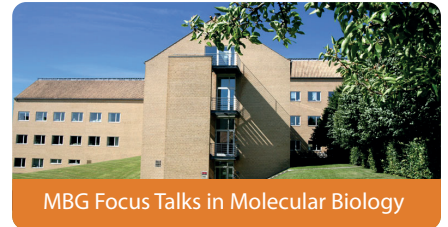


MBG FOCUS TALK

hosted by Erik Østergaard Jensen



Friday, March 2, 2019 at 9:15 - 10:00

Dept. Math. 1531-113

Stig Uggerhøj Andersen

Dept. of Molecular Biology and Genetics, Aarhus University

Insights from diversity: Legume genomics and natural variation

The legume family of nitrogen-fixing plants includes agriculturally important crops such as soybean, chickpea, lentil, faba bean, white clover and alfalfa. Interest in legumes is increasing because of their potential to contribute to more sustainable agricultural practices. In this context, legume-rhizobium symbiotic nitrogen fixation reduces the need for application of artificial nitrogen fertilizers, and the seeds of protein-rich grain legumes provide a nutritious, low-input alternative to meat. Our work is focused on developing legume genomic resources and applying these to the investigation of natural variation in three legume species: the model legume *Lotus japonicus*, the forage crop white clover and the grain legume faba bean. I will show how we have analysed natural variation to gain insight into gene function, species origin, and local adaptation to contrasting climates. I will also discuss how we align our work with breeders in public-private partnerships to facilitate development of improved white clover and faba bean varieties.