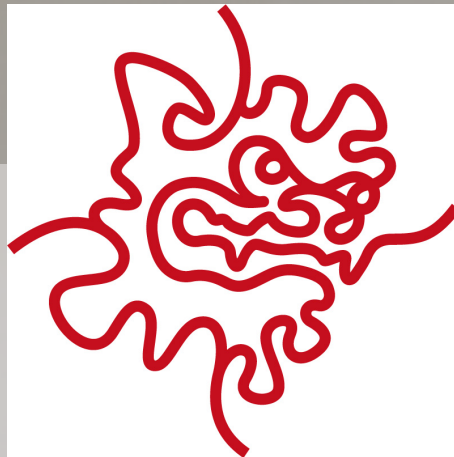


# Meet the Evolutionary Genomics Unit

**Studying Termites and Cockroaches at OIST**



# Principal Investigator

- Thomas Bourguignon (Belgium)
- Termite Phylogenetics and Taxonomy

Bourguignon et al. • doi:10.1093/molbev/msu308

MBE

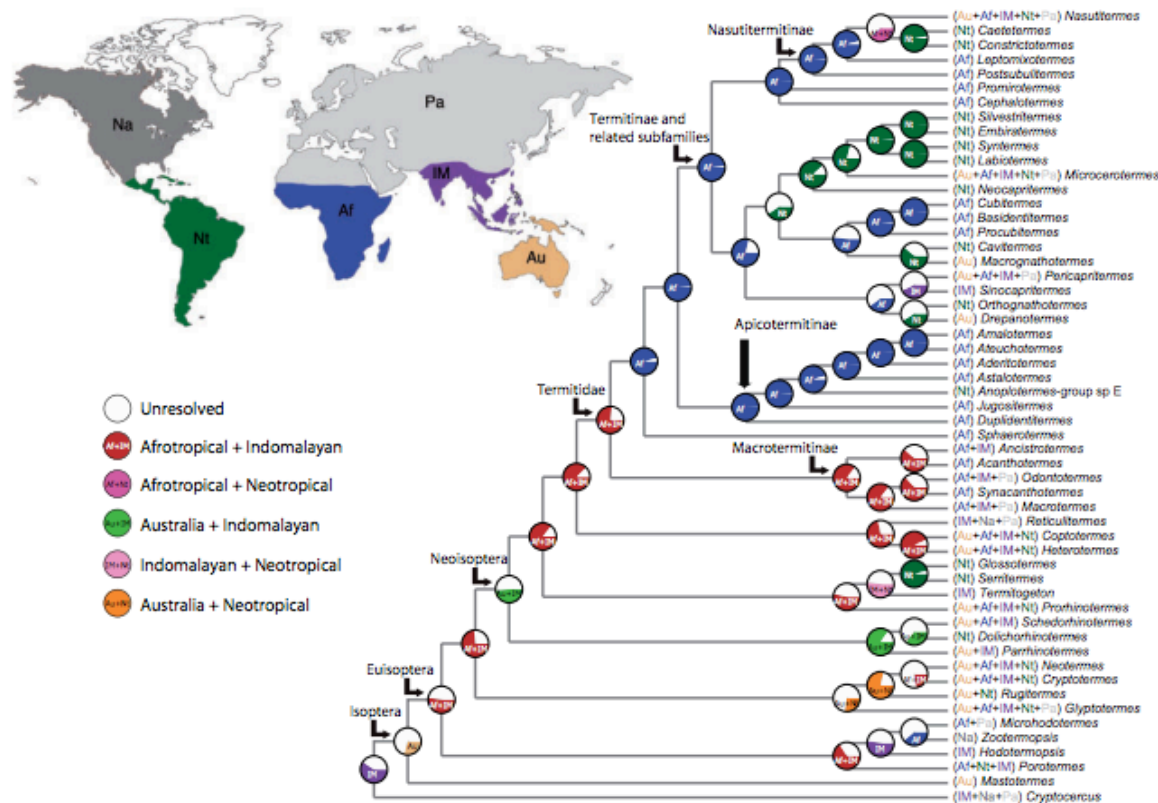


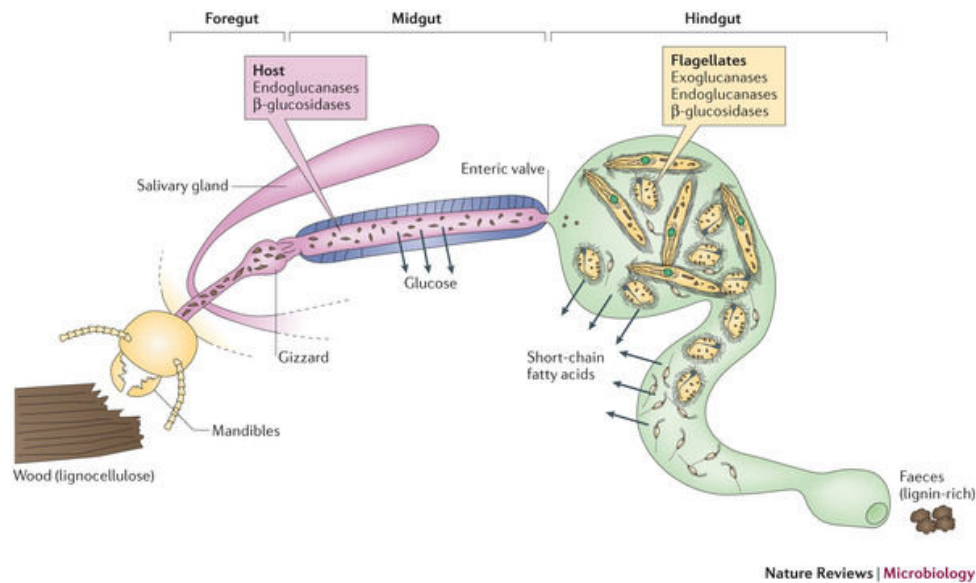
FIG. 3. Reconstruction of termite ancestral distribution using a Bayesian Binary model. The map shows the biogeographic areas considered in the analyses (Udvardy 1975), namely: Af, Afrotropical; Au, Australian; IM, Indomalayan; Na, Nearctic; Nt, Neotropical; Pa, Palearctic. The phylogenetic tree of termites was based on the full mitochondrial genome, with third codon position excluded, reconstructed using Bayesian method. Optimal partition scheme was determined by PartitionFinder.





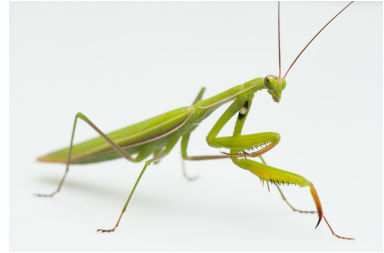
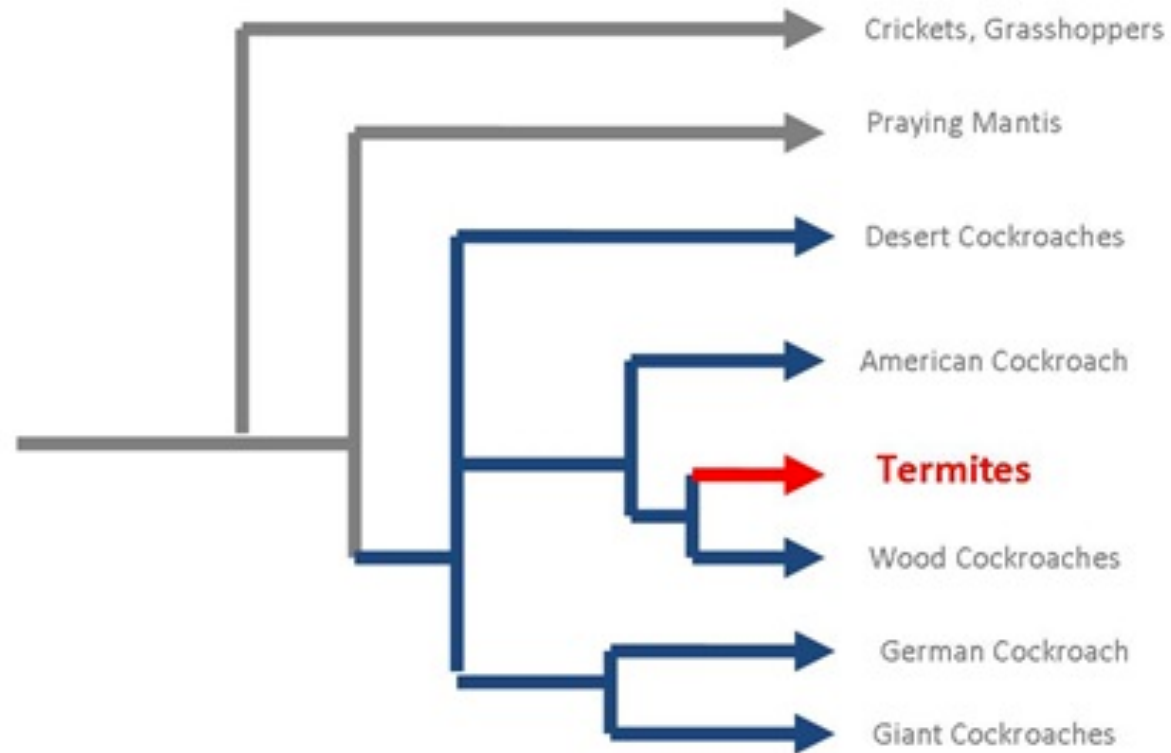
# Endosymbiont Evolution (Microbiome)

- Lucia Zifcakova (Slovakia - PostDoc) and Jigyasa Arora (India – PhD Student)
  - The gut microbiome of termites and how they digest wood



# Mitochondrial based Taxonomy

- Menglin Wang (China – PhD Student)
  - Using high throughput sequencing-generated data to study mitochondrial DNA the historical biogeography of termites





- Ales Bucek (PostDoc - Czech Republic) - Transcriptomics!

- how termites evolved their sophisticated chemical defense arsenal,
- how do they interact with, and adapt to, a range of parasites





# Crystal (South Africa - Technician) – Lab Technician and Genome Assembler!

