

2014 MEDALS & AWARDS

BIGGS AWARD FOR EXCELLENCE IN EARTH SCIENCE TEACHING

Presented to
Callan Bentley



Callan Bentley
Northern Virginia Community College

Citation by Heather Macdonald and Robert Blodgett

Callan Bentley, recipient of the 2014 Biggs Award, is an outstanding educator held in high regard by his students and colleagues. His instruction, work with students, outreach, and writing have been extraordinary. After only six years as a full-time professor at Northern Virginia Community College (NOVA), he received the Chancellor's Award for Teaching Excellence, the highest honor for Virginia community college faculty. His interactive, and challenging courses all have field experiences. One that he developed, Regional Field Geology of the Northern Rocky Mountains, has had a profound, life-changing effect on the students. This year he joined Joshua Villalobos from El Paso Community College (EPCC) in a course which brought NOVA students to West Texas and EPCC students to Virginia for collaborative field work. His richly-illustrated *Mountain Beltway* blog, one of the first in the "AGU Blogosphere" reaches thousands of readers around the world. His pioneering macro GigaPan photography has created a "virtual Virginia" for online geology. Callan was the founding editor of *Foundations*, the NAGT Geo2YC Two-year Colleges Division e-newsletter. His public outreach has included more than 85 public-interest

geology talks, tours, and hikes in the past 8 years. Few faculty, at any level, inspire and engage as many people in the Earth sciences by integrating field work with cutting-edge visualizations. As Steve Whitmeyer recently wrote, Callan's success is a model for all of us to emulate.

Response by Callan Bentley

It's wonderful to be here today with you, here on Earth. You and I are fortunate to live on a very interesting planet. It's big enough to have differentiated. This allows a magnetic field that protects our atmosphere from erosion by the solar wind. Differentiation also provides for mantle convection, the power source driving plate tectonics. The eruption of volcanoes and gravitational acquisition of comets both yield water, and this water is critical for life. Every critter and microbe needs liquid water, and for 4.5 billion years, our planet's surface has had the right blend of solar heating and greenhouse gas insulation to keep the water flowing. *What fortune!* Every move we make, every breathe we take, we rely on geology.

In my job, it is a delight to be surrounded by clever people who are largely unaware of the dynamic geomachinations that sustain them. You and I teach them to read the world. In every process, Earth generates a little clue or two. The cumulative record of these clues is a fantastic saga: from magma ocean to stromatolitic 'slimeworld' to Snowball Earth to Cambrian explosion and eventually human intelligence, we've come a long way! And we have the rocks to prove it.

You and I are the ones who get the honor of opening the world's eyes to geoscience. We reintroduce our students to the planet, what it's made of, how it works, how it sustains them, and how it can kill them. We provide a vital service, a job that is extraordinarily gratifying fun. For each new student, we slip a pair of geology-colored glasses onto their face, and lean back with satisfaction as they stare about in newfound wonder. Their appreciation is the greatest reward.

I'm honored to be recognized with the Biggs Award. I thank Heather MacDonald and Bob Blodgett for making the effort to nominate me. Heather and the faculty at William & Mary nurtured a familial atmosphere that drew me into geology as a very young man. They inspired me, as did many talented writers and artists. I'm grateful to my colleagues at NOVA, Geo2YC, Pearson, and every institution I've been lucky enough to be affiliated with. I'm most grateful to my hardworking students, too many to list now, but some of the best are here at this meeting. My wife Lily is a stalwart supporter of my many projects, but she rightfully reminds me that life is short, and work is but one facet of a full life. Sharing an appreciation of nature with our son Baxter is now the project I want to spend all my time on.

Every person in this room is interested in geoscience education. Future students are lucky to have you to learn from. I hope you are as honored as I am to be doing this job. It is essential work for the sake of our species' future, and for the sake of feeling at home here on the most fascinating planet in the neighborhood.

Thank you.