UNIL | Université de Lausanne Département de physiologie Rue du Bugnon 7+7a CH-1005 Lausanne



Monday, June 17th, 2019 – 12h15 Department of Physiology, Bugnon 7, 1005 Lausanne Seminar room, 6th floor

Social network plasticity decreases disease transmission in the ant *Lasius niger*

Dre Nathalie Stroeymeyt University of Fribourg

Host : Prof. Christian Widmann





Animal social networks are shaped by multiple selection pressures, including the need to ensure efficient communication whilst limiting the spread of parasites and disease. Using a combination of automated tracking and controlled pathogen exposure, we found that colonies of the ant *Lasius niger* further decrease the risk of epidemics by altering their social network adaptively in the presence of pathogens. Social network plasticity in response to pathogens seems an effective strategy to mitigate the impact of disease in social groups, and could be widespread in animals societies.

Stroeymeyt N et al. Science. 2018;362(6417):941-5.