Aude CAIZERGUES

(She/Her)

PhD candidate, University of Montpellier (France)
Urban evolutionary biology

CONTACT

aude.caizergues@cefe.cnrs.fr

427 rue de l'Espinouse
34090 Montpellier
+33 650 05 02 46

https://tinyurl.com/audecaiz

MAIN RESEARCH INTERESTS

I am a PhD candidate at the University of Montpellier (France). My research focuses on the impacts of urbanization on evolutionary trajectories. Using long-term monitoring of natural population as well as next generation sequencing data, my research aim to understand how natural population adapt to urban habitat. My work rely on multiple approaches (i.e. quantitative genetics, CMR models, genomics, epigenomics) combined together to investigate various levels of adaptation involving a wide range of phenotypical traits (morphology, behaviour, life history…).

EDUCATION

- PhD Candidate | 2017-2021 | Montpellier, FRANCE

"Evolutionary impacts of urban life on great tits: from phenotypes to (epi)genomes". Supervised by Anne Charmantier & Arnaud Grégoire

- Master's degree | 2017 | University of Montpellier

Major in Biodiversity and Evolutionary Biology (BEE Darwin). Rank 2/15

- Bachelor's degree | 2015 | Université de Montpellier

Major in Ecology and Biology of Organisms. Rank 1/92

LIST OF PUBLICATIONS

- Published

Caizergues, AE, *et al.* (2021). An avian urban morphotype: how the city environment shapes great tit morphology at different life stages. *Urban Ecosystems*, 1-13.

Perrier, C, **Caizergues, AE**, & Charmantier A. (2020) Adaptation genomics in urban environments, in Urban Evolutionary Biology, Oxford University Press.

Caizergues, AE, *et al.* (2018). Urban vs forest ecotypes are not explained by divergent reproductive selection. *Proceedings of the royal society B*, 285(1882), 20180261.

- In preparation

Caizergues, AE *et al.* Testing for parallel genomic and epigenomic footprints of adaptation to urban life in a passerine bird (*in prep for PNAS*)

Caizergues, AE, *et al.* Are behavioural and stress responses to urbanization adaptive? Great tits as a case study. (*in prep for Journal of Animal Ecology*)

LANGUAGES

French ●●●●●
English ●●●●○
Spanish ●●●○○

PRACTICAL SKILLS

Fieldwork
Bird ringing
Experimental biology
Notions in molecular biology

GRAPHICAL SKILLS

Procreate
Inkscape

WHAT DO I LIKE ?

Learning
Teaching
Understanding
Socializing
Travelling

SKILLS

- Conceptual and theoretical

Evolutionary biology and Ecology
Quantitative Genetics
Adaptation genomics

- Statistics & Programing

General statistics (R) ○○○○○
CMR models (MARK, E-SURGE) ○○○○○
Bio-informatics:
- Bash ○○○○○
- Python ○○○○○

- Communication

Teaching
Vulgarization

OTHER RESEARCH EXPERIENCE

- Master 2 internship

Population genomics on Darwin finches: estimating to which extent genomic adaptation is limited by small effective population size using whole genome sequences of 21 species of Darwin finches and flycatchers

- Undergraduate internship

Set up of an experimental protocol of reciprocal transplant of phytophagous insects (corn borer) on two host plants to study their host specialization

OUTREACH

- Festival of Science | October 2020

Organization of a booth to communicate with a wide audience about biodiversity in urban habitats

- Festival Pint of Science | may 2020 postponed may 2021

Funny presentation of behavioural innovations of urban animals

- Festival of Nature | 22 mai 2019

Raising public awareness about biodiversity

- « 3 Minute Thesis » competition | 2019

Regional finalist of the French "3 Minute Thesis" competition

- My thesis in Comics | june 2019

Vulgarization of my thesis as a comic strip

- Radio broadcast | april 2019

Radio broadcast about urban biodiversity on a national radio station

- Teaching | 2017-2020

Teaching missions in the University of Montpellier (3 years, 192 hours)