Current position: Assistant Professor, Department of Biology, University of

Minho, Braga, Portugal

Education: PhD in Applied Microbiology, Lund University/Institute of Technology, Lund, Sweden (2002). Advisor: Bärbel Hahn-Hägerdal

Nonscientific interests: Long distance running, Kitcars, Python programming

My PhD work involved metabolic engineering of D-xylose fermenting *Saccharomyces cerevisiae* strain especially the importance of the non-oxidative pentose phosphate pathway and cellular NADPH supply for high ethanol yields.

My current research and that of my group involves efficient metabolism of pentoses and pentose sugar polymers as well as production of new biotechnologically interesting molecules. This work often involves assembly and expression of large (15-20 genes) heterologous pathways.

We developed the yeast pathway kit in order to aid the planning and assembly large yet compact metabolic pathways. Our tool and others like it are necessary for further advancing synthetic biology in this important industrial microorganism.

We hope that our work will contribute towards the future development of a green economy through the production of fine chemicals by fermentation processes.