

PostDoc Bioinformatics M/V 1,0 fte

Project description.

Your aim will be to establish a flexible data integration scheme in which transcriptomics, proteomics, metabonomics, and microRNAs are represented. These data are to be analyzed and correlated with state-of-the-art bioinformatics tools in order to develop *in silico* prediction models for genotoxicity, carcinogenicity and hepatotoxicity caused by chemical compounds, and also to gain mechanistic information on the modes-of-action for these agents.

Through other projects a wealth of transcriptomics data (mRNA) is/becomes available for several classes of genotoxicants, carcinogens and controls in human HepG2 cells and mouse primary hepatocytes. These studies will be extended with more compounds, with transcriptomics of miRNAs, with mechanistic studies related to transcriptional regulation of key genes/pathways/processes and with proteomics and metabonomics. Data collected from published transcriptomics, proteomics and metabonomics studies on chemical carcinogens, from animal studies and *in vitro* studies are to be included as well.

This research project is part of major research program from the Netherlands Toxicogenomics Centre. It will be done under your supervision together with a technician and in collaboration with many partners in Maastricht, other universities and research institutes in the Netherlands.

What we seek.

A creative **postdoc** [1.0 fte] with a PhD in biology or bioinformatics and a strong background in molecular biology and cell biology. Previous experience in computational genomics and demonstrated skills in scripting languages as applied to genome-wide analysis are essential.

What we offer

This concerns a fulltime position for 5 years. The salary will be dependent on relevant experience.

Information and applications.

You will be appointed at Maastricht University, Maastricht, The Netherlands

For inquiries:

Dr. J.H.M. van Delft (043-3881092, j.vandelft@grat.unimaas.nl)

Department of Health Risk Analysis and Toxicology, Maastricht University, PO Box 616, 6200 MD Maastricht