

## IPD Project Details

**Project ID:** IPD8104

**Project Title:** Secretome analysis of *Candida glabrata* wild-type and aspartyl protease-deficient strains

**Description:** The project is aimed at characterizing the secretome of a human opportunistic fungal pathogen *Candida glabrata*. Additionally, the effect of loss of a family of eleven aspartyl proteases (Cg Yapsins) on the *Candida glabrata* secretome is studied.

**Principal Investigator:** Dr Rupinder Kaur

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**Sample Preparation:** The supernatants of YNB medium-grown logarithmic-phase cultures of wild-type (wt), Cgyps7?, Cgyps2?ypsc? and Cgyps1-11? strains of *C. glabrata* cells were collected in duplicates and passed through 0.4  $\mu$ m membrane or syringe filters to remove the residual cells. The resultant filtrates were concentrated using Amicon Ultra-15 and Ultra-0.5 (10 kDa cutoff) centrifugal filter units. The concentrated secretome fractions were run on a 12% SDS-PAGE and stained with Coomassie Brilliant Blue. The gel lane containing all proteins was sliced into three sections, with each section containing a different size range (<50 kDa, 50-120 kDa and >120 kDa) of proteins.

**Peptide Separation:** Proteins were identified, after in-gel trypsin digestion, via the microcapillary LC-MS/MS (Liquid chromatography-tandem mass spectrometry) method at the Taplin Biological Mass Spectrometry Facility, Harvard Medical School, Boston, USA using the the LTQ Orbitrap Velos Pro ion-trap mass spectrometer.

**Protein Characterization:** The acquired fragmentation pattern for each peptide was analysed using the Sequest software, and searches were run against the UniProt *C. glabrata* reference proteome database. The identified peptides were filtered to 1% false discovery rate.

**Experiment Type:** Shotgun proteomics

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**Species:** Data in species\_details No Data

**Tissue:** Data in tissue\_details No Data

**Cell Type:** Data in cell\_details No Data

**Disease:** Unknown No Data

**Instrument Details:** Data in instrument\_details Data in instrument\_details

**Protein Modifications:** dehydrated residue

**PubMed ID:** [31621333](#)