BMI Science Illustration Contest

First Edition – January 2017

Winner – 1st prize
Hiba Komati
Making stronger cardiomyocytes with cardiac protein PEX1

Primary cultures of neonatal cardiomyocytes infected with adenovirus-HA-PEX1 construct were co-stained with anti-Sarcomeric alpha-Actinin to visualize the myofibrils (Green), anti-HA to detect the PEX1 protein (Red) and Hoechst to stain cell nuclei (Blue). Notice how cardiomyocytes overexpressing cardiac protein PEX1 (Red) have well organized striated sarcomeres, forming a syncytium of beating cells.

2nd prize
Sean Stephenson
Remembering Change

A budding yeast colony displays epigenetic memory of gene expression. During its first division after plating onto agar, a single yeast cell expressing an RFP reporter derepressed Cre recombinase located within transcriptionally silent heterochromatin. Cre then induced a permanent recombination event that swaps RFP for GFP, leading to a half-sector colony.

3rd prize
Shirley Qiu
Ebola stuck in traffic

Ebola virus infection requires internalization and trafficking through host cells. Treatment of cells with a trafficking inhibitor causes accumulation of virions (green) in early (red) and late (magenta) endosomes.