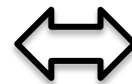
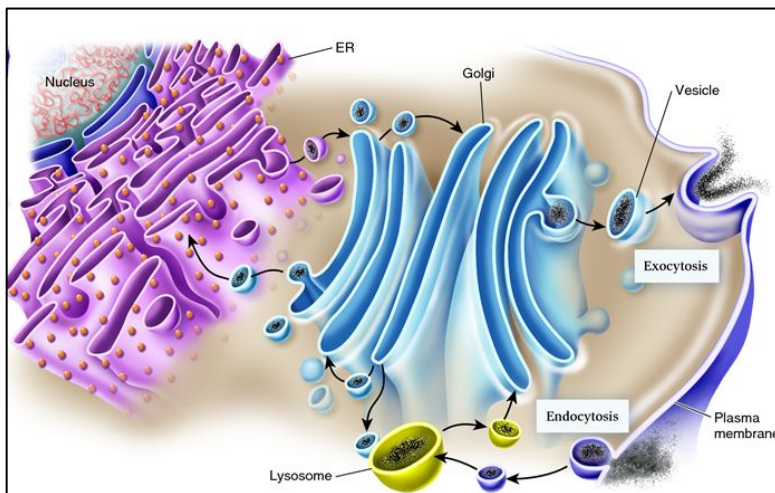




7.341 Advanced undergraduate seminar courses Fall 2015

THE INTRACELLULAR SORTING MACHINERY AND ITS INVOLVEMENT IN PATHOGEN INFECTION AND DISEASE



Budding of HIV

Botulinum and tetanus
toxins

Parkinson's disease

The intracellular sorting machinery consists of a large set of protein complexes attached to the different membranes of the cells. This machinery controls the transport of vesicles between organelles and between organelles and the plasma membrane.

- In this course we will discuss past and present experiments that have allowed researchers to discover the cell's sorting machineries, how they are used by pathogens and their involvement in disease.
- This course will provide exposure to a broad range of scientific approaches, including genetics, biochemistry, cell biology and high-resolution microscopy, and their applications in studies of a broad variety of organisms, including yeast, *Drosophila*, mouse and human.
- Students will visit a research laboratory using advanced live-cell imaging tools for the study of the cell's sorting machinery.

Course website on Stellar

Instructor: Raïssa Eluère raissae@mit.edu

Fall 2015. Tuesdays 11 am- 1 pm. **Snack provided !!!** (Class date and time are flexible.) Room 68-150.