

IBIOL SEMINAR SERIES



28 May 2025



12:15–13:30 PM



ROOM F-100



Sandra Le Bissonais

**Gut check: Exploring the
microbiota of insecticide-
resistant Anopheles mosquitoes**

The role of mosquito-associated microbiota in mediating insecticide resistance is increasingly recognized, yet remains poorly understood. To explore this potential, we performed 16S rRNA sequencing on resistant and susceptible *Anopheles gambiae* mosquitoes across Abidjan district (Ivory Coast). The analysis revealed a shared core gut microbiota, alongside site-specific differences in bacterial richness and diversity. Notably, higher microbial diversity showed potential associations with resistance to pyrethroid insecticides. These findings highlight the need to consider microbiota in the ecology of resistance and vector control strategies.



Magnus Onyiriagwu

**From diversity to complexity:
Rethinking tropical forest
restoration**

Tropical forest restoration is being scaled globally to recover biodiversity and ecosystem services, but it often relies on monocultures. Ecosystem benefits are strongly associated with diverse stands through structural and functional diversity. Using data from biodiversity experiments, I systematically analyze how tree species mixing relates to structural complexity at the pantropical scale.



Ségolène Bressoud

**NAD(P)H Dehydrogenase C1 (NDC1)
is essential for vitamin K₁
accumulation and is involved in
prenyl quinones metabolism in
tomato (*Solanum lycopersicum*)
leaves and fruits**

NAD(P)H Dehydrogenase C1 (NDC1) is a plastoglobule enzyme known for its role in the last step of vitamin K₁ biosynthesis and its implication in plastoquinone reduction in *Arabidopsis thaliana*. In this study, we investigate the role of NDC1 in *Solanum lycopersicum* plastoglobules from leaf chloroplast and fruit chloroplast and chromoplast.

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FOR COFFEE AND COOKIES!**