Safety (ANSES), Maisons-Alfort</i> <i>Thesis: "Impact of urban environment on Chlamydiaceae epidemiology in feral pigeon (<i>Columba livia</i>)"</i> <i>Advisors: Julien Gasparini &amp; Karine Laroucau</i> Feb 2009-June 2009</p> <p><b>RESEARCH ASSISTANT</b> <i>UMR-1272 UPMC-INRA, Reception Transduction Modulation Unit, UPMC, Paris</i> Biomolecular analyses and behavioral studies on the olfaction of <i>Drosophila melanogaster</i> and <i>Spodoptera littoralis</i> <i>Advisor: Thomas Chertemps</i> July 2008-Aug 2008</p> <p><b>MASTER 1</b> <i>ENS UMR-7618 Bioemco, École Normale Supérieure-Ulm, Paris</i> <i>Thesis: "Study of the atmospheric CO2 elevation impact in FACE (Free Air CO2 Enrichment) system on soil functioning"</i> <i>Advisor: Bertrand Guenet</i> Apr 2008-June 2008</p>
EDUCATION	
<p><b>Ph.D. / DEGREE</b> <i>University of Kiel, Germany</i> 2009-2017</p> <p><b>MASTER / DEGREE</b> <i>Université Pierre et Marie Curie</i> <i>Paris, France</i> 2007-2009</p> <p><b>BACHELOR / DEGREE</b> <i>Université Pierre et Marie Curie</i> <i>Paris, France</i> 2006-2007</p> <p><b>ENGINEER SCHOOL</b> <i>ISAB, Beauvais, France</i> 2005-2006</p> <p><b>CPGE BCPST</b> <i>LGT Baimbridge,</i> <i>Pointe-à-Pitre, France</i> 2002-2005</p> <p><b>BACCALAURÉAT SCIENTIFIQUE</b> <i>Lycée Maîtrise de Massabielle</i> <i>Pointe-à-Pitre, France</i> June 2002</p>	

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## TEACHING

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| 2010 & 2015 | <b>Master student supervision</b><br>Two weeks practical course, part of Prof. Dr. Manfred Milinski annual lecture on "Evolutionary Ecology of Sexual Reproduction" at the Christian Albrechts University of Kiel, Germany |
| 2010 & 2011 | <b>Master student co-supervision (with Dr. Martin Kalbe)</b><br>Four-weeks rotation of applicants to the International Max Planck Research School (IMPRS) of Evolutionary Biology, Plön, Germany                           |

## ACADEMIC SERVICES

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|-----------|---|
| Sept 2018 | Talking Evolution: Workshop on Principles and Advances in Evolutionary Thinking<br>Max Planck Institute for Evolutionary Biology, Plön, Germany<br>Member of the organising committee |
| May 2010  | Aquavit, Annual Research Meeting<br>Max Planck Institute for Evolutionary Biology, Plön, Germany<br>Member of the organising committee  |
| Reviewer  | Scientific Reports  |

## AWARDS

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|-----------|---|
| Sept 2015 | <b>1<sup>st</sup> prize for best oral presentation</b><br>Annual Retreat of the International Max Planck Research School for Evolutionary Biology, Geestland, Germany |
| Nov 2011  | <b>3<sup>rd</sup> prize for best poster</b><br>3 <sup>rd</sup> Status Symposium in Evolutionary Biology, Sylt, Germany  |

## LANGUAGES

Mother tongue: French  
Fluent: English  
Lower intermediate: Spanish, German

## REFERENCES

**Dr. Christophe Eizaguirre** ([c.eizaguirre@qmul.ac.uk](mailto:c.eizaguirre@qmul.ac.uk))

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**Dr. Tobias L. Lenz** ([lenz@evolbio.mpg.de](mailto:lenz@evolbio.mpg.de))

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August-Thienemann-Str.2 24 306 Plön, Germany

**Dr. Demetra Andreou** ([dandreou@bournemouth.ac.uk](mailto:dandreou@bournemouth.ac.uk))

Bournemouth University  
Christchurch House C238, Talbot Campus, Fern Barrow, Poole, BH12 5BB

**Dr. Kenyon Mobley** ([kenyon.mobley@helsinki.fi](mailto:kenyon.mobley@helsinki.fi))

Evolution, Conservation, and Genomics  
University of Helsinki  
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**Dr. Julien Gasparini** ([julien.gasparini@upmc.fr](mailto:julien.gasparini@upmc.fr))

Institut d'Ecologie et des Sciences de l'Environnement (IEES)  
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Bat. A, 7 ème étage, 7 quai Saint-Bernard, 75 005 Paris

*Unfortunately Dr. Martin Kalbe, my PhD advisor, has recently passed away. Therefore I indicated some colleagues with whom I closely collaborated as references.*

## PUBLICATIONS

- 2018      Henrich T, **Erin NI**, Phelps L & Kalbe M  
Intraspecific within-host parasite competition alters virulence in a fish-cestode system  
(in preparation)
- Erin NI**, Henrich T, Samonte IE, Jakobsen PJ & Kalbe M  
Examining the role of parasites in limiting unidirectional gene flow between lake and river sticklebacks  
(submitted to *Journal of Animal Ecology*)
- 2017      Weber JN, Kalbe M, Shim KC, **Erin NI**, Steinell NC, Ma L & Bolnick DI (2017)  
Resist globally, infect locally: A transcontinental test of adaptation by stickleback and their tapeworm parasite. *The American Naturalist*, 189: 43-57. (doi: 10.1086/689597)
- 2016      Scharsack JP, Franke F, **Erin NI**, Kuske A, Büscher J, Stolz H, Samonte IE, Kurtz J & Kalbe M (2016) Effects of environmental variation on host-parasite interaction in three-spined sticklebacks (*Gasterosteus aculeatus*). *Zoology*, 119: 375-383. (doi: 10.1016/j.zool.2016.05.008)
- 2014      Franke F, Rahn AK, Dittmar J, **Erin NI**, Rieger JK, Haase D, Samonte-Padilla IE, Lange J, Jakobsen PJ, Hermida M, Fernández C, Kurtz J, Bakker TCM, Reusch TBH, Kalbe M & Scharsack JP (2014) *In vitro* leukocyte response of three-spined sticklebacks (*Gasterosteus aculeatus*) to helminth parasite antigens. *Fish & Shellfish Immunology*, 36: 130-140. (doi: 10.1016/j.fsi.2013.10.019)
- 2013      Jacquin L, Récapet C, Prévot-Julliard AC, Leboucher G, Lenouvel P, **Erin NI**, Corbel H, Frantz A & Gasparini J (2013) A potential role for parasites in the maintenance of color polymorphism in urban birds. *Oecologia*, 173: 1089-1099. (doi: 10.1007/s00442-013-2663-2)
- 2011      Gasparini J, **Erin NI**, Bertin C, Jacquin L, Vorimore F, Frantz A, Lenouvel P & Laroucau K (2011) Impact of urban environment and host phenotype on the epidemiology of *Chlamydiaceae* in feral pigeons (*Columba livia*). *Environmental Microbiology*, 13: 3186-3193. (doi: 10.1111/j.1462-2920.2011.02575.x)

## COMMUNICATIONS

- 2016      May  
Final Symposium of the DFG Priority Programme SPP1399 Host-Parasite Coevolution - Rapid Reciprocal Adaptation and its Genetic Basis, Münster, Germany. *Poster presentation entitled: "Relaxed parasite selection reduces resistance and limits gene flow between stickleback lake and river ecotypes"*
- 2015      September  
Annual Retreat of the International Max Planck Research School for Evolutionary Biology, Geestland, Germany. *Oral presentation entitled: "Parasite-mediated selection in Norwegian three-spined stickleback populations"*
- May  
Aquavit, Annual Research Meeting of the Max Planck Institute for Evolutionary Biology, Plön, Germany. *Oral presentation entitled: "Parasites as habitat-specific selection factors in a natural hybrid zone of three-spine sticklebacks"*
- 2014      July  
Aquavit, Annual Research Meeting of the Max Planck Institute for Evolutionary Biology, Plön, Germany. *Oral presentation entitled: "Parasite-mediated selection in Norwegian three-spined stickleback populations"*
- 2012      May  
Aquavit, Annual Research Meeting of the Max Planck Institute for Evolutionary Biology, Plön, Germany. *Oral presentation entitled: "Parasite strain-specific selection for different MHC alleles in experimental stickleback populations"*
- 2011      November  
3<sup>rd</sup> Status Symposium in Evolutionary Biology, Sylt, Germany. *Poster presentation entitled: "Immune gene expression in sympatric and allopathic stickleback-tapeworm combinations"*
- September  
Jacques Monod Conference 2011 - Coevolutionary arms race between parasite virulence and host immune defence: challenges from state of the art research, Roscoff, France. *Poster presentation entitled: "Immune gene expression in sympatric and allopathic stickleback-tapeworm combinations"*

August

13<sup>th</sup> Congress of the European Society for Evolutionary Biology (ESEB), Tübingen, Germany. *Poster presentation entitled: "Looking for the molecular basis of local host adaptation to a specific macroparasite"*

May

2<sup>nd</sup> Symposium of the DFG Priority Programme SPP1399 Host-Parasite Coevolution - Rapid Reciprocal Adaptation and its Genetic Basis, Berlin, Germany. *Oral presentation entitled: "Molecular basis of local adaptation in a specific host-parasite system, three-spined stickleback and *Schistocephalus solidus*"*

March

Aquavit, Annual Research Meeting of the Max Planck Institute for Evolutionary Biology, Plön, Germany. *Oral presentation entitled: "Parasite strain-specific selection for different MHC alleles in experimental stickleback populations"*

2010

December

1<sup>st</sup> Bioinformatics Workshop of the DFG Priority Programme SPP1399 Host-Parasite Coevolution - Rapid Reciprocal Adaptation and its Genetic Basis, Rothenberge, Germany. *Oral presentation entitled: "Looking for the molecular basis of the virulence evolution in a specific parasite system"*

October

1<sup>st</sup> Evolutionary Genetics Workshop of the Society of Genetics, Koppelsberg, Germany. *Oral presentation entitled: "Host-parasite Genotype x Genotype interactions in sympatric and allopatric combinations"*

May

Aquavit, Annual Research Meeting of the Max Planck Institute for Evolutionary Biology, Plön, Germany. *Oral presentation entitled: "Host-parasite Genotype x Genotype interactions in sympatric and allopatric combinations"*