Project name	
The evolution of fungal host-shifts	
Project description	
Understanding the factors that determine the ability of a fungal pathogen to infect selected hosts, or how fungi can evolve pathogenicity to different hosts is key to predict when and where fungal diseases will emerge in the future. We use an *'experimental evolution*' approach to create artificial host-shifts using insect-pathogenic *Metarhizium* fungi. This allows us to trace evolutionary change in *real-time* in the laboratory during serial passages in novel hosts mimicking the initial phases of pathogen host-shifts not captured by comparative methods. We characterize pathogen plasticity and phenotypic changes resulting from artificial host-shifts onto different novel insect hosts. These data are coupled with potential changes in gene expression, mutations and epigenetic modifications to provide a comprehensive view of the evolutionary and molecular factors promoting host shifts.	
Participants	Funding
Henrik H. De Fine Licht Myrsini Natsopoulou	DFF, Villum
Contact	
Henrik H. De Fine Licht	