



# METABOLISM AND CELLULAR DECISIONS: ENTWINDEN IN HEALTH AND DISEASE

GUEST LECTURE by



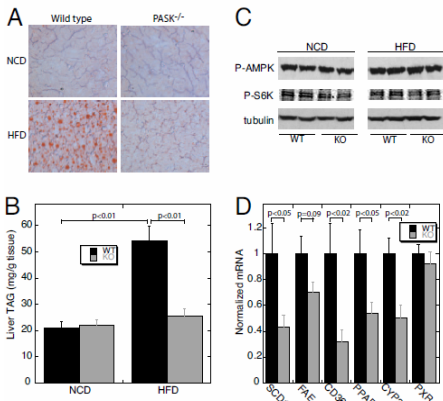
**Prof. Jared Rutter, PhD**

Department of Biochemistry,  
University of Utah, Salt Lake City, USA

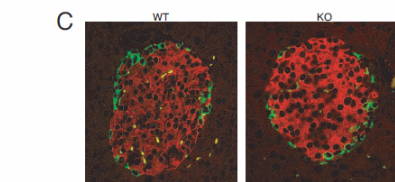
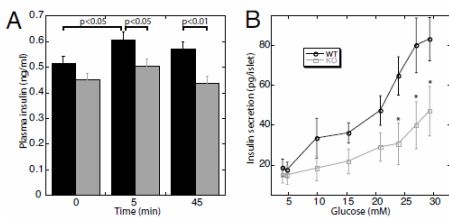
Monday, 30.06.2014

13:00

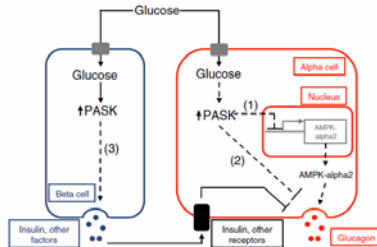
SR 44.22, ZMB-Centre of Molecular Biosciences,  
Humboldtstrasse 48, 2<sup>nd</sup> floor, KFUG



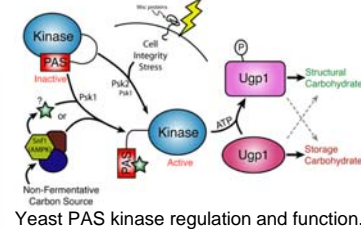
Reduced triglyceride accumulation in PASK<sup>-/-</sup> livers on high fat diet. Hao et al. (2007) PNAS 104(39): 15466-71



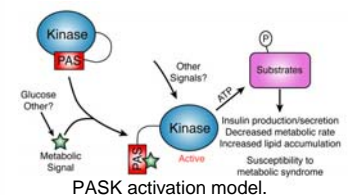
Impaired insulin secretion but normal islet morphology in PASK<sup>-/-</sup> mice. Hao et al. (2007) PNAS 104(39): 15466-71



Proposed mechanism for PASK action in alpha cells. Da Silva Xavier et al. (2011) Diabetologia 54:819-27

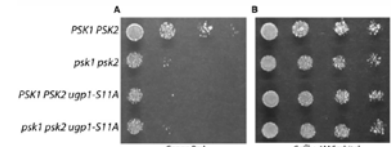


Yeast PAS kinase regulation and function.

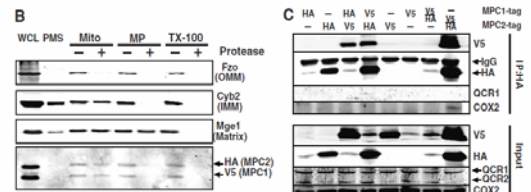
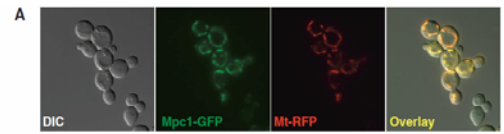


PASK activation model.

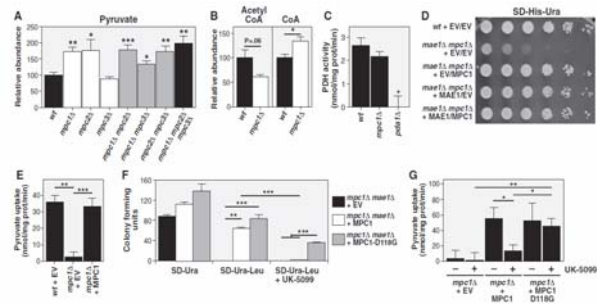
The role of PAS kinase in regulating energy metabolism. Hao & Rutter (2008) IUBMB Life 60(4):1204-9



S11-Ugp1 phosphorylation is required for growth under cell integrity stress conditions. Smith & Rutter (2007) Molecular Cell 26: 491-499



Mpc1 and Mpc2 are evolutionary conserved mitochondrial inner-membrane proteins. Bricker et al. (2012) Science 337:96-100



MPC1 is required for mitochondrial pyruvate uptake. Bricker et al. (2012) Science 337:96-100