

## BRIGHTLIGHTS

[Alison Stephen ('99)]

# Biology major draws on her art studies to beautify the bioscience building

BY JAMES HONG ('13) WITH ERIC GORTON ('86, '09M)

Alison Stephen ('99) exhibited a keen interest in — and a natural talent for — drawing at an early age, so her decision to major in biology at JMU came as a bit of a surprise to her family and friends.

"As an idealistic 17-year-old, I entered JMU as a pre-med biology major with the plan of doing something good for the world," says Stephen, who also minored in art. "I dropped pre-med pretty quickly, but I still really enjoyed the biology classes, plant studies and research. I did some scientific illustration as well, so the combination of art and science seemed like a natural one."

One of Stephen's student projects involved cloning and sequencing the DNA of a flowering plant called *Arabidopsis thaliana*. Little did she know then how significant that student project would become in her and JMU's future. Following graduation, Stephen pursued a career in art, and in 2004 she earned a master's degree in fine arts from Savannah College of Art and Design.

When her former professor asked her to draw a three-story mural for JMU's new bioscience building she was both flattered and unnerved. "I had never created a billboard-sized illustration before," Stephen recalls.

JMU biology professor Jonathan Monroe immediately thought of Stephen when architects proposed a mural for the wall spanning three floors of the south end of the bioscience building. Stephen currently works in administration at the School of Visual Arts in New York City and also does freelance illustrations, mostly for magazine and newspapers.

The process of creating the mural took about six months, starting in December 2011. Once a decision was made to create a mural featuring the DNA from the *Arabidopsis thaliana* plant, the one Stephen

worked with as a student, a lot of work had to be done to get the DNA in a form she could use in the mural. Using a pair of computer programs, Monroe created a 3-D model of the strand.

"I needed to start with the 3-D model so the resulting illustration would very accurately depict the 'topography,' so to speak, of the molecule," Stephen explains. She merged the model with a version she traced by hand "for the hand-drawn feel" and replaced the bold colors of the 3-D computer model with five earth-tone colors.

Following an early review, Monroe asked Stephen to draw some organisms around the DNA. "The department offers a lot more disciplines than molecular biology, and I knew Alison drew a lot of animals," Monroe says.

Stephen said she drew the organisms — sea plants and animals for the first floor, land plants and animals for the second floor and flying creatures for

the third floor — in a style resembling a naturalist's notebook. She also used a program to create the drawings as vector images so they could be enlarged without losing their visual quality.

"Since I'd never worked on a project of this scale, the biggest challenge was adjusting the final illustration's dimensions, colors and specifications so it would come out right at the printing vendor. That was a very stressful night. I sent it in and held my breath," Stephen says.

A Harrisonburg sign company printed the mural, which was installed in June 2012. Thanks to the building's front window structure, the entire mural can be seen from outside the building. Stephen says, "I feel like my life has come full circle, and my disparate interests and experiences have finally combined in just the right project," she says. **M**

\* Read more at [www.jmu.edu/news/2012/09/05-mural-for-bioscience-building.shtml](http://www.jmu.edu/news/2012/09/05-mural-for-bioscience-building.shtml).

**N.Y.C. artist Alison Stephen ('99), a biology major and art minor, created a mural for the bioscience building with the help of her former biology professor Jonathan Monroe. (Read more on Page 50.)**

