



Position by institution 8

ESR No. 11
Host Institution: Innsbruck Medical University, Austria
ESR enrolled at: Innsbruck Medical University, Austria

Institute	Innsbruck Medical University, Austria
Lab	Division of hygiene and medical microbiology/ reference centre for aspergillus and aspergillus infections
Responsible person	Prof. Dr. Cornelia Lass-Flörl
Job title	Early Stage Researcher: PhD thesis on clinical development and testing of an integrated diagnostic system for early and robust diagnosis, including detection and identification of resistant <i>Candida</i> pathogens
Job description	<p>Short description:</p> <ul style="list-style-type: none"> - Required degree: MSc in biology, biochemistry or equivalent - Preferred qualification and expertise: clinical microbiology, infection biology, molecular biology, - Duration: 36 months - Language: English (essential), - Contact: Cornelia Lass-Flörl, Tel.:+43 (0)512 9003 70700; Mail: cornelia.lass-florl@i-med.ac.at <p>The Division of Hygiene and Medical Microbiology (HMM): The Division HMM fulfils its tasks in detection and identification of pathogens causing infections. This covers bacteriology, parasitology, mycobacteriology and mycology. The diagnostic laboratories are certified according to ISO 9001:2009. Special parts are controlled by external audits in accordance to §67 Austrian Medicines Law and FDA, Division of Manufacturing and Product Quality. Within the sector of hospital and technical hygiene (accredited according to ISO/IEC 17025 and ISO/IEC 17020) guidelines for the prevention of infectious diseases are developed and controlled corresponding to the statutory presettings for technical facilities (e.g. disinfection machines).</p> <p>PhD project Objectives: To validate in the clinic the innovative detection tools developed in WPs 2-5.</p> <p>Methodology: Validation will be done on prospective clinical studies, the patient sample library (Biobank, P8) and by application of animal infection models. Clinical validation will include comparison with currently used methods, and a blind test set of yeast isolates (by P2) and previously diagnosed material from the Biobank of P8. P9 will contribute by evaluating the P8 approved and final set of OPATHY diagnostics. ESR11 will also participate in coupling antibodies from WP3 with ELISA-based formats or lateral flow devices.</p> <p>Expected Results: An integrated diagnostic system for early and robust diagnosis, including detection and identification of resistant <i>Candida</i> pathogens.</p> <p>Planned secondment(s): P1 CRG (2 months; Y1; to gain insight how bioinformatics is used to identify regions of diagnostic potential; to get knowledge on how to design probes for PCR); P6 HKI (3 months; Y2; to learn applying RNAseq for identifying specific mRNAs that will be developed into OPATHY diagnostics).</p>