Biologiand Integrative genetics

Auditorium Bâtime<mark>nt Bi</mark>o Vnil-Sorge at **B**o

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*From mice to molecules: the genetics of color adaptation**

One of the main goals of evolutionary biology is to understand how and why diversity is generated and maintained in natural populations. To address the goal, we have been studying cryptic coloration in natural populations of oldfield mice (*Peromyscus polionotus*), which vary tremendously in color and pattern. In this talk, I will present data -- from both the lab and the field - in which we (1) experimentally demonstrate that color matters for survival in the wild, and (2) identify the genes and developmental process responsible for color variation in these mice. Together, these results allow us to retrace the evolutionary path of adaptive change in the wild, teaching us new lessons about the evolution of diversity along the way.

BIG is an initiative of the Faculty of Biology and Medicine, University of Lausanne, and is organized by Uta Paszkowski, Laurent Keller, Henrik Kaessmann and Jan Roelof van der Meer.

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