



# ACTIVATION AND GATING OF STORE-OPERATED CALCIUM CHANNELS

GUEST LECTURE by

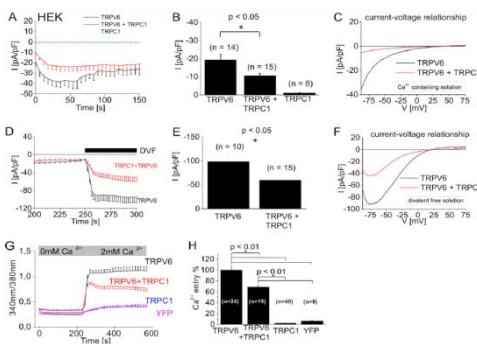


**Dr. Rainer Schindl**

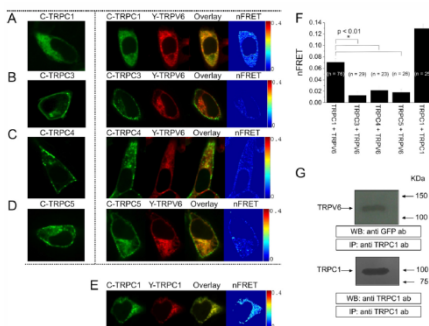
Institute of Biophysics, Johannes Kepler  
University Linz, Austria

Friday, 30.01.2015  
15:00

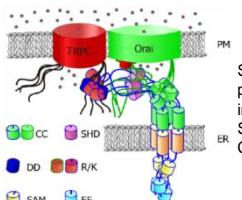
SR 07.11, Preclinics  
Harrachgasse 21, MUG



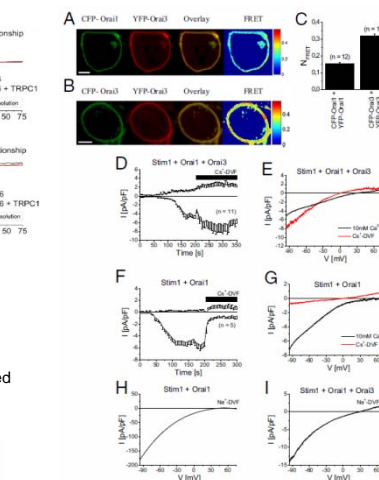
Co-expression of TRPC1 and TRPV6 significantly suppressed TRPV6 currents and  $Ca^{2+}$  entry.  
Schindl et al. (2012) JBC 287:35612-20



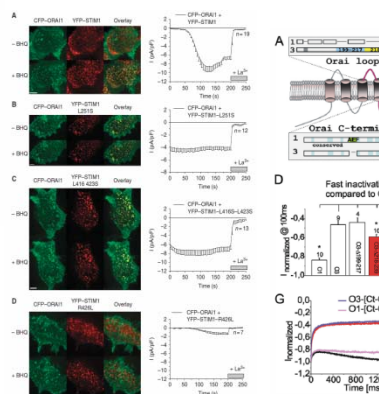
Co-localization and interaction of TRPC1 and TRPV6.  
Schindl et al. (2012) JBC 287:35612-20



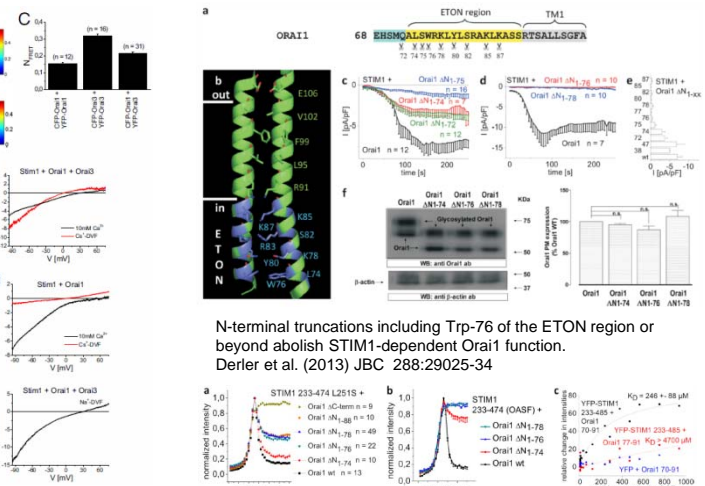
STIM1-Orai coupling and potential TRPC involvement.  
Schindl et al. (2009) Cell Calcium 46:227-32



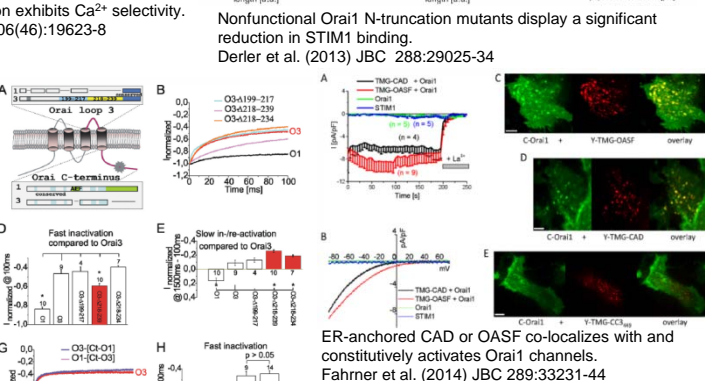
Orai1 and Orai3 co-expression exhibits  $Ca^{2+}$  selectivity.  
Schindl et al. (2009) PNAS 106(46):19623-8



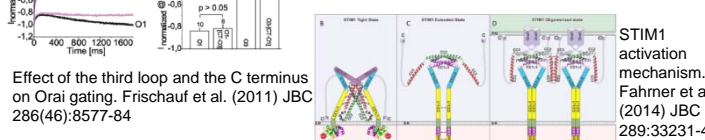
Controlling full-length STIM1 clustering and coupling efficiency with Orai1. Muik et al. (2011) EMBO J 30:1678-89



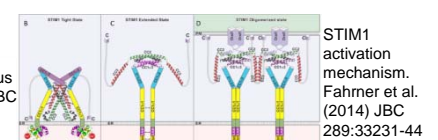
N-terminal truncations including Trp-76 of the ETON region or beyond abolish STIM1-dependent Orai1 function.  
Derler et al. (2013) JBC 288:29025-34



Nonfunctional Orai1 N-truncation mutants display a significant reduction in STIM1 binding.  
Derler et al. (2013) JBC 288:29025-34



Effect of the third loop and the C terminus on Orai gating. Frischauf et al. (2011) JBC 286(46):8577-84



STIM1 activation mechanism.  
Fahner et al. (2014) JBC 289:33231-44