

Project 10: The role of the Ubiquitin fusion protein Ubi1 during the early infection phase of *Ustilago maydis*

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Summary of the project

The phytopathogenic fungus *Ustilago maydis* causes corn smut disease. Recently we have shown that microtubule-dependent mRNA transport is essential for the efficient filamentous growth during the early infection phase. A prominent cargo mRNA for this transport machinery encodes Ubi1, a natural fusion protein consisting of ubiquitin and the ribosomal protein Rpl40. The aim of this project is to uncover, why this mRNA is transported and which precise molecular function is carried out by the protein during polar growth of the infectious filament.