



PHD POSITION IN VIROID RESEARCH: CELL BIOLOGY OF VIROID INFECTION

HEINLEIN team, IBMP, CNRS, Strasbourg, France

We are looking for a highly motivated doctoral candidate to join our team and to participate in the MSCA Doctoral Network “ViroiDoc”.

ViroiDoc is a 4-year Marie Skłodowska-Curie Actions-Doctoral Network (HORIZON-MSCA-2023-DN-01-01) funded within the framework of the Horizon Europe Programme. The aim of this network is to investigate viroids that cause crop losses in the millions of euros every year and affect crop yields and quality worldwide. ViroiDoc offers an international, multidisciplinary and cross-sectoral training program consisting of the individual research project, training by the doctoral school, and specific ViroiDoc network-wide training in scientific, technical, digital, entrepreneurial and transferable skills. For more information, visit www.viroidoc.eu.

As part of the ViroiDoc network, you will be registered at the Doctoral School of Life Sciences and Health of the University of Strasbourg (<http://ed.vie-sante.unistra.fr/>) and work on an individual research project dedicated to ***in vivo* fluorescent tagging of viroid RNA and analysis of its intra- and intercellular trafficking in association with host factors**. You will isolate *in vivo* ribonucleoprotein (RNP) complexes formed with viroid RNA, identify associated proteins by LC-MS/MS and analyse the functional significance of selected proteins during viroid trafficking and infection by reverse genetics and *in vivo* imaging. During the project, several secondments in partner laboratories in Crete (Greece), Argentina, and Spain are foreseen.

You will acquire essential knowledge and experience in plant-pathogen interactions, cell biology, molecular biology, genetics, and biophysics. You will learn advanced techniques, including DNA cloning, biochemical characterization of protein-RNA complexes and their analysis by mass spectroscopy, *in vivo* fluorescence imaging and microscopy, Arabidopsis genetics, and plant virology. You will also achieve training in writing and communication skills, and how to present results to different audiences.

The position is located at the IBMP in Strasbourg (France) and available for 36 months, starting in May-July 2025. The Institute of Plant Molecular Biology (IBMP; <http://www.ibmp.cnrs.fr/?lang=en>) is the largest CNRS research institute dedicated to plant science in France. It hosts 18 research teams and is known for its expertise in plant genomics, genetics, metabolism, biochemistry, cell biology, and molecular physiology. The Heinlein team investigates plant-virus interactions with specific focus on the mechanisms of viral cell-to-cell movement and defence responses involved in this process.

Your profile: You have a Master degree in molecular and /or cell biology, you can communicate in written and spoken English, and you are interested in plant-pathogen interactions. You have experience in DNA cloning, analytical techniques (PCR, Westernblot, etc), and fluorescence microscopy. Previous experience in plant-pathogen interactions is a plus. You have not resided or carried out your main activity at an institution in France for more than 12 months during the 3 years immediately before the recruitment date.

Application: Please submit your application to the **Application Portal** at <https://www.viroidoc.eu/> and select position DC4 (**deadline: 25 April 2025**). Please also send a CV, motivation letter and three reference letters to Manfred Heinlein (manfred.heinlein@ibmp-cnrs.unistra.fr).