



## PhD Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

### Open PhD position at FUB for CSC scholarship candidates 2016

*Please note: the PhD position is only offered to Chinese PhD candidates for application in the framework of the FUB-CSC PhD Program.*

<b><u>Department/Institute:</u></b>	Institute of Biology
<b><u>Subject area:</u></b>	Biodiversity/ Plant, soil and fungal ecology
<b><u>Name of Supervisor:</u></b>	Prof. Dr. Matthias C. RILLIG (Mr.)
<b><u>Number of open PhD positions:</u></b>	2
<b><u>Type of the PhD Study:</u></b>	Full time preferred
<b><u>Project title:</u></b>	Biodiversity of fungi, plant-soil-fungal interactions

#### **PhD Project description:**

Our lab works on the ecology of arbuscular mycorrhiza, root pathogens, root endophytes and soil saprobic fungi, both in natural and agricultural ecosystems. We use lab experiments, field sampling and molecular ecology methods to explore ideas about community ecology and ecosystem functioning.

Within this broad theme, there is scope for numerous projects on the role of the functioning and biodiversity of fungi, including testing the role of specific fungal groups for plant coexistence, exploring patterns of diversity of fungi, and others.

We especially welcome projects that deal with trait-based ecology of soil saprobic fungi (Aguilar-Trigueros et al. 2015, Fungal Biology Reviews 29: 34-41), or root colonizing fungi (Aguilar-Trigueros et al. 2014, Trends in Plant Science 19: 432-438). We further welcome projects dealing with the experimental exploration of community coalescence (Rillig et al. Trends in Ecology & Evolution; <http://dx.doi.org/10.1016/j.tree.2015.06.004>), extinction ecology, coexistence, or other modern topics in ecology, using fungi as model systems. Other topics include AM fungal effects on early life history stages of plants and microplastic effects in soil.

#### **Language requirements:**

English is the language used in the lab and for the thesis.

#### **Academic requirements:**

Applicants with a MSc in Biology, Ecology, Soil Science, Microbiology or related fields. Solid experience with statistics/ quantitative methods is desirable. Applicants with strong modeling skills are also welcome.

**Information of the professor or research group leader:**

Information about the lab at <http://rilliglab.wordpress.com>

**Please note:**

In a first step the complete application should submit to the Beijing Office for evaluation by January 4<sup>th</sup>, 2016. Please don't contact the professor before. He/She will get in contact with you after having received the complete application in January.