

Stephani Gordon, a graduate of MSU's Science and Natural History Filmmaking program, who now owns her own film production company, shoots underwater video during a National Oceanic and Atmospheric Administration archaeology research cruise at the Midway Atoll in Papahānaumokuākea Marine National Monument in the northwestern Hawaiian Islands. Graduates from MSU's MFA program have gone on to win a variety of awards and work in organizations ranging from National Geographic to NASA.



GETTING REEL

MSU's innovative Science and Natural History Filmmaking program is at the forefront of bringing nature to screens around the world

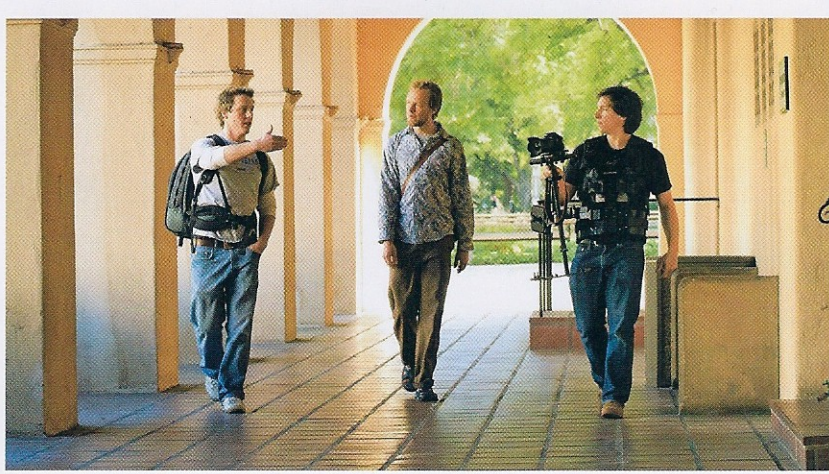
by Anne Cantrell

Kathy Kasic was in Ecuador studying frog evolution when her research adviser handed her a microphone. Here, he said, why don't you record the sounds these frogs make?

"I was out there recording frogs and doing research, and I realized how much I liked telling people about what I did," Kasic said, recalling the trip in 1998 when she conducted research for a master's degree in biology.

Back in the States with her research complete, Kasic realized that "maybe, this (was) the path I wanted to take—to do filmmaking as a scientist."

Kasic later learned about Montana State University's graduate program in Science and Natural History Filmmaking. Even though she was several years into her career as a biologist, Kasic enrolled at MSU in 2004. Now, as an alumna of the world-renowned MSU program, she has worked for organizations like the BBC, National Geographic and the Discovery Channel and had her work screened at numerous festivals, including the International Wildlife Film Festival and Banff Mountain Film Festival. She looks back on the decision to enroll as a wise one.



Science and Natural History Filmmaking graduate students Devon Riter and Danny Schmidt film in Pasadena, Calif., for a NASA-sponsored film about the origins of life.

Filmmakers with scientific training can help ensure that sound science is presented to the public.

—DENNIS AIG

“It’s the best thing I’ve ever done in some ways,” she said of the career switch that changed her life.

Kasic is one of 77 graduates of MSU’s groundbreaking graduate program in Science and Natural History Filmmaking. In the 10 years since its founding, students and alumni of the program have won dozens of prestigious awards, from Fulbrights to Emmys. They have traveled the world, making films on everything from puffins in Iceland, marmots in Mongolia, the Ebola virus and its effects in Republic of Congo, to cutthroat trout in Montana.

Perhaps most importantly, they are creating films that not only are compelling, but which are accurate, balanced and based on science. And that is precisely why the program is so important, according to Dennis Aig, a professor in the MSU School of Film and Photography and the program’s director.

“We train people to become excellent filmmakers who also follow definite scientific principles and ethics,” Aig said. “Even if you don’t agree on a particular issue, you know there was a solid basis of fact behind the film. That’s extremely valuable.”

Origin and design

The university’s program was born out of a visit MSU screenwriting and documentary production professor Ronald Tobias made to Stockholm in 1998. His

colleague, Swedish producer Bo Landin, suggested that the field of filmmaking needed an academic program aimed at training natural history filmmakers.

Tobias asked Landin if he would mind if he ran with the idea. Tobias soon secured \$1.4 million from the Discovery Channel to help fund the program. The first group of students began in 2001. Since then, eight to 16 students have been admitted each year.

Aig said the MSU program was “unprecedented” when it began and still sets the bar.

He explained that one other program existed, at the University of Otago in New Zealand, when the SNHF program began, but it offered only a certificate, not a degree. It now awards degrees but focuses primarily on natural history. In 2004, American University in Washington, D.C., began an MFA program similar to MSU’s that is focused on conservation.

Aig says what really distinguishes Montana State’s program from other film schools is its hands-on nature, its emphasis on the importance of both film history and science history, and the fact that it immerses students in broad knowledge of film.

Chris Palmer, who teaches environmental filmmaking at American University, said the combination of academic training and practical experience MSU offers is rare and exceptional.

“Several times every week someone will

call or email me to seek my advice on where they should study science-based natural history filmmaking,” Palmer said. “I always tell them that one of the best places in the world is at Montana State University because it provides students with sound academic training as well as practical experience.... Any student who gets accepted there is very lucky.”

An equally critical component of the program is its emphasis on training filmmakers who understand scientific methods.

“In today’s world of social media and inexpensive video equipment, everyone can put his or her voice out there, but sometimes questionable research will be put into the mix,” Aig said. “Filmmakers with scientific training can help ensure that sound science is presented to the public. They can provide accurate information that is lacking in other parts of the conversation.”

The MSU program also provides a forum for disseminating that information. Since 2005, it has hosted TERRA, a website produced by MSU graduate students that showcases science and natural history productions from filmmakers all over the globe. In just six years, TERRA films have been downloaded more than 10 million times—an impressive number for any site, let alone one managed by students with many other responsibilities.

Graduates of MSU’s filmmaking program have found jobs at a variety of organizations, including National Geographic, NASA, the Discovery Channel and the BBC. Others are employed at museums or advocacy organizations. A number of graduates work as independent producers, editors and freelancers.

And, time and time again, students and alumni have distinguished themselves with a number of highly regarded awards, including several Fulbright scholarships, student Emmys, Tellys and Jack Kent Cooke scholarships.

“There was no model for the program, no real existing formal academic discipline, so we had to create it,” Aig said. “It’s been challenging, but the success of our students and graduates shows how well it has worked.”



Refah Seyed Mahmoud, a graduate student in MSU's Science and Natural History Filmmaking program, films in Bighorn Canyon, Wyoming.

Explaining science through film

Matt Radcliff was in a science building at Princeton University when a poster caught his eye that described MSU's Science and Natural History Filmmaking program.

His increasing interest in film had already led him to consider attending a "regular" film school, but MSU's program seemed an even better fit. Radcliff soon left Princeton's doctoral program in chemistry for Bozeman, intent on becoming a filmmaker.

"Not only could I learn to make films, but the MSU program was geared toward the films I wanted to make," Radcliff said. "It would make use of my

about general earth science.

"We're letting the public know about the science we're doing at NASA—science that (the public) is paying for," Radcliff said. "We're also spreading the excitement about science. We're spreading the fascination we have with the world around us."

Creating change through film

MSU graduate Kelly Matheson was filming near San Francisco when a woman approached and asked Matheson what she was doing. Matheson replied that she was making a film about elder abuse. Matheson is a program manager at WITNESS,

part of why we made it. We tried to help give the campaign momentum—give it the last push it needed. Hopefully it helped. I believe it did.

"That experience made me know why I do what I do," Matheson added. "Video gave this woman a voice. It amplified her voice and gave her an opportunity to speak out to key decision makers."

Matheson began working at WITNESS after she graduated from MSU's filmmaking program. She enrolled at MSU in 2003 after successful careers as an environmental educator and public interest environmental lawyer.

One overriding belief propelled Matheson to make the switch to film.

"I believe the five most effective ways to create change are law, education, media, economics and science," Matheson said. "The combination of media, science and education really struck a chord with me. With my background as a lawyer, it all came together."

For Matheson, one of the biggest strengths of the program is that it trains filmmakers in basic film skills, and quickly.

"I remember my first professor asking if I had ever picked up a camera. I had taken a still photography course once, and that was it," Matheson said. "I went from having basically no skills to one year later, I had co-produced and co-directed my first documentary film. I didn't consider myself a filmmaker after my first year, but I knew I had the skills to become one."

While at MSU, Matheson won a prestigious Telly Award—a national award that honors excellence in commercials, non-broadcast video and TV programs—as well as a Fulbright scholarship. She used the Fulbright to study film's ability to change policy, practice and law.

"Since the beginning of film, we've taken it for granted that film does have an impact, but getting data is hard," Matheson said. "You can't always precisely show that a difference is being made, but you know that you are making a difference." ■

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—MATT RADCLIFF

background and skills in chemistry."

Radcliff enrolled in 2002. After graduating in 2006, he spent five years working independently, producing educational science pieces, often in partnership with university professors. Then, in 2011, he accepted a position as an earth science video producer at Goddard Multimedia, a division of NASA that provides resources for educators, news media, museums and others interested in exploring and understanding Earth and space.

Most of Radcliff's work at Goddard is focused on NASA's Landsat Program, a series of Earth-observing satellite missions that have collected information about Earth from space since 1972. Radcliff creates educational pieces, such as historical time-lapse videos from the data.

Radcliff also produces short videos for the media and other promotional pieces

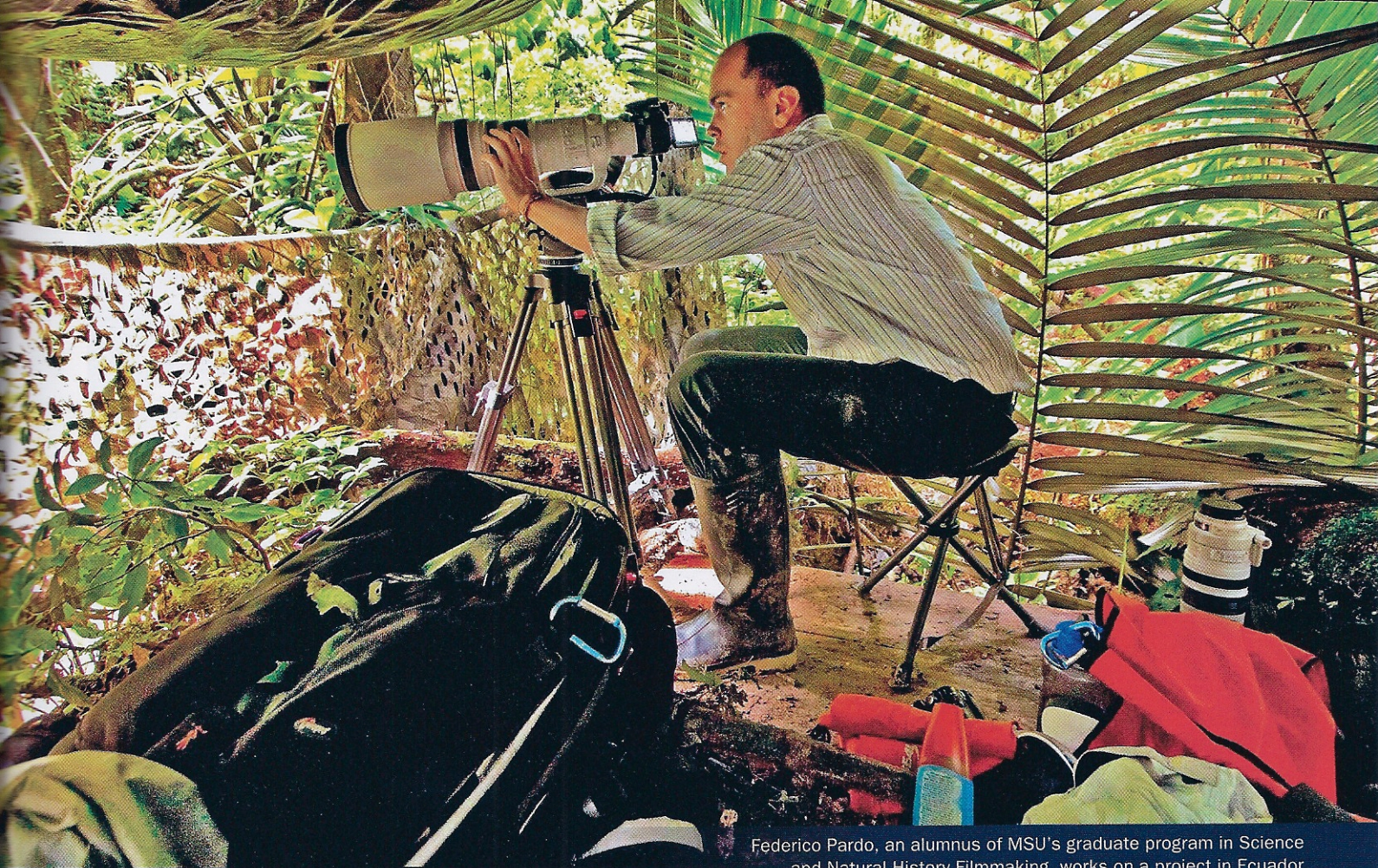
an international human rights organization that uses video for change, ranging from such issues as the commercial sexual exploitation of children to climate change.

"She launched into this story about what happened to her mom," Matheson said. "I asked if she would mind sharing (her mother's story about elder abuse) with the camera. I told her we could take it to Congress."

The film that Matheson, WITNESS and partner the National Council on Aging made about confronting elder abuse was shown to legislators who later decided the fate of the Elder Justice Act. In 2010, soon after the film's release, the Elder Justice Act passed and became law.

"The reality is that more than 500 groups had been working on the passage of the Elder Justice Act for years," Matheson said. "We believe video can support and compel work, and so that's

To see some of the work of students and graduates of MSU's Science and Natural History Filmmaking program, go to www.lifeonterra.com



Federico Pardo, an alumnus of MSU's graduate program in Science and Natural History Filmmaking, works on a project in Ecuador.