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Transcriptome analysis of *Stichococcus bacillaris* strain siva2011

Michael Wilde and Ganapathy Sivakumar
University of Houston, USA

Stichococcus bacillaris strain siva2011 biosynthesizes significant amounts of jet fuel-range lipids. However, the genomic information for its lipid metabolism is unavailable. In order to improve fatty acids or triacylglycerols (TAGs) production in *S. bacillaris* strain siva2011 via metabolic engineering, the fatty acid and TAG pathways' genes need to be screened. Thus, the objective of this research was to identify the fatty acid genes likely controlling biosynthesis in *S. bacillaris* strain siva2011. Identifying *S. bacillaris* strain siva2011 genes that encode for fatty acids could allow comprehensive characterization of this pathway and knowledge-based modification of lipid metabolism. We will present the transcriptome data of *S. bacillaris* strain siva2011.

Biography

Biography Sivakumar's research is primarily focused on biotech implications and applications of high-value natural products. He has extensively studied the plant-based small molecules pathway biochemistry, synthetic biology and metabolic & bioprocess engineering. He is internationally recognized in the field of biopharmaceuticals and a pioneer in industrial-scale production of bioactive molecules. He has over 40 publications. He is also on the editorial board of several journals. He serves as an expert of grant proposals as well as numerous scientific journals. His laboratory focuses on metabolic and bioprocess engineering of colchicine pathway and developing potential anticancer medicine. In addition, his group is interested in developing biofuels to address energy and environmental problems

sganapa3@central.uh.edu

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