

name of the module	Molecular Plant Microbe Interactions
start	Mid October
duration	5 weeks
location	KIT, Botanisches Institut
contact person	Natalia Requena
ECTS (regular/max)	8
examination	Klausur zu M2208 V+P.
graded	Yes, best grade 1.0, passed with 50% of scores
description of content (approx. ½ page)	<p>MFOR-V-2208: Molecular Plant-Microbe Interactions (Vorlesung)</p> <p>Einführung in die Mechanismen der Pflanzenkolonisierung durch Mikroorganismen und Pflanzenstrategien zur Vermeidung der Besiedlung. Hintergrund zum Verständnis der Praktiumsversuche.</p> <ul style="list-style-type: none"> • Introduction, Concepts and Definitions • Recognition and Plant-Microbe Specificity • Mechanisms of Plant Disease Resistance • Bacterial and Fungal Pathogenicity/Symbiosis • Agrobacterium-Plant Interaction • Magnaporthe grisea and Xanthomonas spp. as model pathogenic microorganisms • Arbuscular Mycorrhizal Fungi: model symbiotic fungi <p>MFOR-P-2208: Molecular Plant-Microbe Interactions (Praktikum)</p> <ul style="list-style-type: none"> • Development of an insertional mutant library of the rice pathogenic fungus <i>Magnaporthe grisea</i> using <i>Agrobacterium tumefaciens</i>. • <i>Agrobacterium rhizogenes</i> as vector to produce transformed hairy roots and composite plants. • <i>In planta</i> reporter-gene expression monitored by fluorescence microscopy and induction of specific gene expression by mycorrhiza.