

**Title**

**Postdoctoral and PhD position: Modeling phenotypes resulting from genotypic variation**

**Research**

This 4 years project concentrates on the analysis of the effects of various types of genotypic variation in genomes (SNPs, copy number variation, structural variation) on phenotypic diversity. This project focusses primarily on the effect on mRNA expression in various tissues (cis- and trans-eQTLs) employing rat recombinant inbred strains as an experimental model.

**Job description**

This project consists of large scale experimental data collection using state-of-the-art genomics technologies (next-generation sequencing, paired-end sequencing, optical mapping, digital mRNA and miRNA expression profiling), genome-wide bioinformatic data analysis, data integration and dynamic modelling (transcriptionally regulatory networks). Finally, hypotheses will be validated in targeted experimental setups.

**Location**

The work is embedded in the Cancer systems biology program in collaboration with the Cancer Genomics Center ([www.cancergenomics.nl](http://www.cancergenomics.nl)) and is performed in the Genome Biology Group at the Hubrecht Institute ([www.niob.knaw.nl](http://www.niob.knaw.nl)) in Utrecht, The Netherlands. The group has a long track record in functional genomics research, combining both experimental and bioinformatic approaches to study natural occurring and induced genetic variation.

**Requirements**

Candidates should fulfill the following criteria.

- \* For the PhD position: a completed masters program in a biological, biomedical, or bioinformatics direction with documented experience in and affinity with bioinformatics
- \* For the Postdoc position: a Ph.D. in molecular biology, computational biology or bioinformatics. Bioinformatic experience is a prerequisite.

**Conditions of Employment**

You will be employed by the Hubrecht Institute for a fixed period of 4 years. Your starting salary will be up to a maximum of 2492 (PhD) or 3315 (Postdoc) Euro gross per month, depending on your level of experience.

**Contact**

prof dr Edwin Cuppen  
Hubrecht Institute  
Uppsalalaan 8  
3584 CT Utrecht  
The Netherlands  
phone +31 30 2121969  
mail e.cuppen@niob.knaw.nl

**Website**

<http://www.niob.knaw.nl/researchpages/cuppen>

**Applications**

prof dr Edwin Cuppen  
Hubrecht Institute  
Uppsalalaan 8  
3584 CT Utrecht  
The Netherlands  
e.cuppen@niob.knaw.nl

Applicants should send a CV, list of publications and the names and addresses of at least two persons that can be approached to obtain further information.

**Closing time**

October 31, 2008