

## FOR EMBARGOED RELEASE 8:00 AM EDT September 27, 2017

# Contact: Tiffany Lohwater, AAAS 202-326-8737; tlohwate@aaas.org

## 2017 Golden Goose Award Recognizes Six Researchers Whose Taxpayer-Funded Work Benefits Society

Researchers will be honored at September 27 award ceremony at Library of Congress

WASHINGTON, D.C. – The sixth annual Golden Goose Award ceremony will recognize three teams of scientists whose silly-sounding research has returned serious benefits to society. Led by the American Association for the Advancement of Science, the award committee includes several science societies and organizations and Congressional supporters.

Note: Media are welcome to attend the September 27 evening award ceremony at the Library of Congress. Please RSVP to <a href="media@aaas.org">media@aaas.org</a>. Video footage of each of the winners is available.

The 2017 Golden Goose Award winners are:

## The Sea Soy Solution

#### **Kaichang Li**

Ever wonder how mussels stick so well to varied and rough surfaces while submerged in water? Oregon State University wood chemist Kaichang Li did, and they inspired him to develop a patented soy-based adhesive for plywood, with support from the U.S. Department of Agriculture. Beginning in 2003, Columbia Forest Products worked with Li to commercialize his bio-inspired manufacturing invention, and by 2006 the company had converted all of its plants away from formaldehyde-based adhesives—whose emissions are known to cause cancer—to this new, soy-based glue. Since then, approximately 60 percent of the plywood and veneer industry has followed suit.

"The partnership between Kaichang Li and Columbia Forest Products shows the important relationship between the free market and scientific research," said Rep. Charlie Dent (R-PA). "As a result of this partnership and federal grant money, Li developed a biologically-inspired glue for plywood, fulfilling consumer demand for a biodegradable but equally as effective product. Funding such research is crucial for scientists like Li, who allow their curiosity in the natural world around them to inspire their scientific research into practical inventions for the private sector."

#### The Silence of the Frogs

### Joyce Longcore, Elaine Lamirande, Don Nichols, and Allan Pessier

Joyce Longcore spent her career toiling in relative obscurity until one day two veterinary pathologists from the National Zoo in Washington, D.C. contacted her. At the time, she was one of just a few people in the world who could have answered their question: What is killing so

many of our frogs? Decades of mysterious animal deaths had led to this point, when Longcore's lifelong dedication to the study of an obscure branch of the tree of life – chytrid fungi – would prove crucial to unlocking the mystery of mass die-offs of amphibians around the globe. Thanks to her work with Allan Pessier, Don Nichols, Elaine Lamirande and many colleagues around the world, today we know that fungal infections have the potential to move great distances rapidly, assisted by human movement. Their insights have led to changes in national policies on how animals are moved around the globe and even helped us save iconic species from extinction.

#### Fuzzy Logic, Clear Impact Lotfi Zadeh

It often seems that we're surrounded by fuzzy logic. We are. Fuzzy logic and fuzzy sets were the brainchild of Lofti Zadeh, who worked for many years as a computer science professor at the University of California, Berkeley. With support from the Air Force Office of Scientific Research and the National Science Foundation, Zadeh proposed these revolutionary concepts in 1965 to deal with the mathematics and logic of imprecise information, receiving a skeptical response and howls of "complete nonsense." He even drew the attention of Senator William Proxmire and the infamous Golden Fleece Award. But since the concept's debut, the original research paper has become one of the most widely cited in history, used in more than 16,000 patents and applied to efficiency improvements for HVAC systems, healthcare devices and more. This award recognizes Zadeh's significant contributions to society posthumously.

"The Golden Goose Award reminds us why politicians must leave scientific research to the scientists," said Jim Cooper (D-TN). "This year's winners prove how obscure and even unbelievable studies can change the world as we know it. We must continue to support our scientists whose brilliance and ingenuity keep America the greatest nation on earth."

"AAAS is proud to support the Golden Goose Award, which highlights scientific success stories that would not have been possible without federal funding," said Rush Holt, chief executive officer of AAAS. "These scientists have changed the world in unpredictable ways, and we applaud their curiosity, their tenacity and their achievements."

#### **About the Golden Goose Award**

The Golden Goose Award honors scientists whose federally funded work may have been considered silly, odd or obscure when first conducted, but has resulted in significant benefits to society. In 2012, a coalition of business, university and scientific organizations created the Golden Goose Award, conceived by Rep. Jim Cooper (D-TN) as a strong counterpoint to criticisms of basic research as wasteful federal spending such as the late Sen. William Proxmire's (D-WI) Golden Fleece Award. Learn more about the award, including past winners and supporters: <a href="https://www.goldengooseaward.org">www.goldengooseaward.org</a>.

#####

#### **Awardee Contact Information**

Kaichang Li – <u>kaichang.li@oregonstate.edu</u>

Joyce Longcore – <u>longcore@maine.edu</u>

Elaine Lamirande – <u>elamirande@niaid.nih.gov</u>

Don Nichols – <u>nicholsdvm@aol.com</u>

Allan Pessier – <u>pessier@vetmed.wsu.edu</u>