



- New Assistant Professor investigates an olfactory mystery
- \$3.75 Mil NSF grant for BigPlant v1.0
- CSHL researchers learn more about how brain circuits respond to sound
- Upcoming events

Shining light on an olfactory mystery

Neuroscientist [Florin Albeanu](#), who as a CSHL Fellow studied how sensory systems encode information from the outside world, has been appointed Assistant Professor in the neuroscience program at CSHL. With the ultimate goal of understanding how perceptions arise, Albeanu uses the tools of optogenetics, a relatively new combination of optical and genetic techniques, to investigate information processing in brain circuits.

He recently genetically altered mice such that their brain cells are programmed to respond to light as if it were an odor. Using these mice, his team detected distinct neuronal activation patterns that might explain how brains distinguish one odor from another. These [findings](#) appear in a [paper](#) published in *Nature Neuroscience* on October 17.



More details on how our brain circuits respond to sound



The October 17 issue of *Nature Neuroscience* includes a [second paper](#) from a scientist in CSHL's neuroscience program. [This paper](#), by Professor and program chair [Anthony Zador](#), describes his team's efforts to understand how responses to sound cues actually arise from the complex network of neurons in the brain's "hearing center." The team uncovered some unexpected details of connectivity in this region that add a new dimension to their long-term research goal of understanding how this connectivity is affected in disorders such as autism.

Big Support for "BigPlant v1.0"

CSHL Profs. [Rob Martienssen](#) (Plant Biology) and [W. Richard McCombie](#) (Genomics) are among scientists from four NY institutions who received a five-year, [\\$3.75 million grant](#) from the National Science Foundation on October 25. With colleagues at NYU, The American Museum of Natural History and the New York Botanical Garden, they will exploit a computer-based phylogenetic tree called BigPlant v1.0 that they constructed under a prior grant. The ultimate aim is to identify genes responsible for the evolution of economically relevant seed traits. Also in late October, the prestigious organization EMBO (European Molecular Biology Organization) announced that Dr. Martienssen was among 63 scientists it had just elected to its ranks as associate members.



Upcoming events and announcements:

CSHL's fifth [Double Helix Medals Dinner](#) will be held **November 9** at the Mandarin Oriental in New York City. This year's honorees are geneticist Mary-Claire King, philanthropist Evelyn H. Lauder and Nobel Laureate John F. Nash. For videos and images of the Double Helix Medals events since 2006, please visit <http://doublehelixmedals.cshl.edu/gallery/2009/dinner/>.

The second annual Lorraine Grace lecture on **Societal Issues of Biomedical Research** will be presented by [Nancy Berlinger](#), Ph.D., Deputy Director and Research Scholar at The Hastings Center in Garrison, New York. The lecture, titled "*The Ethics of Hope in End-of-Life Care*," will take place on **November 14 at 4.30pm in Grace Auditorium**.

Nobel Laureate Dr. James D. Watson, co-discoverer of the structure of DNA, and William Grover, partner emeritus of Centerbrook Architects, will explore the theme of architecture in the service of science during their [lecture](#), "Making a Village for Science," an overview of their 34-year collaboration at CSHL. The lecture, which is part of the third annual Centerbrook Architecture Series presented by the Essex Library, is on **November 11 at the Essex Meadows Auditorium from 7 to 8 p.m.** Admission is free; please call (860) 767-1560 to register.

Cold Spring Harbor Laboratory (CSHL) is a private, non-profit research and education institution at the forefront of research in cancer and molecular biology, neuroscience, plant genetics, and bioinformatics and genomics. Under the leadership of Dr. Bruce Stillman, a member of the National Academy of Sciences and a Fellow of the Royal Society (London), more than 400 scientists conduct groundbreaking research to advance the understanding and ability to diagnose and treat cancers, neurological diseases, and other causes of human suffering.

Cold Spring Harbor Laboratory is one of sixty-three institutions supported by the Cancer Centers Program of the National Cancer Institute (NCI) and has been designated as an NCI Cancer Center since 1987.

We would like to hear from you!
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