

# Deciphering the fungus-host-microbiota interplay to improve the management of fungal infections

PhD positions available

Marie Skłodowska-Curie Innovative Training Network

**FunHoMic** is a Marie Skłodowska-Curie Innovative Training Network that integrates experts in fungal pathogenesis, immunology, microbial ecology and omics technologies to **train 13 Early Stage Researchers (ESRs)**. In their research projects, FunHoMic ESRs will tackle the interaction between pathogenic fungi, the host and the microbiota in order to identify novel biomarkers (fungal or host genetic polymorphisms, microbiota profiles, metabolites or immune markers) for the stratification of a patient's risk of serious fungal infection. This will pave the way for precision medicine in patient management through preventive or therapeutic interventions using antifungals, immune modulators or Live Biotherapeutic Products (LBPs).

FunHoMic is coordinated by Christophe d'Enfert at Institut Pasteur and brings together 7 academic partners and 3 SMEs. FunHoMic has started on the 1<sup>st</sup> of January 2019 and will last 4 years. PhD positions are for three years, starting in 2019.

## AVAILABLE PROJECTS

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| <p><b>ESR1:</b> Integration of micro- and mycobiome (VHIR) sequence data</p> <p><b>ESR2:</b> Developing biomimetic tissue models to (MIMETAS) study the fungal-host-microbiota interplay</p> <p><b>ESR3:</b> Application of the SHIME technology (ProDigest) platform to assess the interplay between fungi and bacteria in the human gut</p> <p><b>ESR4:</b> Assessment of the secreted metabolome in (BIOASTER) <i>Candida albicans</i></p> <p><b>ESR5:</b> Impact of fungal cell surface variability (Uni. of Aberdeen) upon fungal interactions with the host and microbiota</p> <p><b>ESR6:</b> Molecular basis of niche specificity in (IP) <i>Candida albicans</i></p> <p><b>ESR7:</b> Impact of microbiota diversity and <i>Candida</i> (HKI) colonization on systemic candidiasis</p> | <p><b>ESR8:</b> Adaptation of <i>Candida albicans</i> (Uni. of Zurich) to variations in the host and in the microbiota</p> <p><b>ESR9:</b> Microbiome and host genetics interaction (Radboudumc) in the susceptibility to recurrent vulvo-vaginal candidiasis</p> <p><b>ESR10:</b> Influence of the microbiota on <i>Candida</i> (IP) <i>albicans</i> gastrointestinal colonization in healthy individuals</p> <p><b>ESR11:</b> Development of Live Biotherapeutic (Uni. of Aberdeen) Microorganisms to prevent fungal infection</p> <p><b>ESR12:</b> The role of antagonistic bacteria during (HKI) host-<i>Candida</i> interplay in commensalism and pathogenicity</p> <p><b>ESR13:</b> Lcr35® mechanism of action on <i>Candida</i> (biose) <i>albicans</i></p> |
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For more information and contact details visit: [WWW.FUNHOMIC.EU](http://WWW.FUNHOMIC.EU)