

A PhD position in metabolomics and nutritional sciences

In collaboration with Agroscope at the Federal Office of Agriculture, Wageningen University is offering a **PhD position** in the fields of biomarkers, metabolomics, and human nutrition. The PhD thesis will be centered on the Cardioferment project whose objective is to associate acute markers of intake of fermented foods with cardiometabolic factors in a real-life observational cohort. The project will use existing data from a series of short-term human intervention studies with dairy products (acute and two-week) in which putative biomarkers of fermented dairy foods have been established. The Cardioferment project will validate these data in a prospective cohort nutritional study "Nutrition Questionnaire plus" (NQplus) (Sluik et al, BMJ Open 2016 6:e010437). NQplus is an ongoing longitudinal study on diet and health in the Netherlands following, since 2011, 2,048 men and women (20-77 years). The NQplus cohort is characterized by multiple dietary assessments as well as anthropometric, cardiometabolic, blood and urine measurements.

The Cardioferment project will encompass: (i) the analysis of the dietary patterns of the NQplus study participants, focusing on consumption of fermented foods/ fermented dairy products, (ii) the association of anthropometric measures and cardiometabolic markers to dietary patterns, and (iii) urine and serum metabolomics on a selected number of participants by GC-MS and LC-MS.

The PhD will use the metabolomics data to confirm biomarkers of food intake before investigating nutritional biomarkers of health, by associating biomarkers of the intake of fermented foods and fermented dairy products with anthropomorphic and cardiometabolic measures of the NQplus cohort.

Applicants for this PhD position should hold a master degree in a biological or nutritional or food sciences, ideally with a knowledge of bioinformatics analysis including R programming. Applicants should be strongly interested in multidisciplinary work and experimental analyses of large datasets. Excellent knowledge of English is required and German would be an asset.

The start of the project is planned in the second quarter of 2018.

The PhD will be directed by **Prof. Edith Feskens**, Division of Human Nutrition, Wageningen University, The Netherlands, and co-directed by PD **Dr. Guy Vergères**, Food Microbial Systems Research Division of Agroscope, Switzerland. The **scientific coordinator** of Cardioferment will be Dr. Kathryn Burton. The PhD thesis will run for three years and consist of nutritional, clinical and food composition assessments in the laboratories of WU (~9 months), urine and serum metabolomics in the laboratories of Agroscope (~9 months), data analysis (12 months), and synthesis (~6 months).

The conditions of the PhD theses follows the regulations of the Food Technology Agrobiotechnology Nutrition and Health Science (VLAG) of Wageningen University, The Netherlands. Further details can be obtained from Prof. Feskens, edith.feskens@wur.nl, or Dr. Vergères, guy.vergeres@agroscope.admin.ch

If interested, please send your application, including CV, letter of motivation and contact details of references, until April 20 2018 via mail to **PD Dr Guy Vergères**, Head of Research Group Fermentomics, Agroscope, Schwarzenburgstrasse 161, CH-3003 Berne, Tel. +41 (0)58 463 81 54, guy.vergeres@agroscope.admin.ch