

Investigating pathogens at the Institute for Molecular Infection Biology

The Institute for Molecular Infection Biology (IMIB) at the University of Würzburg, Germany, will celebrate its 20th anniversary in 2013. The past decades have seen significant growth of interdisciplinary research programmes focusing on pathogens and infectious disease processes. Members of the institute work closely with other life science researchers at the University of Würzburg to investigate fundamental biological problems and molecular mechanisms.



Jörg Vogel, Director of the Institute for Molecular Infection Biology

The appointment of EMBO Member Jörg Vogel as the chair of the institute in 2009 has resulted in an expansion of the traditionally important research areas in bacterial and eukaryotic cell biology, immunology, and gene regulation to also encompass fundamental aspects of RNA biology. In particular, researchers are investigating the role of RNA as a regulatory molecule, as a molecule transferred between cells, and the relationship of different RNA classes with the processes of infection. This includes providing new insight into the roles of non-coding RNAs in host-pathogen interactions and how pathogens subvert the RNA metabolism of the host.

“We are putting in place a dynamic and ambitious research programme that centers around the study of infectious pathogens and disease,” said Jörg Vogel, Director of the IMIB, while recently attending The EMBO Meeting in Nice, France. “Over the years, we have placed considerable emphasis on attracting young investigators to our institute and making sure that they have opportunities to move into tenured full-professorship positions that reflect their standing, progress

and potential in the scientific community.” He added: “The way we integrate our young investigator programme into our research activities has been successfully adopted by many universities throughout Germany,” he added.

Four research groups of the prestigious ZINF Young Investigator program currently reside at the IMIB. In this context, the IMIB has been working closely with the Center for Infectious Disease Research (Zentrum für Infektionsforschung, ZINF), which will also celebrate its 20th anniversary in 2013. These young investigators are investigating the link between aspergillus and disease, deep sequencing approaches to pathogenesis, bacterial cell differentiation and parasite gene regulation.

Both IMIB and ZINF have strong ties to EMBO. The Institute and Center were founded by EMBO Member Jörg Hacker who went on to be President of the Robert Koch Institute and is currently the President of the German Academy of Sciences Leopoldina. Subsequently, current director Jörg Vogel was elected as an EMBO Member in 2011.

“The Institute for Molecular Infection Biology has made outstanding progress in its mission to put in place a diverse research programme devoted to the study of bacterial and other pathogens, and should be congratulated on its efforts to integrate younger researchers into its activities,” said Pascale Cossart, EMBO Member and Professor at the Pasteur Institute, Paris.

Institute for Molecular Infection Biology at a glance:

- Institute for Molecular Infection Biology (IMIB), University of Würzburg www.imib-wuerzburg.de/imib
- Founded: 1993
- Total number of researchers: 75
- Research groups: 11
- Scientific publications 2011: 52
- Total expenditure 2011: 4.8 million Euros
- Competitive funding: 2.9 million Euros