function in somatic divisions, too? In fact, a scaffold that supports and stabilizes spindle structure, referred to as the 'spindle matrix' has been under debate since the 1960s [15]. To date, a range of molecular mechanisms has been proposed to give rise to the presumed spindle matrix, including general mechanisms that locally concentrate spindle components by exclusion of other organelles or by phase separation [16,17], as well as specific molecules building an actual scaffold. These proposed scaffold components include lamin B [18], poly-ADP-ribose (PARP) [19], as well as a set of specific proteins in *Drosophila* [15], all of which stabilize the microtubule spindle structure by different means. Intriguingly, actin filaments have also been proposed as potential spindle matrix components specifically involved in chromosome movements in grasshopper spermatocytes and other systems [20]. Thus, the question for the future is whether spindle actin is generally present in all cells and in meiotic and mitotic divisions to support spindle assembly, or whether diverse mechanisms evolved for this function depending upon the species and cell type.

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Microbiology: And *Amoebophilus* Invented the Machine Gun!

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Bacterial contractile injection systems are fascinating particles that use a spring-like mechanism to inject an effector-loaded needle into target cells. A recent study shows that the intracellular bacterium *Amoebophilus asiaticus* uses arrays of contractile structures to escape from the amoeba phagosome.

To compete effectively for access to nutrients, bacteria have developed an arsenal of weapons that target other microbial cells. These include: contact-dependent growth inhibition (CDI) systems, which are deployed at the cell surface and act as grenades that are pinned out and thrown inside the target bacterial competitor [1]; bacteriocins, which are released into the extracellular milieu and act as mines [2]; and Type VI secretion systems (T6SS), which resemble spear guns that use a spring-like mechanism to inject effectors into the target [3]. The T6SS is part of a larger family of so called contractile injection systems (CIS) that include prototypical bacteriophages such as T4 and Mu [4],