Video 1. Lillie’s experiment today: sperm attraction by resact. A dense sperm suspension is stimulated by release of resact from its caged derivative (Kaupp et al. 2003. *Nat. Cell Biol.* 5:109–117). Release of resact with a UV flash induces accumulation of sperm in the illuminated area while an annulus around the flash becomes depleted of sperm. After several seconds, the gradient dissipates because of resact binding and diffusion. The recording was performed using dark-field microscopy (IX71; Olympus) with a 10× magnification objective (0.4 NA; UPLSAPO; Olympus). Frames were acquired at 10 fps using a back-illuminated EMCCD camera (DU-897D; Andor Technologies). Photolysis of caged resact (50 nM) was achieved using an UV LED (250 ms flash; M365L2; Thorlabs). The movie editing was done using VideoStudio Pro X4 (Corel Corporation). Experiment and movie were performed and created by Jan Jikeli and Dr. Luis Alvarez (Center of Advanced European Studies and Research).