

Occurrence and relevance of plant endophyte interaction – chemical, genetic and bioinformatic investigation

Today, the biosynthesis of secondary metabolites in plants as host and endophyte is a conflicting debate and major question regarding symbiotic interaction are still open. As outlined under *section 1*, it is still unclear, whether plant associated secondary natural products are truly biosynthesized host independently in endophytes or endophytes and plants share biosynthetic competence. The main objective of this common research is to give an answer on the working hypothesis how secondary natural product biosynthesis is organized between plant and endophytes.

We look for a candidate to conduct his Phd (2+2 years, 0.5 E13) and has high interest in plant biochemistry and endophyte microbiology. With focus on medicinal plants like *Cannabis sativa* and *Radula marginata* the candidate should work on the microbe-microbe and plant-microbe interactions to explain survival and beneficial interaction for plant fitness. The ideal candidate has a strong background in natural product chemistry, plant biochemistry and analytics (LC-MS, GC, PCR). It would be of advantage to have conducted his master thesis in the field of endophyte microbiology or plant biochemistry with focus on secondary natural products.

If you are interested in, please send your CV and application documents by email to

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Deadline: 15th April 2016