



The Hubrecht Institute is a research institute of the Royal Netherlands Academy of Arts and Sciences. Presently there are 19 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 Drosophila, 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. Dr. Catherine Rabouille currently has a vacancy for a

PhD student

full time (38 hours/week)

Project description Cells react to environmental stress by forming non-membrane bound pro-survival stress assemblies that store and protect key cellular components. Recently, we have identified a novel pro-survival stress assembly, the Sec bodies that forms in Drosophila S2 cells upon amino-acid starvation (Zacharogianni, M., A. Aguilera, J. Smout, T. Veenendaal, M. van Oorschot and C. Rabouille. 2014. *A reversible non-membrane bound stress assembly that confers cell viability by preserving COPII components during amino-acid starvation. Elife 3: e04132*). The formation of Sec bodies is controlled by specific post-translational modifications including the mono-ADP-ribosylation of Sec16 by PARP16. This modification is sufficient to trigger Sec body formation and as such PARP16 is a key factor for surviving amino-acid starvation (Aguilera-Gomez A., M. van Oorschot, T. Veenendaal and C. Rabouille. 2016. *In vivo visualization of mono-ADP-ribosylation by dPARP16 upon amino-acid starvation. Elife 3. pii: e21475. doi: 10.7554/eLife.21475*). You will participate in a project that investigates further aspects of this response, both in cells and in Drosophila. The project will lead to fundamental and cell biological understanding of this novel stress response entity. To do this, we use cell culture and manipulation, fly genetics, microscopy (immunofluorescence, live cell imaging, electron microscopy), molecular biology (cloning), and biochemical methods (protein purification, antibody generation, gel electrophoresis, Western blot) and others.

Requirements: We are looking for an outstanding PhD candidate (Master of Science or equivalent qualification) with a strong background in genetics and molecular biology. The candidate should be passionate about biology, curious, and highly motivated. Fluency in English is required. The application should include a letter of motivation, a CV with two references, and a short summary of his or her Master thesis. An interview and a presentation at the Hubrecht Institute will be part of the selection procedure.

Duration: Four years

Start of the project: 15 March 2017 (with the possibility of postponing starting date for a few weeks)

Project Supervisor: Catherine Rabouille



Hubrecht Institute

Developmental Biology
and Stem Cell Research

Salary: According to “CAO-Nederlandse Universiteiten” (CAO-NU) € 2.191,- in the first year, increasing to € 2.801,- in the fourth year, 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 Catherine Rabouille at c.rabouille@hubrecht.eu

Interested? Please send your application including a motivation letter, curriculum vitae and contact details of two potential references, before February 8th, 2017 to vacancies@hubrecht.eu, stating vacancy **HI-2017-02** in the subject line.

Any acquisition further to this advertisement will not be appreciated.