

POSTDOCTORAL FELLOWSHIP IN HORTICULTURAL SCIENCE

Project Title: Pre-harvest factors and non-destructive determination of mealiness in 'Forelle, pears.

Applications are invited for one **postdoctoral fellowship available in the Department of Horticultural at Stellenbosch University.** The research aims to study preharvest factors involved in the development of 'Forelle' mealiness as well as further explore x-ray computed tomography as a non-destructive and destructive method of describing fruit that will become mealy as well as differences in fruit tissue density within the canopy. This research also aims to further explore the accuracy and potential semi-commercial colour sorting of 'Forelle' pear in the prediction of mealiness as well as note the percentage of fruit damage as a result. This research is conducted within the Postharvest Innovation Programme, an industry-government partnership and carries an associated full grant-holder bursary for the successful applicant.

Requirements:

The candidate is required to have the following qualifications and profile:

- PhD (obtained within the last five years).
- Motivation and willingness to conduct field and laboratory experiments.
- Conduct research as a team and support students working on the project.
- Strong proficiency in data analysis techniques, preferably with competences in multivariate data analysis (PCA, PLS regressions, PLS-Discriminant analysis) as well as x-ray computed tomography (x-ray CT) data analysis techniques (eg. VGStudio Max, CTAnaliser, Avizo Fire).
- English language (spoken and writing).
- Valid driver's licence.

The fellowship will be tenable in the Department of Horticultural Science (Lombardi Building, Victoria Street). The value of the fellowship will be R 220 000 per annum up to 31 December 2017. Remuneration for 2016 will be calculated from the starting date pro-rate on the remainder of the 2016. Postdoctoral research fellows are not eligible for employee benefits since they are registered as research fellows and their bursaries are awarded tax free. The successful candidate will be required to comply with Stellenbosch University's approved policies, procedures and practices during the tenure.

Commencement of duties: As soon as possible

Closing date: 23 September 2016 or when a suitable candidate has been found.

Enquiries: Send a letter of application, accompanied by a comprehensive curriculum vitae, including list of publications and the names and contact details of at least two referees, to Dr Elke Crouch at the following e-mail address: <u>elke@sun.ac.za</u> (+27 21 808 4900).

Applicants should request their referees to forward confidential reports by the closing date direct to the same address.