

2013 MEDALS & AWARDS

BIGGS AWARD FOR EXCELLENCE IN EARTH SCIENCE TEACHING

Presented to
John G. Van Hoesen



John G. Van Hoesen
Green Mountain College

Citation by James Harding

My colleague, Dr. John Van Hoesen is the 2013 Biggs Award winner for Excellence in Earth Science Education. Having known and worked closely with John over the past ten years, I am delighted to be asked to provide his citation. John's Bachelor of Science degree at SUNY-Albany and his Master's and Ph.D. in Geoscience from UNLV provide the backdrop and framework for his expertise. John has served his profession field and academic institutions through a number of efforts including Associate Editor for the *Journal of Geoscience Education*, recipient of a Fulbright Scholar Award, Full Member of Sigma Xi, and multiple community-based service projects. All of these achievements and endeavors, while impressive and noteworthy, manage only to paint a rather sterile picture of the sort of professional and educator that John has become.

Teaching at a small school, like Green Mountain College, requires faculty to wear many hats. To this end, John is not only our geologist, but he is our GIS specialist, a distance educator, and leader of innovative technology in the classroom. Students quickly recognize that John is unique among the faculty in that his experience with social media, YouTube, and other interactive forms of technology serve to enrich the learning

experience. On more than one occasion, John has been the de-facto tech support person for students (and faculty!) wrestling with some technology related problem. While this suggests that John's strength is in technology, it is but one strength. He is as deeply committed to bringing good science into the classroom and asking the students to always do their best work.

John has taught across the suite of geology-focused courses (Introduction, Sed/Strat, Soils, Geomorphology, Hydrology), but he also regularly teaches classes in our general education curriculum including one focused on the history of scientific thought (*Dimensions of Nature*). Finally John has developed and carved out a number of classes that serve other academic programs across campus. These courses, each with a basis in earth science have proven to be quite popular, no doubt due to John's approach to both the material and his engaging presence in the classroom. Specifically, courses in Natural Disasters, Geology in Film, and Climate Dynamics consistently max-out their enrollments.

I have co-taught courses with John on two separate occasions. In each of these instances, John demanded of the students that they not merely accept what we were teaching them, but that they ask why and probe for deeper answers and understanding. One of these joint ventures involved a three-week field class touring a number of national parks and geologic sites throughout Arizona, Utah, Wyoming, and Nevada. It was clear that students were awed by the landscapes and natural features—not often seen by students from New England. However, the real value to these students was sharing this intensive field class with John teaching in his element and seeing his passions first-hand.

The opportunities for students to achieve excellence extend beyond the boundaries and confines of the classroom though. John has supervised and mentored many students in directed research, independent studies, and internships. He has co-authored articles with undergraduates, shepherded students to present at professional association meetings, and guided them towards assistantships in graduate school and career opportunities. In short, John's work with students is built on asking them to strive for improvement and to think beyond the grade in a class. One of the student references for this award recounted a story whereby the student told John that he was going to quit school and join the US Navy, to which John responded, "Well, that would be a waste of talent." This focused and honest response sent the student into some

soul searching and ultimately on the path to a graduate degree in geology.

Care, insistence on excellence, and earnest encouragement are really the bases behind John's success as a teacher. His academic training, research and applied experiences, and continuing his own learning are all important to understand what goes into making someone an excellent teacher. But the real texture to this excellence is the impact that we make on students' lives. John continues to do this both within and beyond the classroom. I have been personally grateful and professionally enriched to count Dr. Van Hoesen among my colleagues and friends. I know this award is well-deserved—congratulations!

Response by John G. Van Hoesen

I would like to express my gratitude to the Geoscience Education Division for selecting me as this year's recipient of the Biggs Award for Excellence in Earth Science Teaching. As well as Dr. Jim Harding for nominating me and the students who wrote letters of support: Desiree, Dave, Jenna, John, James, Amanda, Cody, Marli, and Barbara. I am humbled by the prospect of joining such a distinguished group of educators, who inspire me to continue learning and experimenting as an instructor myself.

Many people have encouraged and fostered my interest in the natural world while also forcing me to confront my assumptions. My father, in making the decision not to pour concrete over a beautiful exposure of Devonian limestone, which would become the basement floor I explored as a child and sparked my initial interest in geology. In addition, he modeled healthy skepticism that set the foundation for my growth as a scientist. My 10th grade Biology teacher, Bonnie Saine, purchased additional specimens for dissection and spent countless hours after school teaching me the value of careful observation. Dr. John Delano at the University of New York, Albany exuded an infectious passion for geology that inspired me to produce my best work. Dr. Brenda Buck - my master's advisor at the University of Nevada, Las Vegas relentlessly worked to help improve my writing. Dr. Fred Bacchuber -- also at UNLV -- taught me how to individualize instruction and was most influential in how I approach teaching as a profession. But without question I have learned the most from my students, and I see each class as a truly symbiotic learning environment, in which we teach one another.

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There is no better environment for this kind of teaching than in the field, where my students and I may confront a new hand-sample, outcrop or exposure that forces us to integrate observations with definitions and guiding principles. This underscores one of the primary goals I have for every course: to instill an appreciation for the power of observation to better inform what David Leveson described as the ‘major prize’ – those intimate experiences with the natural world wrapped in a new understanding

and appreciation for its origin. Profound experiences in the field can be complemented by classroom instruction, and I have been grateful for the support and professional development opportunities through the UNLV Teaching and Learning Center’s Graduate Professional Development Program, the SERC On the Cutting Edge Program, and the School of Rock Program administered by Ocean Leadership. These opportunities informed both my basic teaching practices but also taught me how to better integrate relevant

technology, and a variety of exercises and datasets that hopefully provide students with a more genuine learning experience.

For me, this award does not attest to my accomplishments; instead, it reminds me to strive more earnestly on behalf of my students, to remain open-minded to new approaches and ideas, while at the same time maintaining a commitment to landscape analysis – in the spirit of Louis Agassiz, I hope that above all I have taught people to observe.