Alumna brings bioscience building to 'Life'

The bioscience building mural, *Life,* was created by biology alumna and New York City artist Alison Stephen ('99) in collaboration with Jon Monroe, professor of biology.

The mural is based on Stephen's sketches of 16 species of organisms around a surface bioscience muralview of about 60 base pairs of DNA. The first floor features organisms from the Earth's surface or under water. The second floor includes organisms found in a forest canopy, and the third floor includes are organisms that fly.

The DNA sequence is from the model plant *Arabidopsis thaliana,* and is a portion of the AGLU-1 gene that encodes an enzyme called alpha-glucosidase. Monroe and a group of his undergraduate students, including Stephen, cloned and sequenced this gene in the JMU labs. The sequence illustrated in the mural was converted to a 3D model using 3D-DART and visualized using the program Chimera. Stephen used a surface view of the model as a starting point to draw an artistic image of the DNA depicting nitrogen atoms blue, oxygen red, phosphorous yellow and carbon gray.

See Page 24 to learn more about Alison Stephen ('99) and how she created the mural with Monroe's assistance.

* Watch a video of the mural's installation at www.jmu.edu/biology/playlist.shtml.