

Encadrement :

Nom : Adams Prénom : Dean Qualité : Professor Invite Tel : 63-45
Laboratoire /Entreprise : Biogeosciences (BioMe)
Adresse : 322 Bât. Gabriel
Courriel : Université de Bourgogne, Bât. Gabriel. 6, boulevard Gabriel, 21 000 DIJON

Titre du stage :

Phenotypic responses to environmental contamination

Mots clés :

Geometric morphometrics, fluctuating asymmetry, developmental instability

Résumé (150 mots maximum) :

This project will investigate the morphological consequences of metal contamination in small mammals. Collaborators (R. Scheifler ; Univ. Franche-Comté) have previously examined the soil contamination from a smelter in NW France, and also found metal contamination in small mammals at nearby locations. Voles were trapped at the study site, in several locations close to and further from the smelter. We will examine patterns of morphological variation in those populations, and assess the degree of fluctuating asymmetry as correlated with levels of contamination. We will test the hypothesis that higher levels of contamination lead to a greater degree of fluctuating asymmetry, due to increased developmental instability.

Deux références bibliographiques:

D.C. Adams. 2016. Evaluating modularity in morphometric data: Challenges with the RV coefficient and a new test measure. *Methods in Ecology and Evolution*. (Accepted).
Adams, D.C., F. J. Rohlf, and D.E. Slice. 2013. A field comes of age: Geometric morphometrics in the 21st century. *Hystrix*. 24:7-14.

Techniques mises en œuvre:

Geometric morphometrics ; multivariate statistics ; R-programming

Compétences particulières exigées:

Competance in R