

## One postdoc position for characterizing grapevine virome in Belgium and the associated phytosanitary risks

**Scientific context.** Belgium is famous for its beers, but the grapevine cultivation area and wine production are rising steeply. This trend is expected to continue in the future due to the climate change and rising temperatures. In Belgium, there is currently little or no information on the status of regulated and other pathogens in the vineyards, nor a knowledge on the symptoms they cause or the best diagnostic tests available. In this context, a new project, called VITIBEL, aims to survey the Belgian vineyards to characterize circulating viruses by high throughput sequencing technologies (detection, genetic diversity analyses...) and to follow their epidemiology by RT-PCR. This project will be developed in collaboration with the team of Kris De Jonghe (ILVO - Genth).

**Host laboratory.** The postdoc will join the plant virology team of the Laboratory of Plant Pathology (LPP) from Gembloux Agro-Bio Tech (Liège University, Belgium). This international team (2 postdocs, 8 PhD students and 3 technicians from 10 nationalities) develops 4 research axes: (i) improving the reliability of HTS-based diagnostic, (ii) resolving the etiology of new or emerging diseases, (iii) studying the epidemiology of viral crop diseases, and (iv) improving the phytosanitary risks analyses. Through continuous participation in international projects, the plant virology team has developed a strong international network allowing knowledge exchanges in plant virology and the development of interdisciplinary approach in research projects.

**Research topics.** The postdoc position will be focused on virome survey of grapevine in Belgium. This survey will be carried out at national scale to set the baseline of viruses infecting new and old grapevine plants in Belgium from commercial and personal vineyards. After training with grapevine virus specialists abroad, the postdoc will lead the survey that combines grower's interview, symptom observation and sampling for virus detection by high throughput sequencing and advanced bioinformatics analyses. In depth epidemiological characterization will be carried out on selected study cases, and innovative detection approaches will be tested.

**Duration of contract:** 2.5 years (first contract of 12 months + prolongation of 18 months).

**Starting date:** May-June 2023 (adaptable)

**Skills:** very good communication skills, autonomy, rigor, curiosity, teamwork ability; driver licence and ability to exchange in French are two assets

**Techniques used.** Nucleic acids extraction, classical molecular biology (PCR, RT-PCR), high throughput sequencing technologies and in depth bioinformatic analyses.

**Location:** Liège University, Gembloux campus in Belgium (35 min by train from Brussels)

**Contact:** Please send your CV and a motivation letter to Prof. Sébastien Massart ([sebastien.massart@uliege.be](mailto:sebastien.massart@uliege.be)) before 31<sup>st</sup> March 2023. Additional information can be obtained at the same mail address.