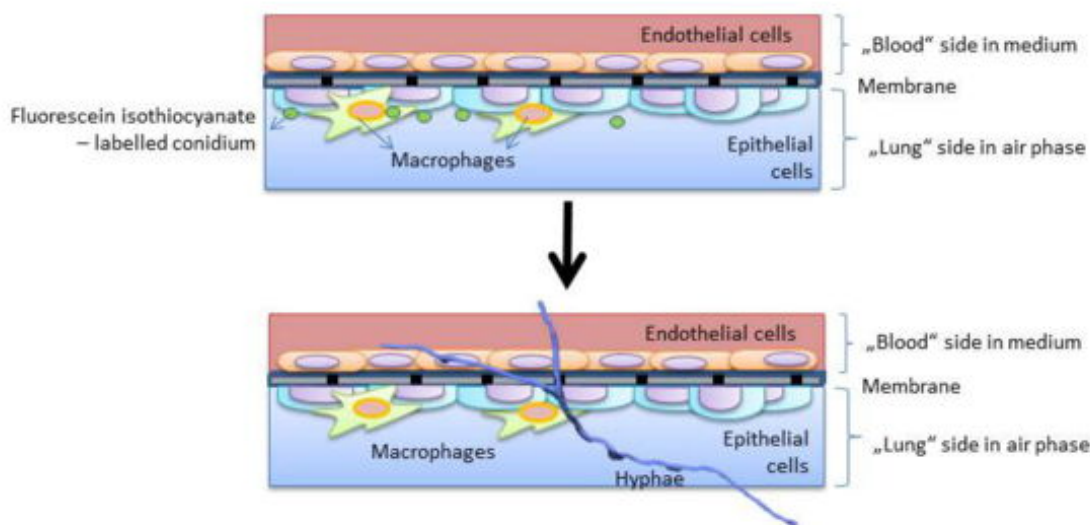


Modelling of invasive *A. fumigatus* infections in the human lung

“Invasive aspergillosis-on-a-chip” – mimicking fungal pulmonary infections in a 3D microfluidic biochip



_ Scheme of the model with application of labelled conidia (upper panel) and growth of invasive hyphae (lower panel).

In co-operation with PD Dr. A. Mosig (Jena University Hospital), our group established a microfluidic lung-on-a-chip model to analyse invasive *Aspergillus* infections. The 3D model allows simulation of a clinical tissue infection and thus enables investigation of the immune response as well as drug testing. In addition, a cooperation with the group Applied Systems Biology of Prof. Dr. M.T. Figge (HKI) allows quantitative analyses of growth behavior.