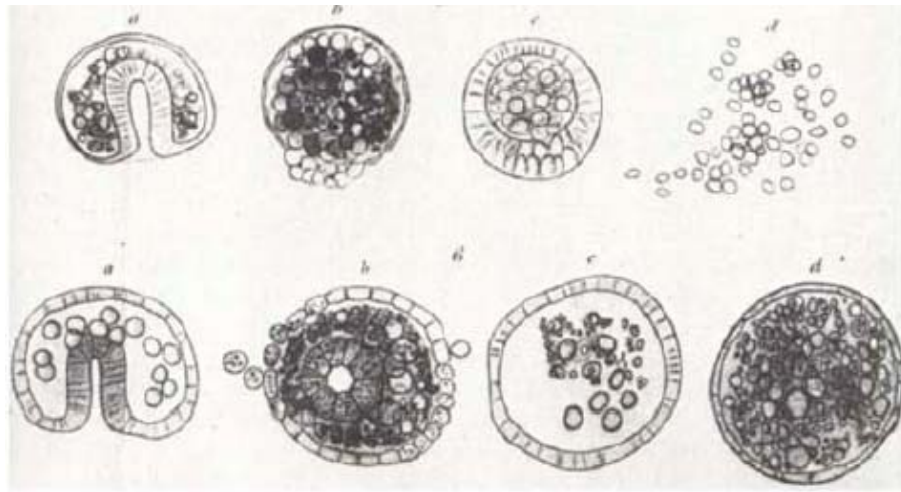




Cellular Consequences of Aneuploidy and Aneuploidy as a Target for Cancer Therapy



Aneuploidy is a hallmark of cancer. Understanding how aneuploidy impacts cell physiology is thus vital for understanding the principles underlying tumor formation. We developed yeast and mouse models to study the effects of aneuploidy on cell physiology. Our analyses revealed that the condition causes chromosome-specific phenotypes, and, remarkably, phenotypes shared by many different aneuploid yeast and mouse cells, which we collectively call the aneuploidy-associated stresses. These stresses include proteotoxic stress as well as genome instability. The discovery of compounds that exaggerate the aneuploidy-associated stresses as well as the implications of genome instability on cancer evolution will be discussed.

Dr. Angelika Amon

Massachusetts Institute of Technology, HHMI

Host: Dr. Marc Meneghini

Date: Monday December 2, 2013

Time: 4:00 p.m.

Place: Fitzgerald Building
150 College Street
Room 103