Objective

Certain oleaginous yeasts are naturally able to accumulate large amounts of lipids (fats) in their cells and these cells make excellent feedstock for biodiesel production. We are attempting to make this process more cost effective by boosting the productivity of yeast through metabolic engineering and process improvements.

Project Details

We are developing the food-safe yeast, *Yarrowia lipolytica*, in our lab to accumulate large amounts of lipid in their cells. While they are already efficient in doing this, a large improvement is needed to turn this into a cost effective process. You could contribute to this goal by investigating the use of food waste as a nutrient source, through genetic engineering of the organism to elevate lipid production or process design to reduce production costs.

Prerequisites

No prerequisites are needed but you will be interested in learning new experimental techniques, be creative and happy to work with (safe) yeasts.

Additional Information

Applicants may be required to attend an interview.