



QUANTITATIVE PATHWAY ANALYSIS OF NATURAL VARIATION IN COMPLEX DISEASE SIGNALING IN *C. ELEGANS*

Within Framework Programme-7 of the European Union a new HUMAN HEALTH collaborative project will investigate the genetic variation underlying human disease pathways in *C. elegans*. Together with European partners we will foster how natural polymorphisms affect gene pathways which are involved in human cancer development. At this stage we have a position for a

PhD-student

at the Laboratory of Nematology, Wageningen University,
PANACEA coordinator

Job description: PANACEA is the first project which focuses on natural genetic variation in disease signaling pathways from a systems biology perspective. The project is based on a recombinant inbred population originating from a cross between the most diverged *C. elegans* wildtypes, Bristol N2 and Hawaii CB4856. Using QTL mapping and high through-put knock-down technologies, the candidate will identify and characterize novel genes and their wildtype alleles affecting gene expression pathways associated with human cancer development. The focus will be on the RAS/MAPK, Notch and Wnt pathways and the temporal dynamics of these gene expression pathways. The aim is to discover new interactions among wildtype alleles in collaboration with other EU partners.

Requirements: For the PhD we are looking for a candidate with an MSc degree in a relevant field (Molecular Sciences, quantitative Genetics) who feels challenged by the aims of this project and has a strong drive for experimental research. Further requirements include:

- a good command of written and spoken English
- excellent writing and presentation skills
- proven ability to organize laboratory experiments
- well developed communicative skills

Facilities: The work will be carried out at the Laboratory of Nematology at the Wageningen University. The Laboratory has already conducted previous studies on mapping and characterizing genes underlying complex traits in *C. elegans*. Excellent facilities exist for studying genetic variation in pathways using high throughput transcriptional profiling and gene expression QTL mapping. Laboratory of Nematology, Wageningen University. URL: <http://www.nem.wur.nl/UK/>

Conditions of employment: Full time position for a period of 18 months initially with a possibility of extension to 4 years. Gross salary will be € 2.000,- per month in the first year rising to €2.558,- per month in the fourth year, according to the collective labor agreement of the VNSU.

Additional information: Additional information about the vacancy can be obtained from Dr. Jan Kammenga, Phone number: +31 (0)317 482998/482197 E-mail address: Jan.Kammenga@wur.nl

Application: Send your application in English with CV and the names of two references to Jan Kammenga, Laboratory of Nematology, Wageningen University, Binnenhaven 5, 6709 PD, Wageningen, The Netherlands, or by email to Jan.Kammenga@wur.nl.