

Peptide synthetases and related enzymes

Fungal nonribosomal peptide synthetases and related enzymes (quinone synthetases, adenylating reductases) of asco- and basidiomycete origin are investigated *in vitro* and *in vivo* for their substrate specificity and product formation.

Presently, we investigate the gene of the atromentin synthetase NPS3 of *Serpula lacrymans*. It is strongly induced by the presence of bacteria and results in increased titers of pulvinic acids, the follow-up products of atromentin. This effect may be related to their modulating effect on biofilms and bacterial motility. Bioinformatic aspects of this project are carried out in close cooperation with Dr. Dr. Ekaterina Shelest of iDiv, Leipzig.