

# Delayed cytokinesis generates multinuclearity and potential advantages in the amoeba *Acanthamoeba castellanii* Neff strain

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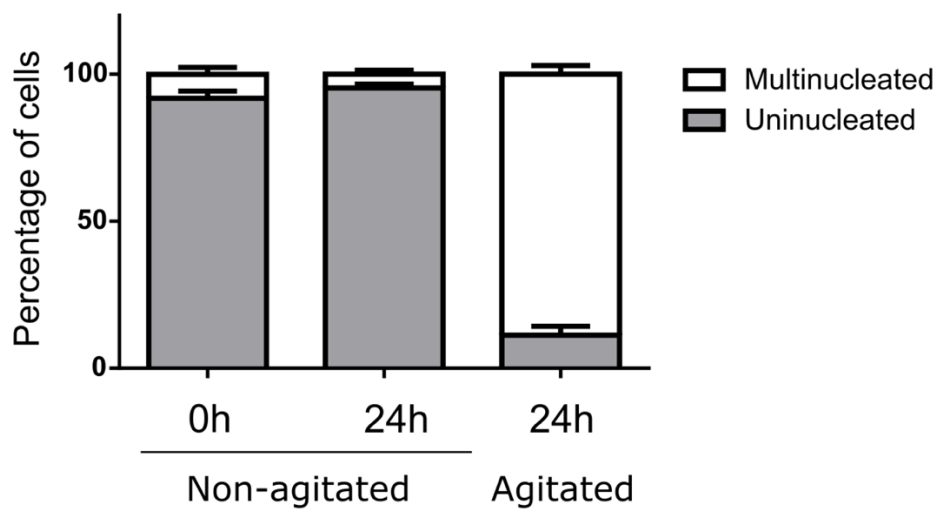
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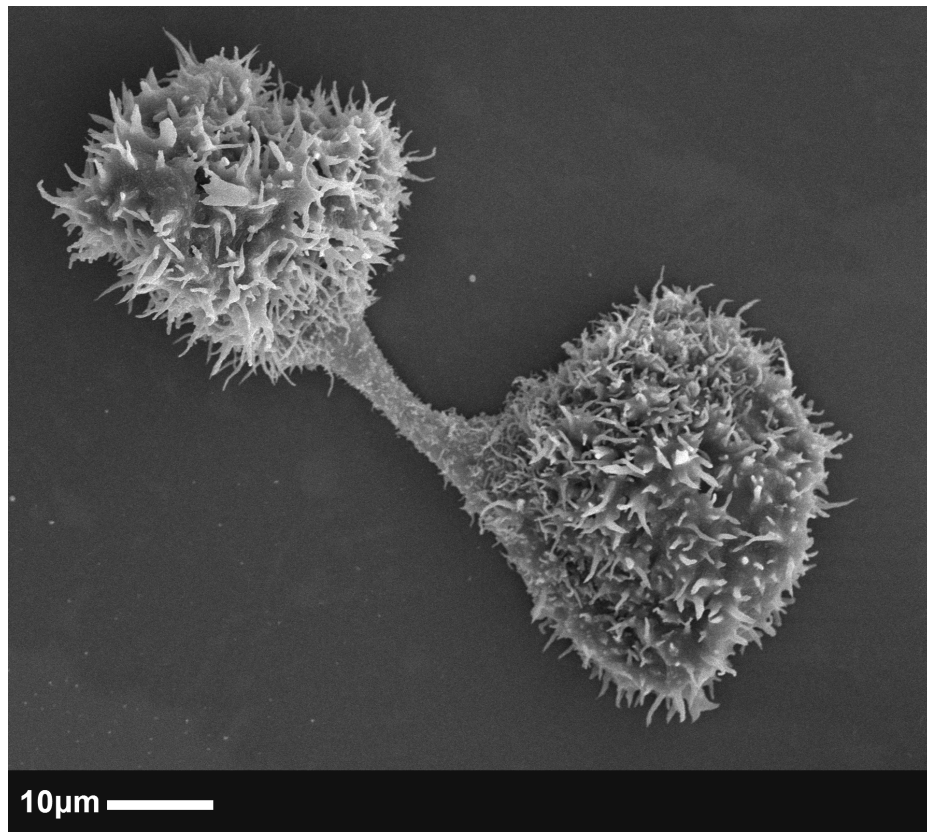
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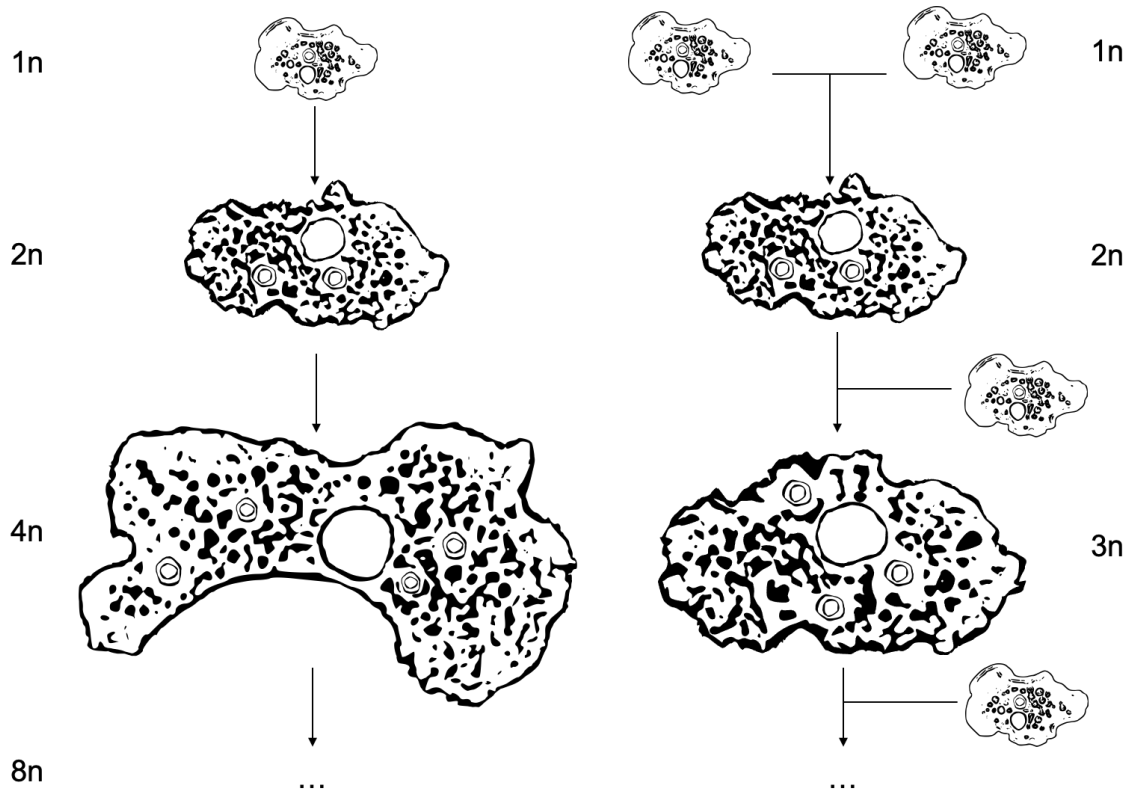
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**Figure S1: Multinuclearity induced in *V. vermiformis*.** Percentage of multinucleated *V. vermiformis* under agitation (Agitated) or not (Non-agitated) for 0h and 24h. Results are averages of three independent experiments, and error bars represent the standard error of the mean ( $\pm$ SEM). Statistical analysis was performed using the Unpaired t-test (\*\*\*)  $p < 0.0001$ .



**Figure S2. Cytosolic bridge of *A. castellanii*.** Scanning electron microscopy of a multinucleate amoeba cell undergoing cytokinesis. A cytosolic bridge characteristic of multinucleate dividing cells is visible in between the two cell bodies. Scale bar: 10  $\mu\text{m}$ .



**Figure S3. Potential origins of cellular multinuclearity.** Multinucleate cells can be generated by endoreplication (left panel), for which the DNA content replicates synchronously in the absence of cytokinesis or by successive fusion events (right panel).