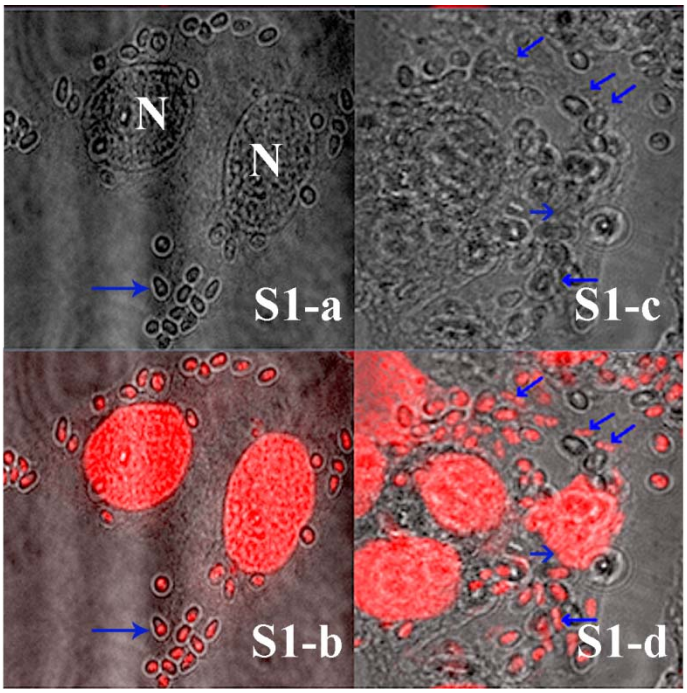
SUPPORTING INFORMATION

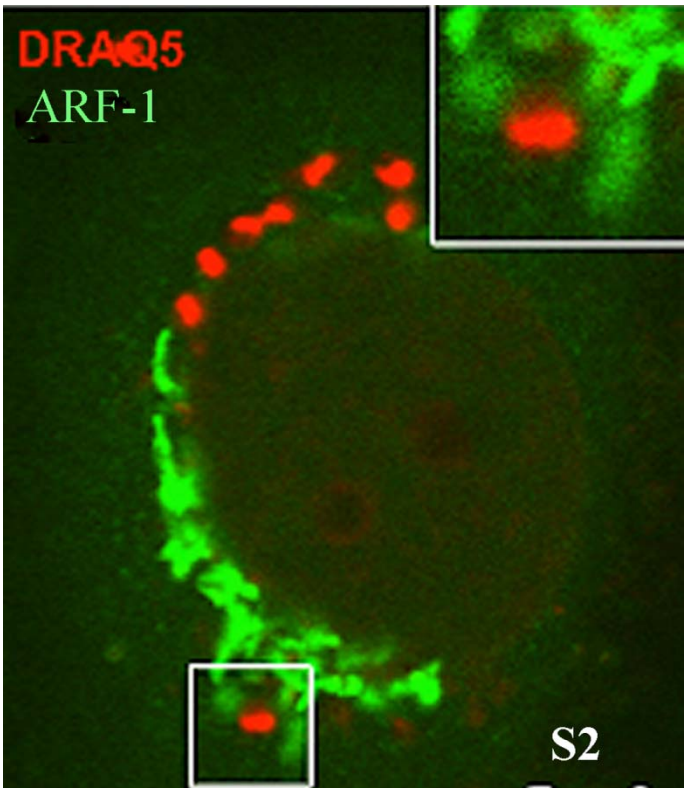
A Novel Fluorescent Labeling Method Enables Monitoring of Spatio-Temporal Dynamics of Developing Microsporidia by Marianita Santiana, Peter M. Takvorian, NihalAltan-Bonnet, and Ann Cali

Fig. S1 A.- D. Live imaging of HeLa cells infected with DRAQ5 labeled *A. algerae*. **S1-a.** Phase image of infected cells (one day PI) with numerous organisms inside the cell cytoplasm. **S1-b**.The same cell with DRAQ5 fluorescent label image overlying the phase image. Arrow indicates the observable diplokaryon of an organism. **S1-c.** Phase image of infected cells (three days PI) with numerous organisms inside the cell cytoplasm. **S1-d.** Same cell with DRAQ5 fluorescent label overlying the phase image. Arrows point to the *A. algerae* diplokaryon nuclear arrangement of several organisms. The DRAQ5 label also facilitates identification of the host cell nucleus, not readily visualized without the label. Arrows, DRAQ5 stained parasite nuclei; N, host nuclei.

Fig. S2. Live imaging of plated HeLa cells transfected with Arf1-GFP DNA plasmid then inoculated with DRAQ5 labeled *A. algerae*, and imaged one day PI. The Golgi is in a perinuclear location and has started to fragment. Numerous organisms are visible in the cell and located near the Golgi. The inset is a higher magnification of an organism abutting the Arf-1 label.

Fig. S3. Live imaging of plated HeLa cells transfected with Arf1-GFP DNA plasmid then inoculated with DRAQ5 labeled *A. algerae*, and imaged three days PI. The Golgi is in a perinuclear location and fragmented. A well-defined parasite (box) is visible abutted to Golgi fragments. The inset is a higher magnification of this organism demonstrating that DRAQ5 labels the*A. algerae* diplokaryon which is visible in live cell imaging.

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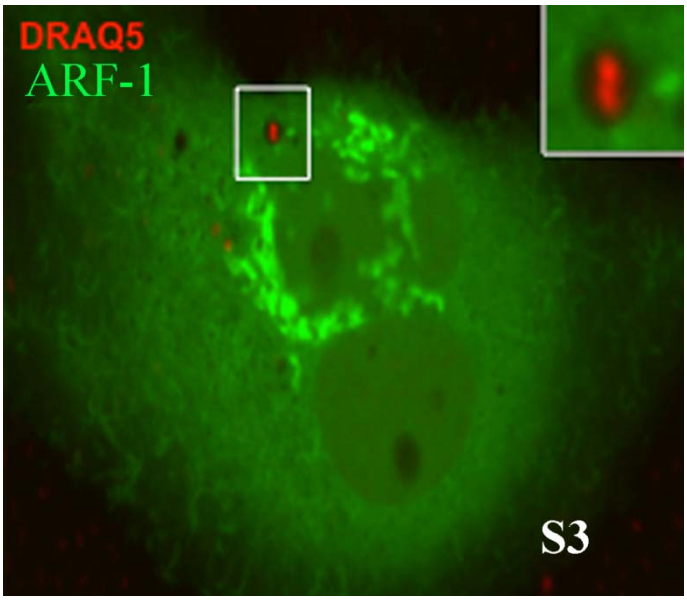
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