In the winter of 1905, Gilbert Grosvenor faced a critical decision—whether or not to publish photographs in National Geographic Magazine. Today photography and National Geographic are synonymous, but at the time, many intellectuals considered photographs superficial or even vulgar. Since its founding in 1888, the National Geographic Society had printed a dense, scientific journal featuring lengthy articles by the leading scientists, geographers, explorers, and intellectuals of the day. Grosvenor, the magazine’s editor, was well aware that his decision could potentially anger the Society’s Board and alienate its members.

But Alexander Graham Bell, the visionary scientist and former president of National Geographic, had instilled in Grosvenor a strong belief that the relevance of the Magazine depended on publishing stories that were readable by “ordinary people.” Otherwise, Bell said, they should “shut up” and become a “strict, technical scientific journal for high class geographers and geological experts.” Grosvenor ultimately decided to print several photographs of Lhasa, Tibet in the January 1905 issue. Even more radically, Grosvenor wrote captions that supported the photos, not the other way around, making the images the center of the story. His decision did irritate several Board members. But the public loved the pictures just as Bell had predicted. Grosvenor continued to publish photographs, transforming the identity of the magazine and attracting new readers. In just two years, the Society’s membership grew from 3,000 to 20,000. Today photography is at the heart of who we are as a mission driven organization. When I tell people that I work for National Geographic, invariably the first question I’m asked is whether I am a photographer.

This year, on the 130th anniversary of our founding, the National Geographic Society has its recommitted itself to innovative storytelling. The Society has launched a Media Innovation division that will fund year-long projects by several storytelling Fellows who are pushing the boundaries of what stories we tell—and how we tell them. This year’s class includes science photographer Anand Varma, environmental writer Emma Marris, digital storyteller Xaquín G.V., and Evgenia Arbugaeva, who grew up north of the Arctic circle and whose project will document how people who inhabit the coastal stretch of land along the Northern Sea Route in Russia are adapting to political, economic, and climate changes.

National Geographic has also revolutionized the museum experience by employing VR (virtual reality) technology in its popular Tomb of Christ exhibition, allowing museum visitors to more fully experience the Church of the Sepulchre. The Society is also launching the first VR theater in Washington, D.C., with programs that offer audiences more immersive experiences, such as diving with leopard seals in Antarctica and exploring Bears Ears National Monument in Utah. Wearing individual VR headsets, 450 people will simultaneously experience what our explorers saw and heard in the field. This new technology has the potential of not only increasing an
In addition, this fall we are premiering National Geographic On Campus, a series of live science and storytelling events designed specifically for university audiences. As program manager, my goal is to complement what students are learning in the classroom and to provide opportunities for students to amplify their impact by connecting them with National Geographic’s worldwide community of scientists, storytellers, educators, and explorers. These university-based events—open to all undergraduate and graduate students regardless of their field of study—will center around two day-long programs: the Science & Storytelling Symposium; and a series of National Geographic-led storytelling workshops in areas such as conservation photography, investigative journalism, and transmedia storytelling.

The Science & Storytelling Symposium will feature dynamic talks and panel discussions that bring together National Geographic Explorers in conversation with university scholars and local thought leaders. The symposium will highlight interdisciplinary thinking, science and storytelling collaborations, and the connections between research and storytelling. Program themes and panel topics will center around regional issues and the university’s disciplinary strengths will be developed in full partnership with each host university. For example, our pilot program at the University of Miami—World Without Borders—will focus on sea level rise, freshwater scarcity, species conservation, wildlife trafficking, human migration, and cultural identity in an increasingly globalized world. Each symposium will also feature a panel called Storytellers for Change, which will explore how storytellers are helping to create a more peaceful, just, and sustainable planet.

The second day will feature a series of National Geographic-led workshops that offer students an opportunity to learn and hone their storytelling skills with our Explorers and staff, including veteran Magazine reporters. It’s one thing to be inspired by reading National Geographic Magazine, or watching our films; it’s another thing to see an Explorer live on stage, to hear the passion in their voice and to have the opportunity to ask them an audience question. But it’s an incredibly unique opportunity for a student to spend a day working with a National Geographic photographer or journalist, gaining both actual and conceptual storytelling skills that will enhance their work and impact regardless of their field of study. The goal is to both inspire and educate the students, and in the process, cultivate informal mentor relationships for students in a variety of fields. All programs are offered free of charge to currently enrolled students.

The On Campus program is an outgrowth of the Science & Storytelling Symposium, a two-day event hosted by the Yale School of Forestry & Environmental Studies in partnership with National Geographic in April 2016. As the curator of the symposium, my goal was to create the kind of experience that I wish had existed when I was a student—one that not only pushed me to think more deeply about storytelling, but also provided hands-on instruction and connections to professional storytellers. In addition to the daylong symposium that explored such topics as Artistic Representations of Nature, Meaning and Morality in a Contested Landscape, and Making Science Accessible Through Storytelling, the event, which I conceived
and developed with the support of then-F&ES Dean Peter Crane, featured a special presentation on Greater Yellowstone Migrations—a science-storytelling collaboration by ecologist Arthur Middleton, wildlife photojournalist Joe Riis, artist James Prosek, and filmmaker Jenny Nichols, which documents ungulate migrations in the Greater Yellowstone Ecosystem through a combination of quantitative science, cartography, and visual storytelling. We sponsored an art show featuring Prosek’s and Riis’s works, hosted an intimate fireside chat by science writer David Quammen, and held an exclusive dinner at the Peabody Museum of Natural History, with a special keynote address by Thomas Lovejoy. National Geographic also hosted a workshop for their Young Explorers Grants program, which was open to students from throughout Yale.

The On Campus program seeks to replicate and scale this student program. In addition to highlighting the work of National Geographic Explorers and Grantees, each live event will feature a range of scholars from the sciences, social sciences, arts, humanities, communications, business, and law. As the program manager, I oversee all aspects of the On Campus initiative, including programming, university relations, and branding. National Geographic has always supported education; we develop curricula for middle school teachers and host a national geography bee competition, for example. And since our founding, the Society has sponsored live events, starting with the very first National Geographic lecture by John Wesley Powell in 1888. But On Campus is the first live National Geographic program specifically tailored to university audiences. Our inaugural event will be held at the University of Miami, November 9-10, followed by a second three-day student event at the University of Virginia in early March 2019, and a third at the University of Southern California later next spring. As we scale the program, our hope is to partner with four schools a year (two each semester)—from liberal arts colleges and state universities, to Historically Black Colleges and Universities and tech and engineering schools. We want to engage students from across the university in dialogues around science and storytelling, encourage them to think critically about interdisciplinary collaborations, and provide with them with storytelling tools to amplify their mark on the world.

In this 21st century, a degree is no guarantee of a job, or even of meaningful work. Students must not only develop deep theoretical understanding and demonstrated research in their chosen field, but also understand how to apply their knowledge and skills outside of the academy. Thomas Katsouleas, Provost at the University of Virginia, has referred to this as “Ph.D. Plus.” A program like On Campus can make a lasting impact on a student by marrying the disciplinary expertise they gained in the classroom with the storytelling skills, opportunities, and reach that National Geographic can provide. Even pioneering primatologist Jane Goodall has said that Louis Leakey made her a scientist, but National Geographic made her “Jane.”

While On Campus is primarily intended for undergraduate and graduate students, a secondary goal of the program is to highlight alternative measures of impact for academic scholars. Despite the technological and cultural advancements in storytelling over the past century, many academics still dismiss photography and other storytelling media as illegitimate. Too often scholars prioritize writing for an academic audience simply out of necessity because tenure is
tied to publishing in peer-reviewed journals. Given the numerous demands placed on university professors—teaching, conducting research, writing, advising, giving lectures, and serving on committees, just to name a few—it’s difficult at best—and at worst a liability—for scholars to spend time engaged in non-academic storytelling media, such as photography, film, podcasting, or digital storytelling. Publishing in scientific journals is undeniably a difficult and noble achievement, and engaging in meaningful dialogue with other academics can expand theoretical boundaries, generate research, and foster innovation and new ways of thinking. But scholars should also be allowed to pursue various storytelling media, and rewarded not only for the number of journal articles they publish, but also for the impact of their work beyond the ivory tower.

I first began to appreciate the importance of storytelling while conducting a baseline presence survey of Canada lynx (Lynx canadensis), which had recently received federal protection under the Endangered Species Act, for the U.S. Fish and Wildlife Service in Washington’s Cascade Mountains. I had already conducted extensive field research on forest carnivores at Mt. Rainier National Park as an undergraduate at the Evergreen State College, where I studied not only wildlife biology, but also evolutionary biology, chemistry, geology, wetland ecology, and forest ecology. I had learned to think of nature in terms of interdependent systems. And like other “Greeners,” I was required to attend weekly seminars where I read works of fiction and gained an appreciation for the role of the humanities in ecological thought. But although Evergreen is well known for its fine arts and documentary film programs, I did not pursue courses in storytelling that would have complimented my scientific skills. Moreover, I was not encouraged to develop creative ways to communicate my own scientific research; nor was I taught to conceive of scientific research as one story amidst a sea of stories about how the world works. Story, myth, legend—those were areas for the humanities, religious scholars, and philosophers. Film and photography—those were areas for artists and journalists. Science, on the other hand was empirical, objective, fact. Science, I had been taught, was not only the language of power when it came to the natural world, it was the correct worldview.

As a federal wildlife biologist, I was asked to attend a town hall in southwestern Washington to discuss what the listing of the lynx meant for land owners and other local residents. I prepared my talking points and slides for a formal presentation. But upon arrival to the meeting, I was confronted by loggers, hunters, ranchers and others angry that a little cat was threatening their livelihoods, and as a federal employee, I was seen as the enemy. A veteran colleague who had anticipated such a reaction, however, and arranged several round tables to promote dialogue between the local community and various stakeholders, including us government officials. I had come prepared to talk to the group about lynx. But sitting there across the table from men and women who lived in this community, I found myself listening to their stories. I heard stories about their families, their grandparents, their neighbors. I heard stories about the woods, about their logging and hunting. I heard stories about how they had been down this road before with the spotted owl. I heard stories about how much the land meant to them.

As a field biologist, I had spent considerable time in those woods, but I didn’t live there. I had never hunted and was a poor fisherman. I didn’t know how to use a chainsaw. I didn’t
personally know any locals who actually lived there. In fact, I was born and raised on the domesticated prairie of north-central Iowa, not the mountains of western Washington. In short, I had no personal connections to the land beyond my field work and belief in the inherent value of the lynx. I had no real stake in the game, only data points and the confidence that comes with having science on your side.

Their stories made a deep impression on me. Not only did I not have a very compelling narrative, it was clear that their stories were about them, not lynx. Their stories were about their identity, which was deeply connected to the land. I wanted to hear more of their stories, and felt that somehow those stories were key to the protection of endangered species.

Some years later, as a graduate student at the University of Montana, I conducted an oral history project with the Confederated Salish and Kootenai Tribes who were at the time pursuing co-management of the National Bison Range, which is located in the heart of their reservation. Their efforts had generated a strong backlash by surrounding communities, including television commercials, newspaper ads, and town halls where people angrily protest against co-management. I wanted to know why co-management was so important to the Tribes. I conducted dozens of interviews with tribal members, from the tribal chairman to elders to high school students. Although the Tribes had long accepted science as the language of power and developed a strong natural resource management program that included, for example, one of the first grizzly bear habitat management plans in the West, the stories I heard were again about them as people, as a confederated tribe, about their history, about a deep relationship with bison that went straight to the heart of their identity as a people.

When I later became a ninth-grade environmental science teacher, I saw firsthand what many young people actually think, how popular culture uses stories to promote external values such as money, fame, and physical appearance as the ultimate measure of success. I saw how students gravitated to those narratives, and the need to create curricula that encouraged students to not only think about science as a story, but also encouraged them to develop storytelling projects of their own. I incorporated art and role play into my climate change curriculum so that students would better understand different cultural perspectives and the complexity of global warming. Students produced short videos with their cell phones and created paintings that represented complex biogeochemical cycles. And during our field research, in addition to their data collection, I required students to keep a field journal of their qualitative observations that included both written reflections and drawings. I wanted my students to understand that science is more than a collection of data or even a systematic process of inquiry; it is a collection of stories about how the world works that says as much about who we are in this time and space as it does about that which we study.

The importance of storytelling is not a novel idea. Stories are how we make sense of the world, each other, and ourselves, and the world’s greatest scientists are often powerful storytellers. But in recent years there has been greater attention to how we think about, create, and tell effective stories, particularly in the sciences, along with an explosion of new storytelling technologies. The climate movement, for example, has largely recognized the importance of
storytelling to change people’s hearts and minds and behaviors, and rebooted a fatalistic narrative to one of hope and action focused on people, not just polar bears. It is crucial for scholars and other researchers to consider the role that storytelling plays in their work, and to develop storytelling skills and interdisciplinary storytelling collaborations that engage, inspire, and educate the public not only about their research, but critically what it means for humanity.