

Dear colleagues,

It is my pleasure to invite you to attend the seminar by Laurent Keller (UNIL) this Friday at 11 in room SV1717.

Laurent Keller is a famous myrmecologist, an expert of ants. If you haven't yet attended one of his seminars, don't miss this one! His seminars are engaging, thought-provoking and fun. His research focuses on the principles that govern the evolution of animal societies and their implications for social life.

Here is a brief summary of his seminar:

Intraspecific variability in social organization is common, yet the underlying causes are rarely known. I will show that the existence of two divergent forms of social organization in six ant species is under the control of a pair of heteromorphic chromosomes that have many of the key properties of sex chromosomes. In particular, this social chromosome contains a large region in which recombination is almost completely suppressed via three large inversions. The same region also regulates social organization in five other closely related species. Moreover, social organization is also controlled by supergenes in several other ants, highlighting how genomic rearrangements can maintain divergent adaptive social phenotypes involving many co-adapted genes.

Further reading:

Coevolution of Genome Architecture and Social Behavior.

Rubenstein DR, Ågren JA, Carbone L, Elde NC, Hoekstra HE, Kapheim KM, Keller L, Moreau CS, Toth AL, Yeaman S, Hofmann HA.
Trends Ecol Evol. 2019 May 23.

Sexual conflict drives male manipulation of female postmating responses in *Drosophila melanogaster*.

Hollis B, Koppik M, Wensing KU, Ruhmann H, Genzoni E, Erkosar B, Kawecki TJ, Fricke C, Keller L.
Proc Natl Acad Sci U S A. 2019 Apr 23;116(17):8437-8444.

Social network plasticity decreases disease transmission in a eusocial insect.

Stroeymeyt N, Grasse AV, Crespi A, Mersch DP, Cremer S, Keller L.
Science. 2018 Nov 23;362(6417):941-945.

Genetics and Evolution of Social Behavior in Insects.

Weitekamp CA, Libbrecht R, Keller L.
Annu Rev Genet. 2017 Nov 27;51:219-239.

Host: Miki De Palma