Graduate student awarded “Best Student Poster” at Society of Industrial Microbiology and Biotechnology Annual Meeting

The 2021 Carol D. Litchfield Best Student Poster Presentation in Metabolic Engineering was awarded to Jacob Fenster (CU Boulder).

Jacob’s poster was titled: “Dynamic Control of the Beta-ketoadipate pathway, In-situ Efflux Pump Engineering, and High-throughput Functional Genomics in *Pseudomonas putida* KT2440 with CRISPR-Cas9 Tools”.

Abstract: *Pseudomonas putida* KT2440 is a promising chassis for the renewable conversion of lignin into commodity chemicals. While this organism has a wealth of genetic tools available, high-throughput (HTP) experiments that enable forward engineering have not yet been published in this organism. As current microbial engineering efforts rely on the Design, Build, Test cycle to generate desirable production phenotypes, it is critical to deploy HTP capabilities in this organism to domesticate this host. Towards this goal, this work seeks to leverage CRISPR-Cas9 technologies to demonstrate HTP capabilities on various biotechnologically relevant targets.

The five best poster presentation awards were given in each of the Society’s core areas: Biocatalysis, Environmental Microbiology, Fermentation and Cell Culture, Metabolic Engineering, and Natural Products. The posters were judged onsite by special members of the Awards and Honors Committee at the annual meeting.

https://sim.confex.com/sim/2021/meetingapp.cgi/Paper/44269

Jacob Fenster