

Charest, P. and R.A. Firtel (2007). Big roles for small GTPases in the control of directed cell movement. *Biochem. J.* 401:377-390.

Small GTPases are involved in the control of diverse cellular behaviours, including cellular growth, differentiation and motility. In addition, recent studies have revealed new roles for small GTPases in the regulation of eukaryotic chemotaxis. Efficient chemotaxis results from co-ordinated chemoattractant gradient sensing, cell polarization and cellular motility, and accumulating data suggest that small GTPase signalling plays a central role in each of these processes as well as in signal relay. The present review summarizes these recent findings, which shed light on the molecular mechanisms by which small GTPases control directed cell migration.