

POSITION FOR 1 POSTDOCTORAL RESEARCHER

Developing multipurpose *Nicotiana* crops for molecular farming through metabolic engineering with new plant breeding techniques

The VIB Center for Plant Systems Biology (PSB) is a world-leading plant science institute located at the heart of a renowned Plant Biotech campus in Ghent, Belgium. Please visit us at www.psb.ugent.be for more information.

The group of Specialized Metabolism (<https://www.psb.ugent.be/specialized-metabolism>), led by Prof. Alain Goossens at PSB, is looking to recruit 1 highly-motivated postdoctoral researcher. The Goossens lab focuses on the characterization of plant signalling pathways that steer the biosynthesis of high-value bioactive metabolites in crop, medicinal and model plants. Simultaneously, this group aims to generate new tools for the engineering of plant metabolic circuits towards the production of bioactive metabolites that can be exploited by humans as drugs, therapeutics, nutraceuticals, pesticides, flavours, fragrances, cosmetics, etc.

For this position the candidate will be involved in a project that aims to identify and characterise the genes that encode for enzymes catalysing missing steps in *Nicotiana* alkaloid biosynthesis. This knowledge will be used to engineer *Nicotiana* prototypes with altered alkaloid profiles and the capacity to deliver valuable speciality chemicals. The latter will also involve 'organelle engineering' to increase the biochemical potential of *Nicotiana* plants. This will be achieved with the use of the CRISPR-Cas9 genome-editing technology. This project forms an integral part of the EU Horizon 2020 large-scale collaborative project Newcotiana that comprises research partners from all over Europe.

For this challenging position, we are looking for a talented and motivated candidate with a PhD degree in bio-engineering, biochemistry/biotechnology or molecular biology. A publication record in peer-reviewed journals, expertise in the areas of plant molecular biology, plant biotechnology, plant biochemistry, functional genomics, metabolic engineering and/or synthetic biology, as well as experience in guidance of master and/or PhD students are assets.

We offer a 3-years position, an internationally competitive package and access to state-of-the-art infrastructure and services.

Please submit your application with your CV, a one-page summary of your past research activities, a one-page motivation letter, and the names and contact details of 2 to 3 references on the VIB jobs website (<http://www.vib.be/en/jobs/Pages/default.aspx> or

<https://vibvzw.jobsoid.com/j/10764/postdoctoral-researcher-metabolic-engineering-of-multipurpose-nicotiana-crops-with-genome-editing>).

The position is available from April 1, 2018 on. Applications are welcome until the position is filled.

The Department of Plant Systems Biology belongs to the Flanders Institute for Biotechnology (VIB) and the Ghent University (UGent), both equal opportunity employers.