



The aim of this project is to discover new cytostatic or antibiotic compounds from fungi. For this we focus on fungal secondary metabolites as this field is still underexplored and contains a huge potential. First step is to isolate fungi from sea sediments, plants or lichens. Interesting fungi which contain bioactive compounds are taxonomically identified by ITS sequencing. Fungi are evaluated with regard to their potential to produce bioactive natural products through appropriate cell based bioassays and the chemical constituents are structurally elucidated using one and two dimensional NMR, HRMS and chiroptical methods. Bioassays aiming at the determination of the cytostatic and antibiotic properties of fungal natural products are being conducted in close collaboration with other groups within the GRK. From the fungus *Coniella fragariae* the new cytotoxic compound coniellin A was obtained as part of this ongoing project.

Haiqian Yu is working in the Institute of Pharmaceutical Biology and Biotechnology (RG P. Proksch).