

The Department of Cell Biology and Neuroscience presents:

## Departmental Seminar

# Dr. Stephen Sprang

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### “Effector regulation of G protein activity”

When bound to GTP, G proteins regulate the activity of signaling molecules called effectors. Effectors may have reciprocal effects on G proteins, most commonly by accelerating GTP hydrolysis (thereby leading to dissociation of the G protein from its effector). Earlier work addressed the regulation of adenylyl cyclase by Gas, and more recently, the mechanism by which Ga13 regulates G-protein dependent regulators of cytoskeleton formation. These remarkable effectors activate the small G protein, Rho. At the same time, these effectors deactivate Ga13, resulting in tightly coupled cycles of G-protein activation and deactivation.

**Friday, March 7, 2008 - 2:00pm**  
**108 Ag/Plant Biosciences Building**