

Meili, R., A.T. Sasaki and R.A. Firtel (2005). Rho rocks PTEN. *Nature Cell Biol.* 7:334-335.

Many biological processes require the movement of cells in response to guidance cues. Small GTPases and phosphoinositides are key mediators of the underlying cytoskeletal rearrangements, and a new study establishes that the localization and activation of the phosphoinositide phosphatase PTEN at the rear of chemotaxing neutrophils is mediated by the small GTPase RhoA.