



CBS FUNGAL BIODIVERSITY CENTRE

The Fungal Biodiversity Centre (CBS) is an independent research institute of the Royal Netherlands Academy of Arts and Sciences, situated on the campus of the largest university in the Netherlands (Utrecht). It studies fungal biodiversity in the widest sense, focusing on three priority areas, agriculture, human health, and industry (indoor air and food). Presently there are 5 research groups with a total of about 80 employees. The institute maintains a large culture collection of fungi and yeasts, and research groups such as those of Pedro Crous (Evolutionary Phytopathology), Robert Samson (Applied and Industrial Mycology), Sybren de Hoog (Origins of Pathogenicity in Clinical Fungi), Teun Boekhout (Yeast and Basidiomycete Research), Ronald de Vries (Fungal Physiology) and Vincent Robert (Bioinformatics). Additional information is available on our website: www.cbs.knaw.nl.

The CBS invites applications for:

2 PhD- Students

full time (38 hours/week)
to work on:

Harvesting nature's bounty: Efficient prospecting of fungi for the bio-based economy

Description of the project:

Conversion of plant biomass into bio-fuels and -chemicals is a crucial aspect of the move to a bio-based economy. Fungi are major players in these processes due to their ability to degrade plant biomass into monomeric components. However, the strategies used by fungi differ significantly and are likely related to the substrate composition of their respective biotopes. To be able to develop more efficient fungal-based applications it is crucial to obtain more detailed fundamental knowledge of the mechanisms underlying the fungal strategies.

The aim of this project is to understand the different strategies used by fungi to degrade plant biomass, focussing in particular on regulatory systems, extracellular enzymes and carbon metabolism. This topic will be addressed in detail in a number of selected fungi that have been shown to have different strategies. The positions are part of a highly interactive project involving 4 PhD students and 1 postdoc.

Requirements: The highly motivated candidates should have an MSc degree, excellent communication and social skills, a team-player attitude and affinity with fungal physiology. Knowledge of standard molecular laboratory techniques such as gDNA isolation, PCR, cloning and sequencing as well as a basic understanding of biochemistry is required.

Duration: Four years.

Salary: According to "CAO-Nederlandse universiteiten" (CAO-NU): € 2.042,- in the first year, increasing to € 2.612,- in the fourth year, excluding 8% holiday allowance and a 8.3 % year-end bonus.

Location: Utrecht.

Information: For additional information please contact Dr Ronald de Vries r.devries@cbs.knaw.nl or visit the website www.cbs.knaw.nl.

Interested? Please send your application including curriculum vitae and contact details of two potential references to Dr R.P. de Vries, CBS Fungal Biodiversity Centre, Uppsalalaan 8, 3584 CT, Utrecht or by e-mail to vacancies@hubrecht.com, stating vacancy **CBS-2013-01** in the upper left corner of the envelope or in the subject line, respectively.

Any acquisition further to this advertisement will not be appreciated.