Scientific assistant

Project description

When pears are stored under too low oxygen conditions their energy metabolism changes dramatically. This may result in storage disorders such as off-flavours, browning and the development of cavities. Gas exchange of the fruit with its storage environment plays an important role in this. The objective of this project is to construct a metabolic network model for the respiratory metabolism of pear protoplasts and mitochondria to obtain a deeper insight into respiratory and fermentative metabolic pathways in relation to storage disorders. The model will be based on the stoechiometry of the most important biochemical fluxes. Proteomics data will be available to facilitate the parameter estimation of the network model. The purpose of the model is to evaluate the effect of changing gas conditions on respiratory and fermentative pathways in silico.

The candidate

Graduate candidates with both an interest and preferably experience in proteomics or bioprocess modelling may apply.

Further information

Interested candidates are asked to contact or to send their CV towards: Bart Nicolaï, KU Leuven, Dept MeBioS, De Croylaan 42, B3001 Heverlee, Belgium, phone: ++32 16 322375 Or by e-mail: <u>bart.nicolai@biw.kuleuven.be</u>

