ABSTRACT

For centuries, perishable food products are fermented primarily for conservation purposes. Even since other conservation techniques are available, fermented foods are produced because of their desired organoleptic properties. Using microbiological techniques, the microorganisms performing the fermentation processes have been identified as species of lactic acid bacteria, acetic acid bacteria, coagulase-negative staphylococci, yeasts, etc. In recent years, high-throughput DNA sequencing technologies allow to investigate food fermentation processes in a much greater detail, and this for the whole microbial fermentation ecosystem in which all species act together as well as for single microbial species involved in the fermentation processes. This knowledge contributes to the understanding and improvement of the fermentation processes and the products obtained by applying well-selected functional starter cultures. Examples will be given on cocoa bean fermentation and water kefir fermentation.

Omics in food fermentation processes: tradition meets technology

on Thursday, October 10, 2019, at 17h30
in Auditorium I0.02, Building I, Brussels Humanities, Sciences & Engineering Campus Vrije Universiteit Brussel
Pleinlaan 2, 1050 Brussels

How to reach the campus? See http://tiny.cc/8cnocz

The inaugural lecture will be followed by a reception at 18h30 in the Atrium of Building I

Please confirm your attendance before October 1, 2019 (stefan.weckx@vub.be)

BIO

Prof. Dr. Stefan Weckx is associate professor at the Faculty of Sciences and Bioengineering Sciences of the Vrije Universiteit Brussel since 2019. He obtained a MSc. in Biochemistry in 1996 and a PhD in Sciences in 2004, both at the University of Antwerp, Belgium. As PhD student, he stayed as a Marie-Curie training fellow at the European Bioinformatics Institute in Hinxton, Cambridge, UK. After obtaining his PhD, he was postdoctoral fellow at the MicroArray Facility of VIB in Leuven, Belgium. In 2006, he joined the Research Group IMDO of the Vrije Universiteit Brussel as postdoctoral fellow. He was IOF business developer from 2006 to 2014. In 2014, he became a tenure track lecturer. He supervises the molecular (micro)biological research and initiated research on (meta)genomics and bioinformatics to investigate food fermentation processes and promising strains isolated from those fermentation matrices. He teaches courses in omics, bioinformatics, industrial biotechnology, and industrial systems biology. He is involved in policy on High-Performance Computing at the Vrije Universiteit Brussel and the Flemish Supercomputer Center.