

## Articles of Significant Interest Selected from This Issue by the Editors

### **A Deep View of a Hyphal Cell**

In the past few years, imaging of fluorescently labeled proteins associated with the diverse organelles in the cell has revealed a refined view of the morphology and dynamic of individual organelles. Attempts to simultaneously image most or all organelles in one cell using GFP variants and live cell staining methods have so far met with limited success. In this issue, Gibeaux et al. (p. 1423–1432) employed electron tomography to present a high-resolution 3D snapshot of the crowdedness of organelles in a multinucleated hypha of *Ashbya gossypii*. Illustrated by a rotating multicolored model, this work will stimulate our thinking about fungal cell and systems biology.

### **Similar Cytoadhesion under Flow by Very Different *Plasmodium falciparum*-Infected Red Blood Cells**

Individual malaria parasites express and deliver unique PfEMP1 cytoadherent proteins, out of ~60 choices in any parasite genome, to the surface of red blood cells (RBCs) they infect. Herricks et al. (p. 1490–1498) used microfluidics to show that regardless of the size or sequence of the PfEMP1 on a given infected RBC, the proteins confer similar binding strength upon the modified RBC for the host ligand CD36 and they all facilitated flow-dependent RBC deformations with hysteresis to facilitate surface attachment. Variations in *var* gene size, number of domains, or sequences may still play important roles in immune evasion or binding to other specialized host ligands.