#### Rowan University Rowan Digital Works

Cooper Medical School of Rowan University Faculty Scholarship

Cooper Medical School of Rowan University

3-30-2022

#### Protein S-acylation as a New Paradigm in Cell Signaling

Darren Boehning Rowan University, boehning@rowan.edu

Follow this and additional works at: https://rdw.rowan.edu/cmsru\_facpub

Part of the Medicine and Health Sciences Commons

#### **Recommended Citation**

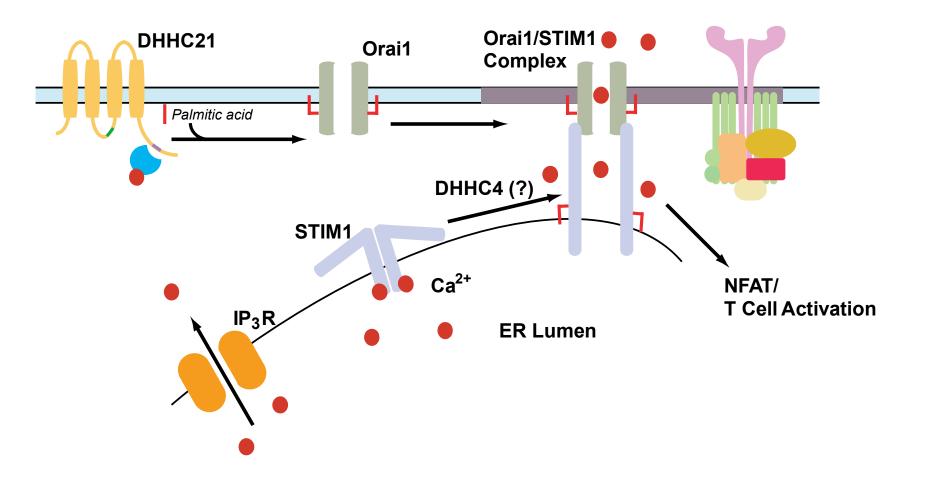
Boehning, Darren, "Protein S-acylation as a New Paradigm in Cell Signaling" (2022). *Cooper Medical School of Rowan University Faculty Scholarship*. 7. https://rdw.rowan.edu/cmsru\_facpub/7

This Presentation is brought to you for free and open access by the Cooper Medical School of Rowan University at Rowan Digital Works. It has been accepted for inclusion in Cooper Medical School of Rowan University Faculty Scholarship by an authorized administrator of Rowan Digital Works.

### Virtual Faculty Research Day 2022

# Fatty acylation of signaling proteins in health and disease

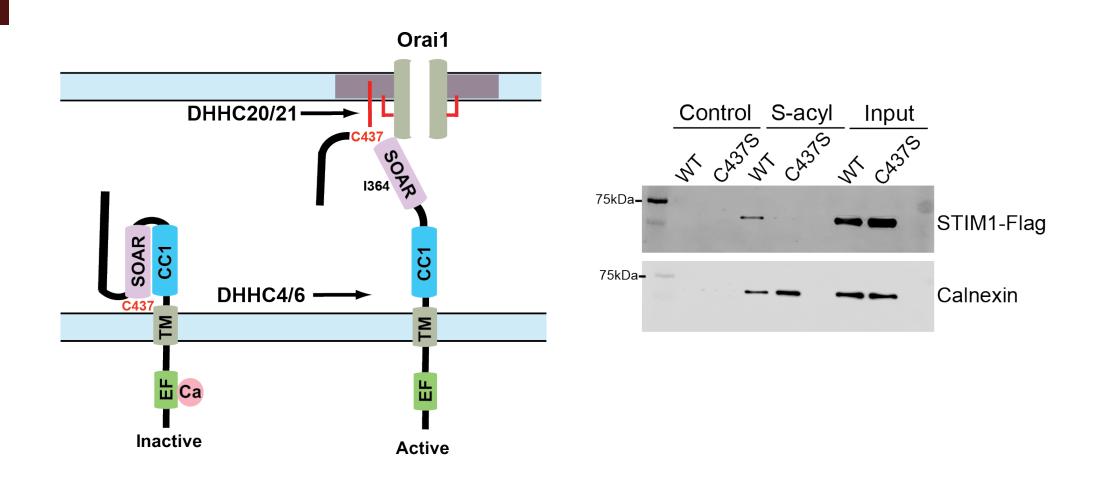
Goutham Kodakandla, PhD Student; Darren Boehning, PhD, CMSRU





### Virtual Faculty Research Day 2022

## The ER Calcium Sensor STIM1 Is S-Acylated at Cysteine 437

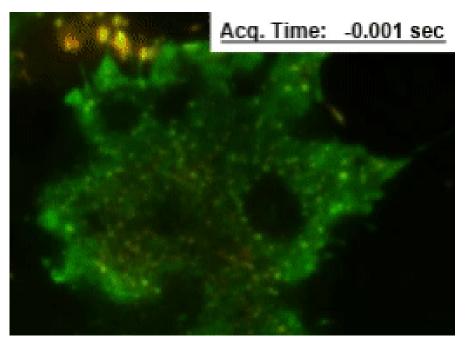


Mutations in STIM1 cause Immunodeficiency 10 (LOF), Tubular Aggregate Myopathy 1/Stormorken Syndrome (GOF)

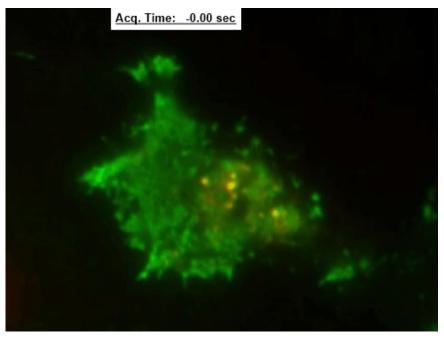


## S-Acylation Of STIM1 Is Required For Assembly With ORAI1

## STIM1 WT; ORAI1



## STIM1 C437S; ORAI1



JBC, *In revision*; bioRxiv (tinyurl.com/2p8t2stf) Goutham Kodakandla (Rowan) Savannah J West, Qiaochu Wang, Michael X. Zhu, Askar M. Akimzhanov (UTHealth Houston) Ritika Tewari (Benaroya Research Institute)



National Institute of General Medical Sciences



