

**Job offer at the Institute of Health and Society - UCLouvain****Doctoral fellowship for the research project NITROPOL-BE « Impacts of nitrogen deposition in the natural environment on pollen allergy and respiratory infection outcomes in Belgium »**The research project:

Allergic disorders related to pollen exposure are associated with an important burden of disease because of their high prevalence, often life-long morbidity impact, and their role in increasing the susceptibility to respiratory viral infections. Therefore, aeroallergen exposure is a major public health concern. The prevalence of allergies to aeroallergens is increasing due to various interactions between changes in the environment, including air pollution and climate warming, and lifestyle. One of the possible, yet underexplored, additional drivers of increasing aeroallergen and allergy prevalence is nitrogen deposition.

The Belspo BRAIN-be project “NITROPOL-BE” aims to understand how nitrogen deposition affects pollen allergy burden in Belgium, adjusting for potential confounding by air pollution and climate. NITROPOL-BE engages a multidisciplinary team of scientists (from Sciensano, KU Leuven, UNamur and UCLouvain), biodiversity conservationists, policymakers, and citizens (allergy patients) in Belgium. It aims to provide the scientific basis and evidence to support regional nitrogen deposition reduction and environmental policies as well as national health policies.

Within the NITROPOL-BE project, you will be responsible for the work package aiming to quantify the pollinosis disease burden attributable to eutrophication. Specifically, you will contribute to the collection of data on quality of life and work productivity from allergy patients and controls along a nation-wide nitrogen deposition gradient. You will combine the results from this survey with (inter)national literature to quantify the burden of pollinosis in function of DALYs and QALY losses. In a final step, you will use statistical models to compare quality of life and disease burden between allergy patients and controls and between areas with different environmental nitrogen enrichment.

Expected tasks:

As a doctoral researcher, you will be responsible for the organisation, implementation and reporting of this subproject. Your research results will contribute to the preparation and defence of a PhD thesis in the field of public health.

We offer:

- A PhD scholarship of 48 months, with joint supervision from UCLouvain (Institute of Health Society, Prof. Niko Speybroeck) and Sciensano (Service Lifestyle and chronic diseases, Prof. Brecht Devleeschauwer)
- Collaboration within an ambitious project with important societal consequences
- Supervision of experienced scientists
- A dynamic environment with opportunities for development and training, both at UCLouvain and Sciensano
- Start date will be determined in consultation

Your profile:

- Master in (bio) medical sciences, biology, (bio) statistics, epidemiology, or related quantitative domains
- A clear motivation and commitment for pursuing a PhD
- Demonstrable quantitative skills and experience with statistical software (by preference R)
- Interest in public health and clinical epidemiology

- Appreciated complementary experiences: quality of life, burden of disease, statistical modelling
- Languages: very good knowledge of English, both orally and in writing (knowledge of Dutch and / or French is an asset)
- Generic competences: proactive, communicative, accurate, able to work independently and in team, setting up and maintaining networks, good organization and coordination skills

### **Apply now**

Potential candidates are invited to apply as quickly as possible via <https://forms.gle/9mnGJrow5SSsauUy9>.

For more information, please contact Prof Dr Niko Speybroeck ([niko.speybroeck@uclouvain.be](mailto:niko.speybroeck@uclouvain.be)) and Prof Dr Brecht Devleeschauwer ([brecht.devleeschauwer@sciensano.be](mailto:brecht.devleeschauwer@sciensano.be)).