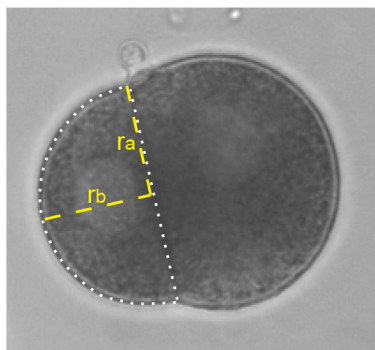
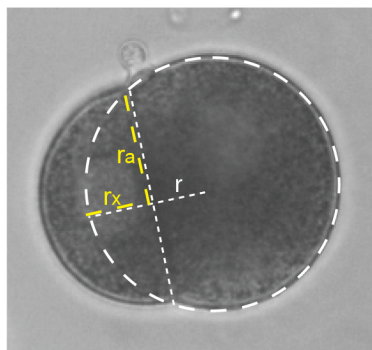


a)

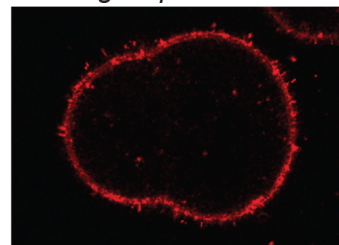
$$V_{\text{small_cell}} = \frac{4/3 \pi r_a^2 r_b}{2}$$


 0.4 ± 0.5

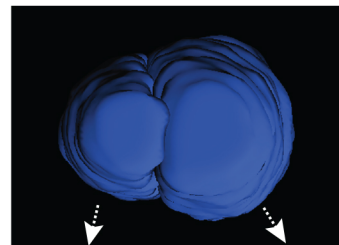
$$V_{\text{large_cell}} = \frac{4/3 \pi r^3}{2} - \frac{4/3 \pi r_a^2 r_b}{2}$$


 1 ± 0.9

b)

M. galloprovincialis

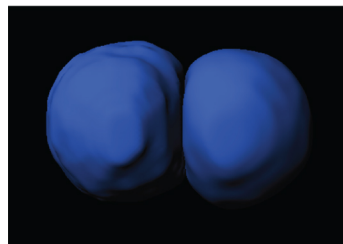
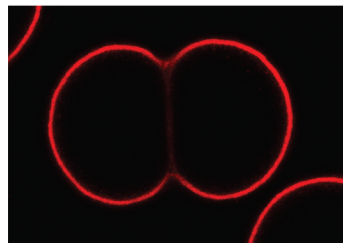
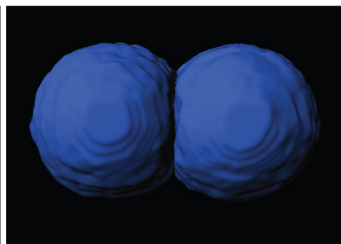
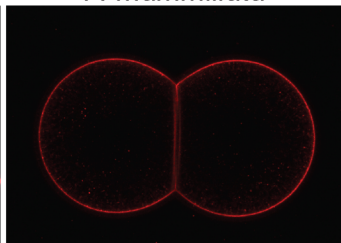
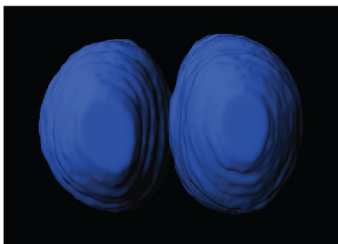
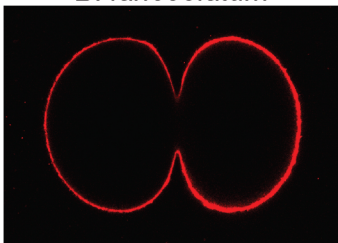
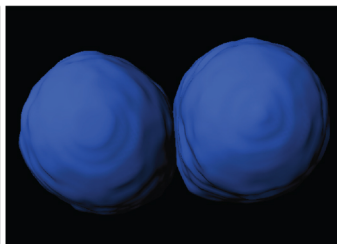
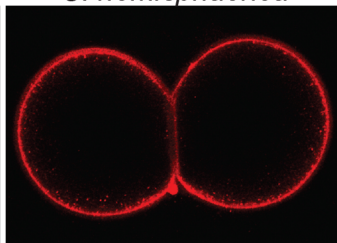
Cell Mask Orange



3D rendering

 $0.4 \pm 0.01 \quad 0.8 \pm 0.02 \quad \times 10^5 \mu\text{m}^3$

c)

P. lividus
 1.9 ± 0.2
P. mammillata
 6.5 ± 1
B. lanceolatum
 5 ± 0.3
C. hemisphaerica
 19.5 ± 2.5
 $\times 10^5 \mu\text{m}^3$

Cell Mask Orange

3D rendering

Figure S3: Measurement of volume in 2-cell stage embryos.

a) Mathematical calculation of cell volume in *M. galloprovincialis*. Average calculated volume is reported below each panel. b-c) Cell Mask Orange staining and 3D rendering of live 2-cell stage embryos of indicated species. Volume of 3D reconstruction is reported under each panel.