

## **PhD vacancy INSECT DOCTORS: Covert DNA virus infections in insects**

Within the EU-funded INSECT DOCTORS program, we have a vacancy for a PhD candidate. The overall aim of the INSECT DOCTORS' training programme is to educate a new generation of scientist that have in-depth knowledge on insect pathogens, as well as the skills to assist the upcoming industry of insect mass rearing to prevent disease outbreaks in their insect cultures. INSECT DOCTORS is coordinated by Prof. Monique van Oers (Wageningen University), and involves many insect pathologists including a lot of SIP members.

In total, 15 PhD candidates participate in this programme, and each PhD candidate is enrolled at two universities in different European countries. Each PhD candidate has his/her own research project involving stays in at least two countries. Several novel PhD courses will be offered to all PhD candidates of INSECT DOCTORS. To learn more about the training network please visit our website:

[www.insectdoctors.eu](http://www.insectdoctors.eu)

### Vacancy for PhD candidate (intended start date January 2020):

The recent revolution of large-scale sequencing technologies has unveiled a vast amount of covert virus infections in insects, including also DNA viruses. In addition to pathological 'overt' infections, many viruses produce silent or 'covert' infections in their hosts, which are often vertically transmitted from parent to offspring. Under certain conditions, such covert infections can switch to overt, lethal, infections. Here we aim to determine the mechanism by which large dsDNA viruses are maintained as covert infections in insects. The project includes baculoviruses (infecting caterpillars), hytrosaviruses (infecting flies) and nudiviruses (in a range of insect species). The candidate will look into the molecular mechanisms maintaining a covert state and will investigate whether homologous mechanisms exist for these related insect viruses. In addition, the conditions and mechanism facilitating a transition from covert to overt infections will be studied. Furthermore, the effect of covert viruses on host fitness are investigated. Understanding these processes is needed to predict, prevent and control diseases in insect mass rearing, enabling sustainable rearing of insects. The knowledge obtained will be fundamental to develop tailored detection methods and to optimize insect mass rearing methods.

The PhD candidate will work under the supervision of Dr. Vera Ros (Wageningen University & Research) and Dr. Salvador Herrero (University of Valencia, Spain). The candidate will be based at Wageningen University & Research, and will perform a secondment for a minimum of 9 months at the University of Valencia.

For more information, and for the [eligibility rules](#), see:

<https://www.wur.nl/en/show/PhD-position-Covert-DNA-virus-infections-in-insects.htm>

Only applications through the WUR portal are accepted.