



Session	TO-BE-START-UPS looking for Finance: pre-seed/angel/seed funding and/or partners
Title	Leave them snails be - A friendly approach to the production of complex Mucin proteins
Company	Mucin Impossible
Speaker	Wanisha Bhoelai
	Astrid de Vries
Keywords feedstock (max. 2)	Simple sugars
Keywords technology (max. 2)	Directed evolution
Keywords End-Product (max. 2)	Mucin proteins
Abstract:	
Mucins are complex glycoproteins. Currently, many are extracted from snail slime. Although animal friendly extraction methods are being developed, Mucin Impossible believes in developing methods which provide more stable production of higher quality Mucin proteins completely animal-free. Mucin Impossible strives to produce Mucin proteins with sequential batch bioreactors extensively monitored and controlled by innovative Process Analytical Technology (PAT) solutions and a ground breaking software model enabling precise directed evolution. The cultivation method has been validated academically and Mucin Impossible aims to adapt this technology specifically for Mucin production. The end product consist of different types of Mucins from relatively low cost feedstocks. The first application will be cosmetics because of proven hydration properties of mucins, a well established application. Further development will focus on medical applications of mucins for clinical use on eyes, in the gastrointestinal tract and to bio-lubricate artificial joints. We are looking for pre-seed funding to perform the first studies to design and build a proof-of-concept production process on a small scale. Access to research infrastructure has been secured as well as commitment of the original inventor of the cultivation technology.	