



# The International Cosmos Prize 25th Anniversary



## The Harmonious Coexistence between Nature and Mankind

Since ancient times, Japanese rural communities have preserved natural settings called satoyama, where local people have formed and maintained a mechanism for sustainably enjoying the blessings of nature through recycling of limited resources.

Satoyama represents the Japanese traditional concept of “Harmonious Coexistence between People and Mankind.” To carry on and further develop this concept, we at the EXPO '90 Foundation honors an individual or group who is recognized as contributing to its realization, by awarding the annual International Cosmos Prize.

The award ceremony is held in Osaka every autumn, offering the prizewinner a monetary prize of 40 million yen.

This year, the International Cosmos Prize celebrates the 25th anniversary of its establishment.

### Prizewinner 2012~2016

2012



**Dr. Edward Osborne Wilson**  
Nationality : U.S.A.

2013



**Dr. Robert Treat Paine**  
Nationality : U.S.A.

2014



**Dr. Philippe Descola**  
Nationality : France

2015



**Dr. Johan Rockström**  
Nationality : Sweden

2016



**Dr. Kunio Iwatsuki**  
Nationality : Japan

### WHO WILL BE THE NEXT PRIZEWINNER?

**We are now calling for recommendations for the 2017 International Cosmos Prize!**



If you have a candidate whom you would like to recommend, please e-mail us at the address below.

We will send you a recommendation form (in Microsoft Word). The deadline for recommendations is April 15.

**EXPO '90 FOUNDATION** E-mail: [rec-cosmos@expo-cosmos.or.jp](mailto:rec-cosmos@expo-cosmos.or.jp)

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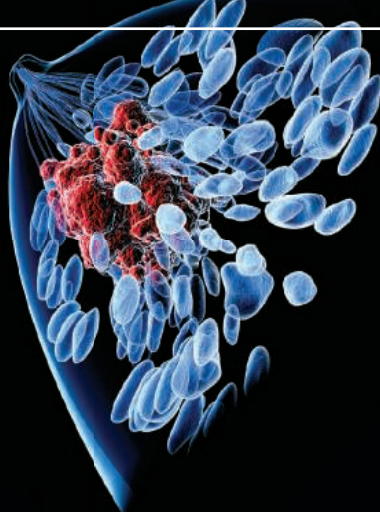
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As of February 2, 2017



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Leslie K. Ferrarelli, "Focus Issue: Refining the War on Cancer", *Sci. Signal.* 7, 318eg2 (2014). Image: Raycat/iStockphoto

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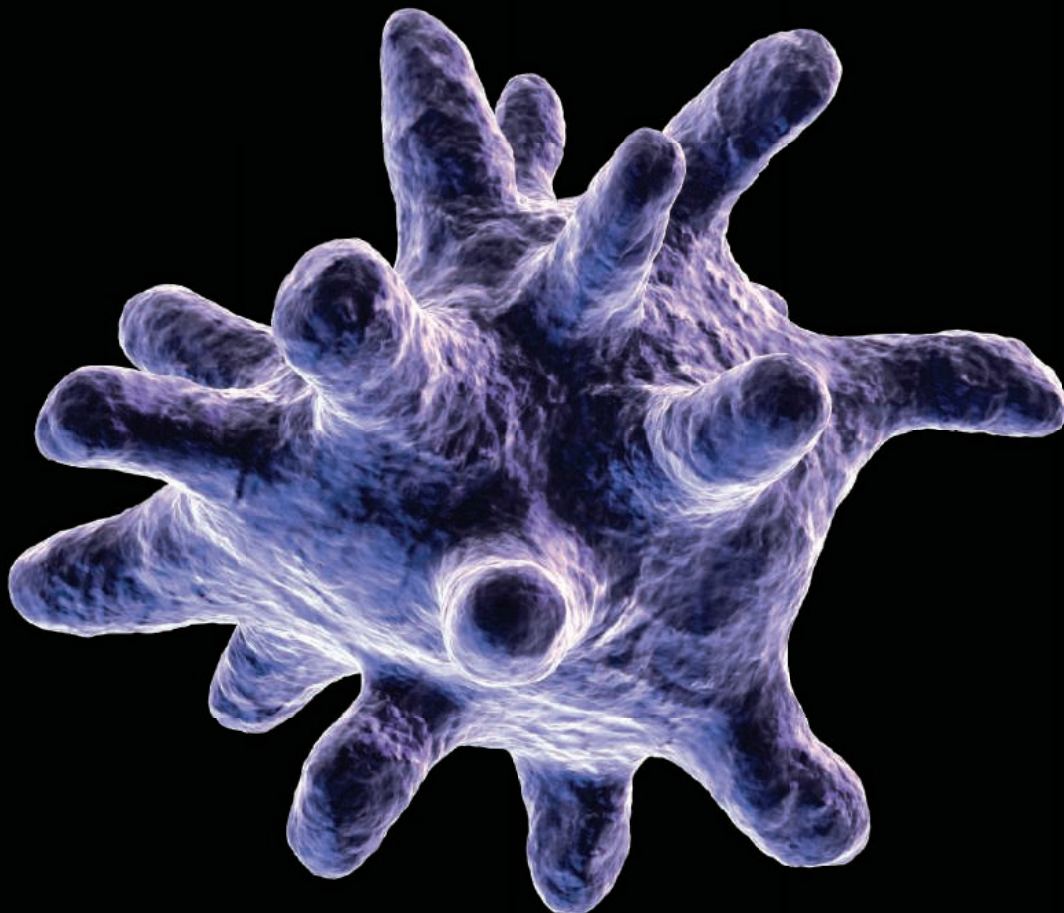


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2016 Winner

Gilad Evrony, M.D., Ph.D.

Mount Sinai Hospital

For research on technologies  
to sequence and analyze the  
genomes of single cells  
from the human brain



## Call for Entries

Application Deadline  
June 15, 2017

### Eppendorf & Science Prize for Neurobiology

The annual Eppendorf & Science Prize for Neurobiology is an international award which honors young scientists for their outstanding contributions to neurobiological research based on methods of molecular and cell biology. The winner and finalists are selected by a committee of independent scientists, chaired by Science's Senior Editor, Dr. Peter Stern. To be eligible, you must be 35 years of age or younger.

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with unequal lysis efficiencies of different organisms, making it ideal for microbial community profiling. For processing, samples are transferred to the provided ZR BashingBead lysis tubes, where samples are rapidly and efficiently lysed by bead beating in uniquely designed buffers.

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#### Zymo Research

For info: 888-882-9682

[www.zymoresearch.com](http://www.zymoresearch.com)

### PCR Master Mixes

Applied Biosystems TaqPath ProAmp master mixes are developed for high-throughput genotyping and copy number variation protocols requiring accurate results from samples containing PCR inhibitors. They are designed to deliver sensitive, reproducible results from genomic DNA targets. Two formulations of these versatile, multiplex assay-compatible master mixes are available: TaqPath ProAmp Multiplex Master Mix with Mustang Purple for multiplexing up to four targets, and TaqPath ProAmp Master Mix, which includes ROX as the passive reference dye for multiplexing up to three targets. Both mixes enable measurement of FAM, VIC, ABY, and JUN dye, or other dyes with similar emission wavelengths.

#### Thermo Fisher Scientific

For info: 800-955-6288

[www.thermofisher.com/proamp](http://www.thermofisher.com/proamp)

### NSCLC FISH Probe

The Cytocell Aquarius ROS1 *Plus* Breakapart and RET Breakapart probes specifically and accurately detect rearrangements in the genome associated with the most common form of lung cancer—non-small-cell lung cancer (NSCLC). The new additions complement Oxford Gene Technology's existing NSCLC probe range (including ALK Breakapart, EGFR Amplification, and EML Breakapart), providing a comprehensive solution for diagnosis and patient stratification. As NSCLC can be classified into different molecular subtypes, accurate genomic identification of the correct subtype is of paramount importance for targeted treatment. The new Cytocell probes for NSCLC will further improve the ability to stratify and treat NSCLC. The probes are available in two economical sizes and are premixed in hybridization buffer—saving time and minimizing potential errors. Fully optimized for use on FFPE samples, Cytocell fluorescence in situ hybridization (FISH) probes deliver high-intensity signals with minimal background for accurate, reliable results and confident diagnoses.

#### Oxford Gene Technology

For info: +44-(0)-1865-856828

[www.ogt.com/NSCLC](http://www.ogt.com/NSCLC)

### MP-AES System

The new Agilent 4210 microwave plasma-atomic emission spectrometer (MP-AES) runs on air rather than flammable gas—a feature unique to Agilent MP-AES systems—making it both safer and less expensive to operate. This capability is especially important to laboratories in the food, agriculture, petrochemical, environmental, and mining industries. The 4210 features an advanced valve system, an inert torch, a humidifier, a temperature-controlled spray chamber, a multimode sample-introduction system, and enhanced diagnostics software—all of which extend the instrument's analytical performance, sample throughput, and ease of use. In addition, new automation software enables remote elemental analysis. This flexibility opens up new possibilities for applications such as onsite process stream monitoring and environmental monitoring. Researchers can analyze all the elements they want, with excellent repeatability, accuracy, and detection limits. Laboratories equipped with the 4210 will have access to the lowest-cost elemental analysis possible.

#### Agilent Technologies

For info: 800-227-9770

[www.agilent.com](http://www.agilent.com)

### Germicidal Lamps

Herolab's UV Products division features germicidal lamps that are available for a number of applications. The main use of germicidal lamps is the direct and indirect degermination of air. Microorganisms floating around freely in the air are affected by UV radiation, whereas conventional methods of disinfection fail or cannot be used. UV radiation can also be used to sterilize solid articles, but bacteria which may be in the radiation shadow, in lines or cracks, or inside the substance will not be affected. Herolab germicidal lamps are suitable for mounting on ceilings or walls, and are also available with a stand on rollers so that they are mobile. The range features lamp units with or without reflectors and with 30-W or 15-W tubes. All units emit a high level of 254-nm UV light (UV-C), and the 30-W lamps are also ozone-free.

#### Herolab

For info: +49-(0)-6222-5802-0

[www.herolab.de/index.php/en](http://www.herolab.de/index.php/en)

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#### Phenomenex

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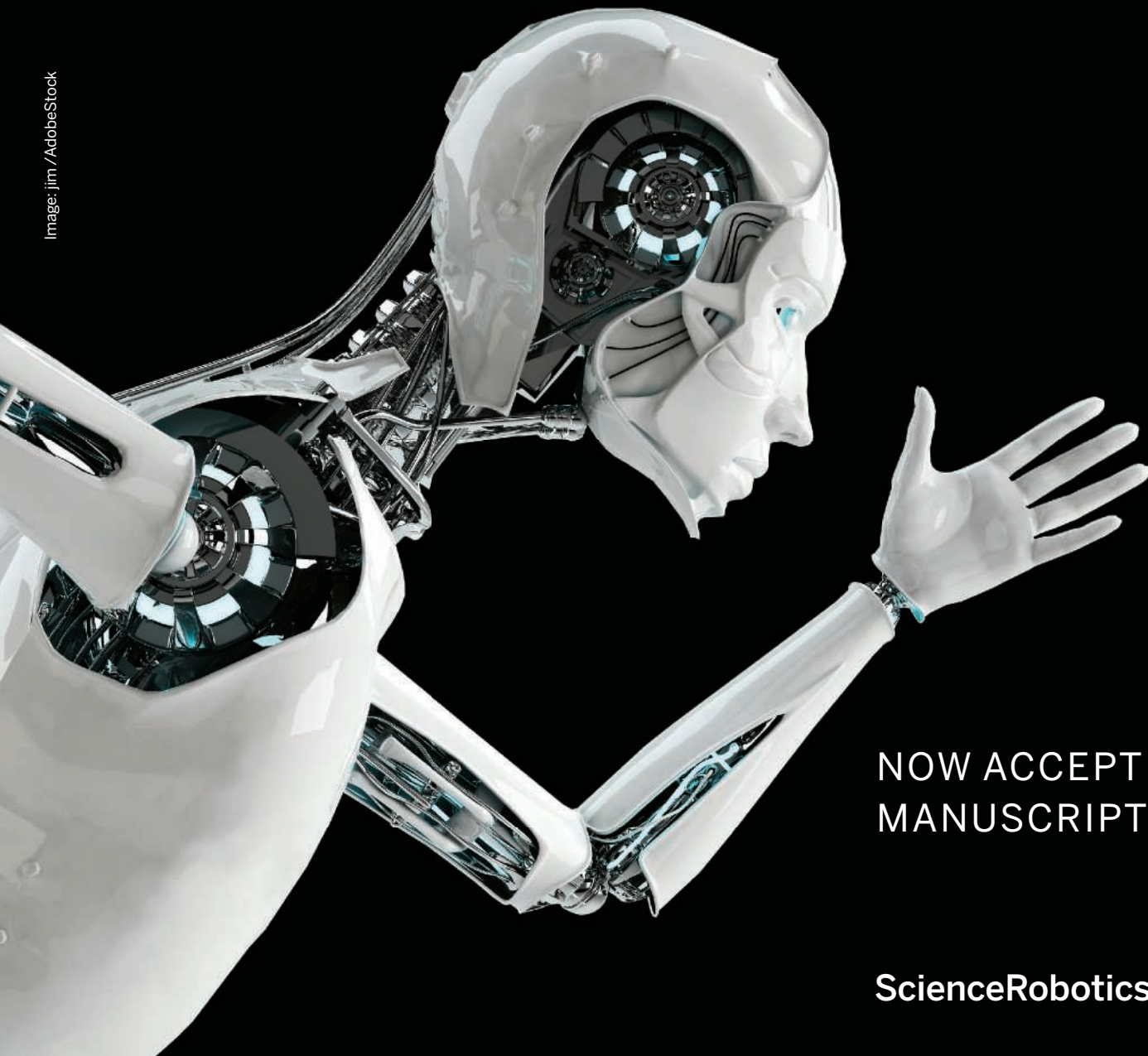


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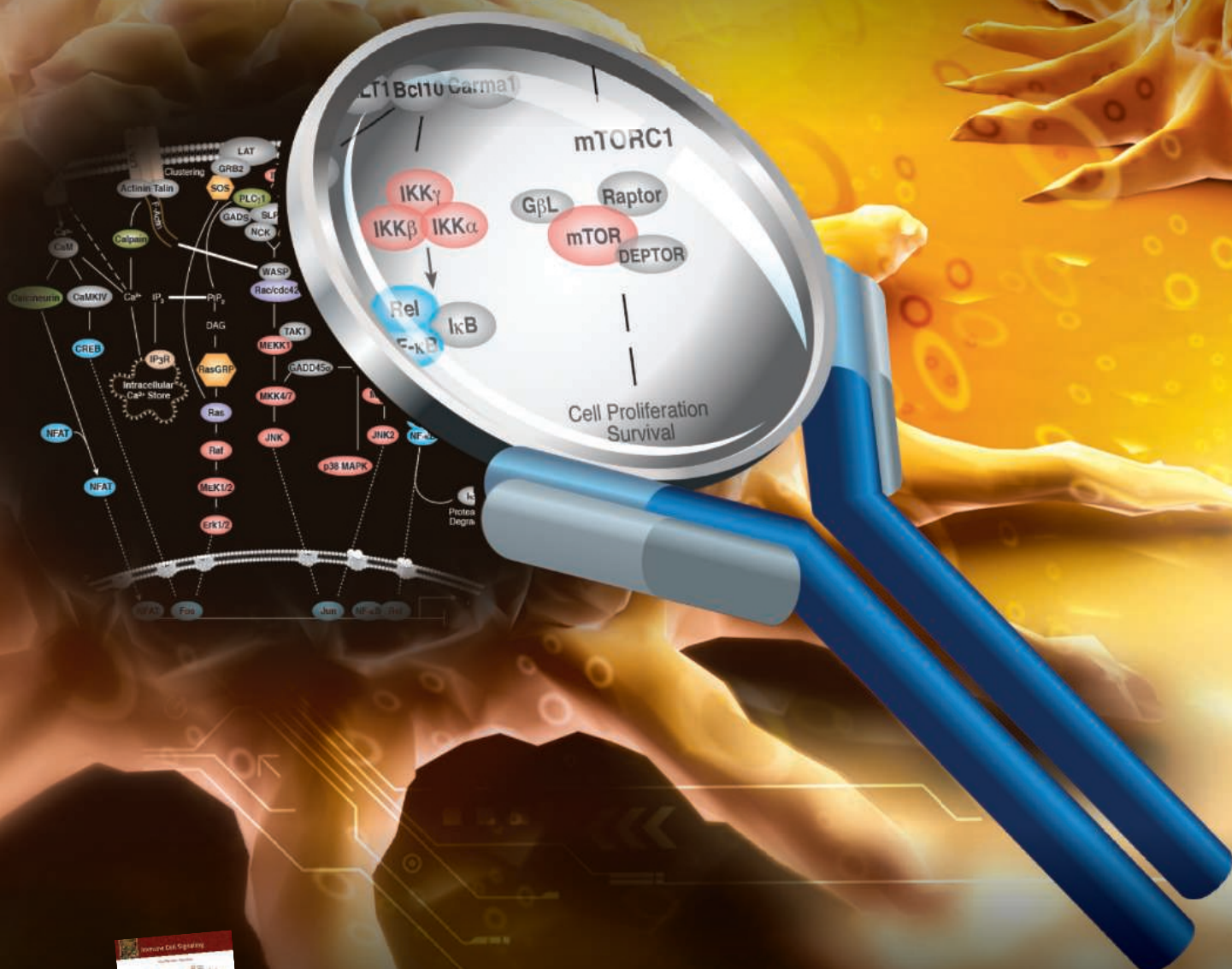
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