Hubrecht Institute

Developmental Biology
and Stem Cell Research

The Hubrecht Institute is a research institute of the Royal Netherlands Academy of Arts and Sciences. Presently there are 23 research groups with a total of about 350 employees and guest researchers. In addition to a highly interactive and international scientific environment, excellent research facilities are available for imaging and functional genomics. Moreover, several model organisms are present, including C. elegans, zebrafish and rodents. The institute is situated at the Utrecht Science Park. The Hubrecht Institute is affiliated with the University Medical Center Utrecht and has close connections with Utrecht University, e.g. in the graduate school Cancer, Stem cells & Developmental biology.

The group of Prof Wouter de Laat currently has a vacancy for a

(Bio)statistician, computational biologist or data scientist (postdoc)
full time (38 hours/week)

To work on: Methodological development of novel genetic diagnostics

Description of the project:
Currently, pregnant couples that carry a severe genetic disease (e.g. cystic fibrosis, thalassemia, Duchenne, etc.) need to undergo invasive amniocentesis or chorionic villus sampling to determine if their child inherited their genetic abnormality. Such invasive procedures are perceived as burdensome, also because they carry a procedure-related small risk of miscarriage. In collaboration with biotech company Cergentis, the UMC Utrecht and various other Dutch academic medical centers, we recently introduced an alternative to these common invasive practices and showed a proof of principle for a novel Non-Invasive Prenatal Diagnosis test (NIPD, Vermeulen et al., AJHG 2017) that requires a simple non-invasive blood test to perform aforementioned genetic tests. In this project we will further optimize this method and will focus on the statistical and computational aspect of this innovative method to deliver a robust framework that ultimately facilitates its implementation in routine diagnostics across medical centers in the Netherlands.

Through this project you may participate in other cutting-edge research in Biomedical genomics department of the Hubrecht institute that aims to increase our understanding of human genetics through development of novel genomic technologies.

Requirements: We are looking for a statistician with experience in programing/scripting languages or otherwise a programmer with strong background in statistics. In particular, we seek a candidate with:

- MSc/PhD degree or equivalent in Statistics, Mathematics, Bioinformatics or Life sciences, or related fields. Otherwise a minimum of 2 years' experience in statistical analyses or programming.
- Experience with programing in either R, Python, C or C++ languages.
- General knowledge of biology and experience in working with biological datasets is a plus.
- Proactive attitude in learning related topics that may be from outside his/her comfort zone.
- Team player mentality and experience (or interest) in working in a multidisciplinary environment.
- Verbal and written communications skills in English.

Duration: one year, with the possibility to extend for one more year.

Starting date: October 2020, or as soon as possible.

Salary: According to “CAO-Nederlandse Universiteiten” (CAO-NU), depending on experience, excluding 8% holiday allowance and an 8.3% year-end bonus. We offer an extensive package of fringe benefits.

Location: Utrecht Science Park, De Uithof.

Information: For additional information please contact Prof. Wouter de Laat, w.delaat@hubrecht.eu or visit the website www.hubrecht.eu.

Interested? Please send your application including CV and contact details of two potential references, before September 27th, 2020 to vacancies@hubrecht.eu, stating vacancy **HUBR-2020-12** in the subject line.

Any acquisition further to this advertisement will not be appreciated.