Cross lab

centre for mechanochemical cell biology

Work in the lab focuses on the force-generating mechanisms of kinesins and microtubules.

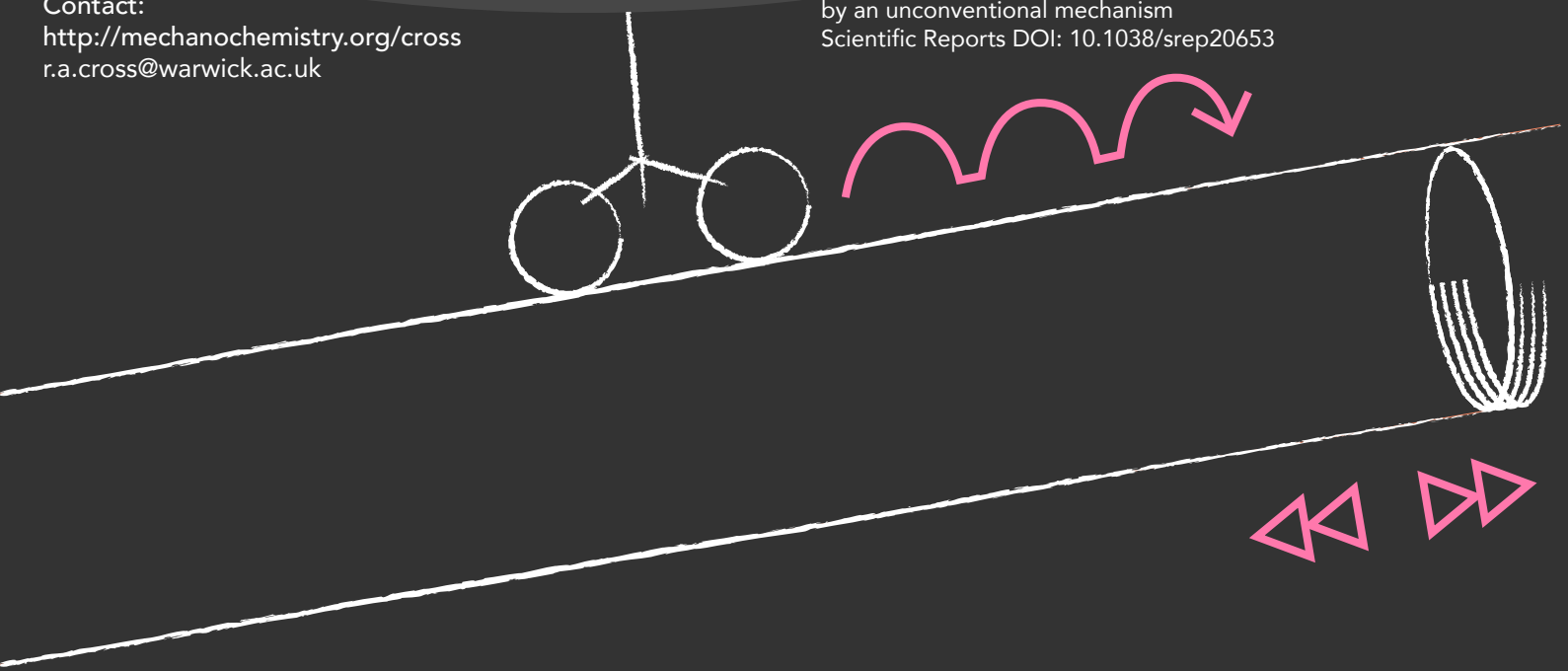
These mechanisms drive much of the self-organisation behaviour of eukaryotic cells and understanding them is important both for fundamental science and for the development of improved chemical biology approaches to a range of important medical and agricultural problems.

Contact:
http://mechanochemistry.org/cross
r.a.cross@warwick.ac.uk

M. Britto, A. Goulet, S. Rizvi, O. von Loeffelholz, C. A. Moores, and R. A. Cross (2016)
Schizosaccharomyces pombe kinesin-5 switches direction using a steric blocking mechanism
PNAS DOI: 10.1073/pnas.1611581113

R.A. Cross (2016)
Mechanochemistry of the kinesin-1 ATPase
Biopolymers DOI: 10.1002/bip.22862

Frauke Hussmann, Douglas R. Drummond, Daniel Peet, Douglas S. Martin & Robert A. Cross (2016)
Alp7/TACC-Alp14/TOG generates long-lived, fast-growing MTs by an unconventional mechanism
Scientific Reports DOI: 10.1038/srep20653



Charlotte Fletcher | Naomi Sheppard | Rob Cross | Neil Jenkins | Dan Peet | Nick Carter | Algirdas Toleikis