RESEARCH HIGHLIGHTS

Smithsonian
Institution

OCTOBER 2018

MOSQUITO! – SCIENCE EDUCATION IN PANAMA AND THE WORLD

The **Smithsonian Science Education Center** ("SSEC") is attempting to empower the next generation of decision makers to make choices about the complex socio-scientific issues facing human society. Smithsonian Science for Global Goals is a new freely available curriculum developed by SSEC in partnership with the InterAcademy Partnership — more than 130 national and regional member academies working together to support the special role of science and its efforts to seek solutions to address the world's most challenging problems. It uses the United Nations Sustainable Development Goals as a framework to focus on sustainable actions that are student-defined and implemented.

Scientists from the **Smithsonian Tropical Research Institute** ("STRI") and educators from SSEC came together to create a free educational module—*Mosquito!*—available via the Smithsonian Learning Lab (*https://learninglab.si.edu*).

The learning module addresses the problem of diseases transmitted by mosquitos. Aimed at children between ages 8 and 18, and their teachers, the module provides free resources for use in classrooms and in a community context.

 With support from Panama's National Secretariat of Science, Technology, and Innovation and Panama's Ministry of Education, as well as financial support from the Gordon and Betty Moore Foundation and Johnson & Johnson, STRI and SSEC brought together a group of change agents and more than 50 teachers to test the content of the module, interacting with scientists using innovative teaching methods.

SMITHSONIAN PROFILES PROVIDES TOOL TO IDENTIFY SMITHSONIAN SCHOLARS AND RESEARCH

Smithsonian Profiles is a website that aggregates Institutional research activity and output with the primary objective of locating Smithsonian experts. The Smithsonian joins a network of more than 140 institutions and agencies in more than 25 countries

implementing VIVO—a member-supported, open source software and an ontology for representing scholarship. After internal compliance testing, in mid-August 2018, this resource became publicly accessible (*https://profiles.si.edu/*). The number of profiles will continue to grow.
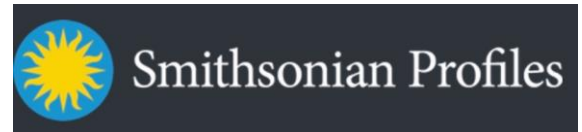
The system allows users to search the cumulative expertise at the Smithsonian. Smithsonian Profiles provides snapshots into the expertise of Smithsonian staff and helps connect site users with hundreds of curators, historians, and researchers who continually discover new knowledge to share with the world. Smithsonian Profiles is searchable by name, organization, keyword, or subject area.

Individual scholar profiles include brief biographical information, a statement of research activity, a list of research publications automatically generated by Smithsonian Research Online, grants, affiliations, awards, and other professional accomplishments. Additionally, a map on the site's home page shows the countries and regions where Smithsonian scholars do their work.

This is the first publicly available resource of its kind meant to highlight and share the staff and scholarship at the Smithsonian in order to bridge connections beyond the Smithsonian—with potential external collaborators, partners, and peers.

SPYING ON WHALES:
THE PAST, PRESENT, AND FUTURE OF EARTH'S MOST AWESOME CREATURES

From *Moby Dick* to *Free Willy* to *Blackfish*, whales have long intrigued us. They are among the largest, most intelligent, deepest diving species to have ever lived on our planet—they seem almost too majestic, too fantastical to be believed. They evolved from land-roaming creatures the size of German shepherds into animals that move like fish, breathe like humans, can grow to 300,000 pounds, live 200 years, and travel entire ocean basins. Whales fill us with awe, terror, and affection, but because they live 99% of their lives underwater, they remain mysteries to us.

In *Spying on Whales*, paleontologist at the **National Museum of Natural History**, Nick Pyenson, takes readers to the ends of the earth and the cutting edge of research to answer some of our biggest questions about whales. Why and how did they evolve to such enormous sizes? How did their ancestors return from land to the sea? What do their lives tell us about our oceans and about evolution as a whole? How have hundreds of years of whaling affected their population, and what does climate change mean for their survival?
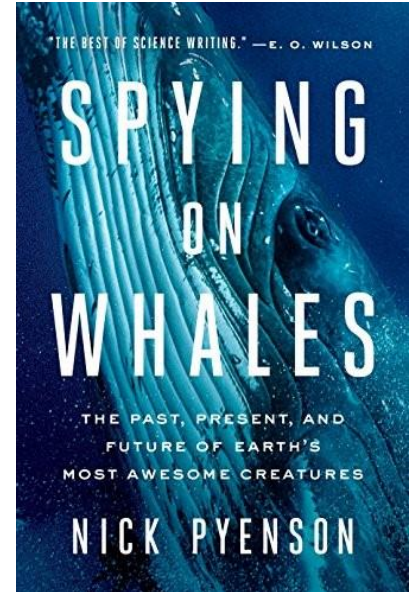
Nick Pyenson is the curator of fossil marine mammals at the National Museum of Natural History. His work has taken him to every continent, and his scientific discoveries frequently appear in *The New York Times, The Washington Post, National Geographic, The Los Angeles Times, The Economist, Popular Mechanics, USA Today,* and on NPR, NBC, CBC, and the BBC. Along with the highest research awards from the Smithsonian, Pyenson has also received a Presidential Early Career Award for Scientists and Engineers in January 2017.

THE ARCHIVES OF AMERICAN ART JOURNAL
SPECIAL VOLUME HIGHLIGHTS LATINO ART AND ARCHIVES

A special issue of the Archives of American Art Journal, devoted to Latino art, showcases the **Archives of American Art's** ("AAA") recent collecting initiative funded by the **Smithsonian Latino Center**. The issue acknowledges the value of Latino history and cultural production to the study of American art, and aims to stimulate more research on Latino art and its archives.

Featured are research articles by Karen Mary Davalos, whose publications on Chicano art have helped define the field, and Tatiana Reinoza, a postdoctoral fellow preparing a book on Latino printmaking. To accompany this new research, AAA commissioned art historian Jennifer A. González to conduct interviews with academics and curators whose scholarship on Latino art engages deeply with archives, at the Smithsonian and beyond. Her conversations with C. Ondine Chavoya, Olga Herrera, Tey Marianna Nunn, and Adriana Zavala demonstrate how far AAA has come in preserving the historical records of Latino artists and institutions, and how much work remains. The scholars' responses to González's questions highlight Archives
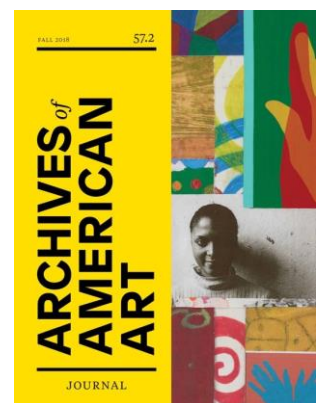
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materials that have been instrumental to their research and speak more broadly to the role that primary sources can and should play in Latino art history.

The issue would not be complete without the voice of Josh T. Franco, who oversaw the Archives' Latino collecting initiative between 2015 and 2017. In the "Acquisitions" section, Franco critically surveys the Smithsonian's engagement with Latino studies and the many collections he has acquired for the Archives. He argues for preserving the voices of Latino artists, critics, historians, collectors, and curators because they are Latino *and* because they contribute significantly to the history of art in the United States. As Franco puts it, "Latino art is American art."

SMITHSONIAN SECRETARY'S RESEARCH PRIZES HONORS SCHOLARS IN 2018

The Secretary's pan-Institutional Research Prizes recognize excellence in recent research by the Institution's employees and carry a $2,000 award to the primary author's research account. The work of the recipients of the Secretary's Research Prizes is peer-reviewed by a committee representing research areas across the spectrum of Smithsonian.

An awards ceremony took place on September 18, to honor this year's recipients:

- Dr. Joshua Bell, **National Museum of Natural History**, for the article "A Bundle of Relations: Collections, Collecting and Communities" published in the *Annual Review of Anthropology*.

- Dr. Igor Chilingaryan, **Smithsonian Astrophysical Observatory**, for the article "RCSED—A Value-added Reference Catalog of Spectral Energy Distributions of 800,299 Galaxies in 11 Ultraviolet, Optical, and Near-infrared Bands" published in the *Astrophysical Journal Supplement Series*.

- Drs. Robert Fleischer and Kevin Mulder, **National Zoological Park**, for the co-authored article "No paternal genetic integration in desert tortoises (*Gopherus agassizii*) following translocation into an existing population" published in the journal *Biological Conservation.*

- Ms. Lynn Heidelbaugh, **National Postal Museum**, for the exhibit "My Fellow Soldiers: Letters from World War I."

- Dr. Michael Johnson, **Smithsonian Astrophysical Observatory**, for the article "Dynamical Imaging with Interferometry" published in the *Astrophysical Journal*.

- Dr. Jeremy Kinney, **National Air and Space Museum**, for the book *Reinventing the Propeller: Aeronautical Specialty and the Triumph of the Modern Airplane* published by Cambridge University Press, 2017.

- Dr. Huib Schippers, **Center for Folklife and Cultural Heritage**, for the book *Sustainable Futures for Music Cultures: An Ecological Perspective* published by Oxford University Press, 2016

The awards ceremony was followed by the fifth annual Bruce "Will" Morrison (former program manager in the **Office of Fellowships and Internships**) memorial lecture by Dr. Melissa Songer, Conservation Biologist at **Smithsonian Conservation Biology Institute**, and the 2011 Chair of the Smithsonian Congress of Scholars. Dr. Songer's topic was "Beyond the Border: Smithsonian's Leadership in International Conservation Science."

New Virus Discovered in Myanmar by Smithsonian's Global Health program

Smithsonian and University of California, Davis scientists and partners have discovered a new coronavirus in a species of bat in Myanmar as part of routine surveillance for the PREDICT project, funded by the U.S. Agency for International Development ("USAID"). A second virus was also detected in Myanmar for the first time; it had been previously detected in bats in Thailand. This is the first detection of viruses in wildlife for the PREDICT/Myanmar team and marks a milestone in the success of the project.

"At the time of this finding, we have finalized testing from samples of 150 animals of which we had two positives," said Marc Valitutto, a wildlife veterinarian with the Smithsonian's **Global Health Program**. "This is the first step to understanding what kind of viruses are present in Myanmar's wildlife populations and lays groundwork for additional work to understand their potential risk to humans and other animals. We still have hundreds more samples to test, and we expect that we will find more novel viruses."

The two viruses belong to the coronavirus family, which also includes two pathogens that have had devastating effects on human health—Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). Although in the same viral family, the two new coronaviruses are not closely related to SARS or MERS. Scientists detected the viruses in saliva and fecal samples that the team collected from insectivorous bats in the *Chaerephon* genus.

Smithsonian's **Global Health Program** is a part of the **Smithsonian Conservation Biology Institute**. The Smithsonian currently participates on the of PREDICT teams in Myanmar and Kenya.

Cooper Hewitt, Smithsonian Design Museum Receives London Design Biennale 2018 Emotional States Medal

Cooper Hewitt, Smithsonian Design Museum was awarded the London Design Biennale 2018 Emotional States Medal for the most inspiring interpretation of the 2018 theme, supported by Panasonic. This medal has been selected by the Biennale's International Jury, a group of 14 world-leading design experts and influencers.

Representing the U.S. at the Biennale, Cooper Hewitt presented "Face Values," an immersive installation that explores the pervasive but often hidden role of facial-detection technology in contemporary society.

Live facial data becomes the basis of dynamic graphic images and provocative engagement between humans and machines. Visitors are invited to perform emotions and transform identities by interacting with original digital works. The exhibition is curated by Ellen Lupton, Senior Curator of Contemporary Design at Cooper Hewitt, and features original work by designers R. Luke DuBois and Zachary Lieberman, displayed within a digital environment designed by Matter Architecture Practice.

Informed by the Biennale's theme of "Emotional States," "Face Values" investigates how the human face has been transformed into a living data source that governments and businesses use to track, measure, and monetize emotions. "Face Values" speaks to the growing fascination around facial-recognition technology, particularly in the U.S. where major companies continue to experiment and push boundaries with this controversial software.