



Sylvain Schmitt

PHD STUDENT
TROPICAL FOREST ECOLOGY AND EVOLUTION

Experience

- 2017 **PhD student: Ecological genomics of niche exploitation and individual performance in tropical forest trees**, UMRs BIODIVERSITÉ GÈNES ET COMMUNAUTÉS (BIOGECO) AND ÉCOLOGIE DES FORÊTS GUYANAISE (ECOFOG), *under supervision of Bruno Hérault, Myriam Heuertz and Niklas Tsyklind*, Bordeaux - Kourou, France - French Guiana.
Ecological genomics, Functional ecology, and community ecology
- 2017 **Research internship: Biodiversity and resilience of tropical forest ecosystem after disturbance**, UMR ÉCOLOGIE DES FORÊTS GUYANAISE (ECOFOG), *under supervision of Bruno Hérault, Stéphane Traissac and Jérôme Chave*, Kourou, French Guiana.
Modelling (TROLL model), statistics, and forest dynamic
- 2016 **Research internship: Wood and leaf strategy in a low elevation rainforest of Western Ghats (India)**, FRENCH INSTITUTE OF PONDICHERY (FIP), *under supervision of François Munoz and Maxime Réjou-Méchain*, Pondicherry, India.
Statistics, Community and functional ecology, botany
- 2015 **Research internship: Species distribution modelling (SSDM)**, INSTITUT AGRONOMIQUE NÉO-CALÉDONIEN (IAC), *under the supervision of Robin Pouteau and Phillipe Birnbaum*, Nouméa, New-Caledonia.
Modelling, statistics, ecology, botany and R development
- 2015 **Research internship in soil ecology**, HELMOLTZ ZENTRUM, *under supervision of René Kerner and Karin Pritsch*, Muncih, Germany.
Statistics, functional ecology and scientific writing
- 2008 **Discovery internship in research**, CNRS ET UNIVERSITÉ RENNES 1, Rennes, (35).

Education

- 2016 **Master 2 Vegetal biodiversity and tropical ecosystems management**, AgroParisTech, Kourou, French guyana.
- 2015 **Internal study licence**, AgroParisTech.
- 2014 **Natural land management speciality**, AgroParisTech, Nancy, France.
- 2013 **Ingeneer first year**, AgroParisTech - Paris Institute of Life, Food and Environnemental Sciences, Grignon, France.
- 2011-2013 **"Grandes Écoles" preparatory school (Biology Chemistry Physics and Geology)**, Lycée François René de Chateaubriand, Rennes, France.
- 2011 **Scientific Baccalauréat with rewards**, Lycée Anita Conti, Bruz, France.

Computer skills

Coding R, RMARKDOWN, STAN, C++, PYTHON, PHP, SQL, MATHSLAB
Softwares SIG, Statistics, Image, Sound, Video, Text
R-studio, sublime, ArcGis, Q-GIS, Adobe suite, Office suite

Languages

French **Native speaking**
English **Fluent (TOEIC 960/990)**
German **Intermediate - low skill**

Interests

- SEPNB member *Society for study and protection of nature from Bretagne*
- ADEF presidency *Association of forest students*
- School bar presidency
- Photography
- Cyclisme
- Hiking
- Nature
- Informatics
- Sailing
- Drum
- Travels

Publications

- Accepted article Schmitt, S., Pouteau, R., Justeau, D., de Boissieu, F., & Birnbaum, P. (in press). SSDM: an R package to predict distribution of species richness and composition based on stacked species distribution models. *Methods in Ecology and Evolution*.
- CRAN package Schmitt, S., Pouteau, R., Justeau, D., de Boissieu, F., & Birnbaum, P. (2017). SSDM: Stacked Species Distribution Modelling. *R package version 0.2.3*. <https://github.com/sylvainschmitt/SSDM>
- Article in preparation Schmitt, S., Raevel, V., Réjou-Méchain, M., Ayyappan, N., Balachandran, N., Barathan N., & Munoz, F. (2018). Wood and leaf strategies in a low-elevation rainforest of Western Ghats. Manuscript in preparation.
- Article in preparation Schmitt, S., Traissac, S., Pioniot, C., Fischer, F., Maréchaux, I., Chave, J., & Hérault, B. (2018). Functional diversity improves tropical forest resilience to disturbance. Manuscript in preparation.

Others

Supervision of Émilie Ducouret and Nino Page master 2 thesis.
Reviewer for Ecological Informatics.