

3 PhD Vacancies at the Universities in the Netherlands

Description of the programme entitled: Helminth infections and type 2 diabetes mellitus in Indonesia, Intergreting parasitological, immunological, behavioral and metabolic studies

This research programme is funded by the Royal Netherlands Academy of Arts and Sciences (for more information see the brochure "[10 years scientific Programme Indonesia Netherlands](#)")

Indonesia is a country in transition where environmental and lifestyle changes are altering the diseases landscape in the country, from infectious diseases to non-communicable inflammatory disorders, including type 2 diabetes mellitus (DM2). To get a grip on the precise mechanisms underlying this transition, the current program will take on the challenge of forming an interdisciplinary research program that brings together clinical and basic scientists with public health specialists and biostatisticians. Together the work will be centered around a population on Flores Island where chronic parasitic infections are endemic and where life style changes are taking place at a reasonably rapid pace. The hypothesis that helminth infections, which are associated with a strong modulation of immune responses towards a T-helper 2 and regulatory mode, are associated with increased insulin sensitivity and thus a healthy metabolic phenotype will be tested through a rigorous placebo controlled albendazole trial within households. In addition, through questionnaires all lifestyle and behavioral data will be gathered in the Ende district. The consortium is acutely aware of the urgent need for specialized statistical models to deal with complex datasets that will be generated and therefore takes the important step of creating a project dedicated to development of methods that can be utilized for the gathered information. The information is complex; it encompasses clinical, biochemical and molecular immunological data as well as descriptive details through questionnaires. Each of these has their own special characteristics in terms of distribution, cut off and missing values. By creating the methods to deal with the data, it will be possible to integrate all the data together and to create plausible biological pathways that lead to insulin resistance.

Under this program 4 PhD scholarships are available at the University in the Netherlands

Projects:

Project with reference: JRP-SP1

Randomized Control Trial on the influence of helminth and energy balance on carbohydrate and lipid metabolism

This project aims to assess in a randomized, placebo-controlled treatment design the effect of repeated 3-monthly chemotherapeutic eradication of intestinal helminth infections on insulin resistance and related metabolic parameters.

Project with reference: JRP-SP2

Helminth infections and glucose metabolism: the underlying immunological and inflammatory mechanisms

The project aims to determine the cellular and molecular mechanisms involved in the relationship between helminth infections, inflammation and insulin resistance.

Project with reference: JRP-SP3

Sociocultural environment and health behavior: the impact of urbanization

The project aims to assess the impact of urbanization in Indonesia on health behavior related to cardiovascular risk and by what mechanisms is this influence exerted.

Project with reference: JRP-SP4

Statistical methods for integrated analysis in complex study designs

The project aims to develop the necessary methods and tools for valid and efficient analysis of the data gathered in the project

Your profile:

- Young, enthusiastic and intelligent
- hold a recent MD and MSc in biomedical science (JRP-SP1 & JRP-SP2), MSc in Social Science, e.g. Anthropology (JRP-SP3) and MSc in statistics, biostatistics or mathematics (JRP-SP4)
- Excel academically as shown by a grade transcript and curriculum vitae
- Good level of spoken and written English and excellent communication skills, evidence by IELTS = 6.5 (TOEFL 570 paper-based / 230 computer-based) or equivalent
- willing to stay in the field (Flores Island) of part of your study period
- able to work in a team and within a multidisciplinary research group
- strong motivation to succeed in scientific research
- currently is a lecturer of an Indonesian state or private university and has received a supporting letter from the home institution

Selection process:

The promising candidates will be invited to attend a 2 days workshop (23 and 24 January 2013) and ½ day evaluation (25 January 2013) at UI in Jakarta.

Scholarship:

The PhD students will receive a DIKTI scholarship. The position is initially for 1 year and preferably starting is April 2013. If the evaluation is positive, the contract will be extended to a total 4 years. During the four years, PhD candidates will conduct the fieldwork in Indonesia or set up a database and also study in the Netherlands.

Application:

Application with a motivation letter and a short cv, grade transcripts and English proficiency test score should be sent to: Dr. Taniawati Supali (taniawati@yahoo.com) with cc to Dr. Erliyani Sartono (E.Sartono@lumc.nl)

More information

If you have more questions regarding the application procedure or the project please contact the Indonesian program coordinator Dr. Taniawati Supali (taniawati@yahoo.com) with cc to Dr. Erliyani Sartono (E.Sartono@lumc.nl)