

SU partners with overseas research institute to study 'drivers of liking'

The Food Science Department and the Institute of Wine Biotechnology (IWBT) at Stellenbosch University (SU) have both teamed up with Nofima, Norway's most prominent research institute in the food sector, in an exciting four-year international research project that will focus on exactly why consumers are more likely to buy one product than another. The scientific part of the project, which will run from 2009 to 2012 and has been dubbed ConsumerCheck, will be headed by Prof Tormod Næs, a statistician and Principal Research Scientist at Nofima. SU is one of four international research partners that were identified by Nofima to join the project. The other partners comprise the Danish Technical University, the Commonwealth Scientific and Industrial Research Organisation Australia and Logic8, based in the Netherlands. The Norwegian division is financed by the National Science Foundation there and by Norwegian food industries. The international research partners will be responsible for finding their own local industry partners to work with and generate funding for their research. The researchers involved in the project will be studying the relationship and interaction between sensory and consumer data using preference mapping as one of the statistical techniques. They will thus construct preference maps to increase understanding of what the drivers of liking are for selected products. They will also draw on another statistical technique known as conjoint analysis. This can be used for studying the effect of several extrinsic design variables on consumer acceptance, such as packaging, health information and price. However, says Prof Næs, the challenge of this research project will be working out how to combine preference mapping and conjoint analysis mathematically. "This project will develop and apply methodology for the purpose of identifying the main drivers of liking, their interactions and their optimal combinations," he says. The project will therefore focus on concrete problem-solving for industrial partners and on method development, in particular experimental design and analysis methodology, and on the development of easy-to-use software tools. Nofima and a Danish partner have just completed a related project in which a software package called PanelCheck was developed. The software, which is freely available to industry and researchers on Nofima's website, assists sensory scientists in the analysis of sensory data, especially in the testing of whether data are reliable. Nofima, explains Prof Næs, has always focused on issues such as the quality of food products, product development and the safety standards of food and beverages. "The goal of Nofima is to help the Norwegian food industry to improve its food quality," he says. Nofima also collaborates widely on research issues. Prof Næs has shared a five-year relationship with SU. He has furthermore presented workshops focusing primarily on specialised chemometric techniques and has collaborated with SU on research projects. "It's important to have good collaboration because it's always fruitful to develop and learn from each other. This helps one to do better research and to write more and better papers," says Prof Naes. "My hope is that SU will be able to create a network of researchers so that, together, we can do something that, alone, we would never have done."

With Prof Tormod Næs from Nofima (second from the right) are Dr Jessy van Wyk from the Cape Town University of Technology, Dr Andreas Tredoux from the IWBT, Dr Hélène Nieuwoudt from the IWBT and Nina Muller from the Department of Food Science (Photo: Anton Jordaan, SSFD)

