

Uptake and metabolism of exogenous fatty acids



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Key Publications and Presentations:

Germann, M. Gallo, C., Donahue, T., Shirzadi, R., Stukey, J., Lang, S., Ruckenstein, C., Oliaro-Bosso, S., McDonough, V., Turnowsky, F., Ballian, G., and Nickels, J.T. Jr. Characterizing sterol defect suppressors uncovers a novel transcriptional signaling pathway regulating zymosterol biosynthesis. *J. Biol. Chem* (2005) Oct 28;280(43):35904-13

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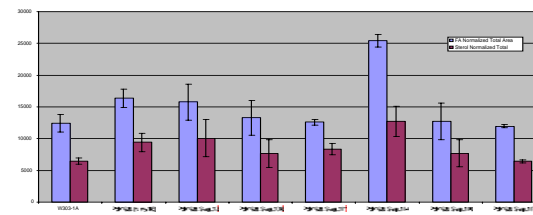
McDonough, V.M., Stukey, J., Cavanagh, T. Mutations in *erg4* affect the sensitivity of *Saccharomyces cerevisiae* to medium chain fatty acids. 2002. *Biochim. Biophys. Acta* 1581 (3):109-118

Swain E, Baudry K, Stukey J, McDonough V, Germann M, Nickels JT Jr. Sterol-dependent Regulation of Sphingolipid Metabolism in *Saccharomyces cerevisiae* (2002) *J Biol Chem* 277(29):26177-84

Yeast Cells Lacking the *ARV1* Gene Harbor Defects in Sphingolipid Metabolism: Complementation by Human *hARV1*. (2002)

Swain, E., Stukey, J., McDonough, V., Germann, M., Liu, Y., Sturley, S.L., Nickels, J.T. . *J. Biol Chem.* 277(39):36152-60

In my lab, we employ a molecular and biochemical approach to investigate how cells acquire fatty acids from their environment and traffic them for metabolism using the model eukaryote *Saccharomyces cerevisiae*.



111-9-3 bottom

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GANTTGTTCATGTGANTNANGNTTTTCGTATAGNNTTATCTTT
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GAATACAGAGAGACCAACCTGCTTTCATAACACGGTCCATA
AAGCGCACCAATGCCATNNCCAAGTGGCAGGGNTTGCCTGA
TGCAAATGGTGCNGGGTTAGTAAACATTTGAACCAATGCAG
GTGTAATAAACGCACCCAACAATNTCCAACCTGAATNNTTCA
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