



CSHL in the News

Long Island Pulse

[Science Island](#)

April 26, 2013

BBC

[The structure of DNA](#) [podcast]

April 25, 2013

National Geographic

[The jumping gene: Friend or foe](#)

April 25, 2013

MSNBC

[New Nobel letters reveal secrets of DNA Prize](#)

April 24, 2013

Clinical Oncology News

[Drugging the undruggable](#)

April 11, 2013

MSNBC

[Partha Mitra](#) on the [Melissa Harris Perry Show](#)

April 7, 2013

The Washington Post

[Obama: 'Braaaaaains.' Partha Mitra: 'Whoa there, buddy.'](#)

April 3, 2013

"In Quotes"

Professor [Tony Zador](#) quoted in

[Techonomy](#)

[Brain science could be the next big leap](#)

April 23, 2013

Assistant Professor [Anne Churchland](#)

quoted in [News at Princeton](#)

[Bad decisions arise from faulty information, not faulty brain circuits](#)

April 15, 2013

Associate Professor [Pavel Osten](#)

quoted in the [LA Times](#)

[Method for making brain transparent may open scientific frontier](#)

April 10, 2013

Professor [Partha Mitra](#) quoted by the

[BBC](#)

[Babies' brains to be mapped in the womb and after birth](#)

April 10, 2013

Milestones

[Zach Lippman](#) promoted to Associate Professor

Professor [W. Richard McCombie](#)

awarded [Ingenuity Systems grant](#)

James Watson honored at [World Science Festival gala](#)



CSHL wins top performance awards for our electronic newsletter

Upcoming Events

[Team CSHL at Long Island Marathon Weekend](#)

Saturday and Sunday, May 4-5

[The Women's Financial Group's 10th Anniversary Gala](#) in support of CSHL

Tuesday, May 7

Science on Screen @ CINEMA

ARTS CENTRE

[Race for the Double Helix](#)

Wednesday, May 15

[Science Walking Tour](#)

Sunday, May 19

[Public Lecture: Alternative Medicine - Sense and Nonsense](#)

Saturday, June 8

[20th Annual CSHL Golf Tournament](#)

Tuesday, June 11

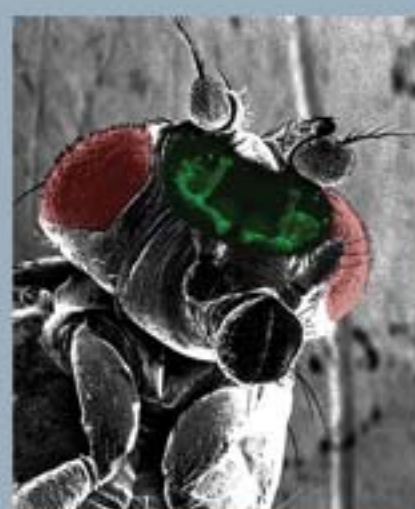
[2013 DNALC Summer Camps](#)

Registration Now Open

'Jumping genes' associated with memory loss and early death in animal model

Associate Professor **Josh Dubnau** and his team may have uncovered another dark side to transposons. Also known as "jumping genes," transposons are pieces of genetic material that copy and insert themselves randomly into the chromosomes. They were discovered in corn (maize) at CSHL by Nobel laureate Barbara McClintock, and are thought to be one cause of desirable genetic variation. But it is also known that they can cause havoc in the DNA of sperm and eggs cells, known as "germline DNA," possibly leading to sterility or fatal developmental complications.

Dubnau's team **noticed** that when they bred fruit flies lacking a functional version of a protein responsible for controlling transposons, called Ago2, the flies had a deficiency in their long-term memory. The team found that in the abnormal flies, transposons began to accumulate much earlier and went on to multiply more than in normal fruit flies. This was accompanied by earlier onset of age-related defects in long-term memory and also shorter lifespan. These results were **published** in *Nature Neuroscience* this month. "The next step will be to design experiments to ask whether transposons are a direct cause of neurodegeneration," Dubnau says.



Watson School of Biological Sciences graduates 10th class

The **Watson School of Biological Sciences** at CSHL celebrated its 10th commencement Sunday afternoon, April 28, conferring the Ph.D. degree in biology upon eight new graduates and honorary doctoral degrees on two distinguished investigators, **Brigid Hogan** and **Jack E. Dixon**, who have had major impacts in their fields. As noted by **Dr. Alexander Gann**, who became

Dean of the Watson School at the beginning of this year, this year's ceremony not only included the School's 60th graduate, but was held on the same week that the world celebrated the 60th anniversary of the discovery of the double-helix structure of DNA. Assistant Professor **Gurinder "Mickey" Atwal**, Ph.D., a quantitative biologist, received The

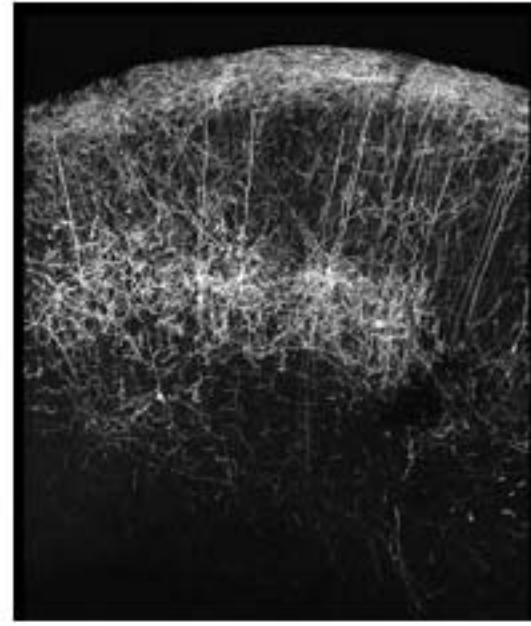
Winship Herr Teaching Award at the commencement, recognizing his outstanding teaching at the Watson School.



How the brain converts sound information to action

Our ability to act on the basis of what we hear is primal - something we take for granted, and without which we as a species would surely have been less successful over the millions of years of our evolution. Professor **Anthony Zador** and his recently graduated doctoral student Petr Znamenskiy have just published a **paper** in *Nature* that lays bare one of the outstanding mysteries about how mammals convert "representations" of sounds in their brain into information that can be used to make decisions -- for instance, to move out of the way of a fast-approaching truck. Representations of sound, they learned, move from the auditory cortex of the mammalian brain to another brain area called the striatum, which receives inputs from many brain areas and is intimately involved in processing signals involved in motion.

As they demonstrated in the rat brain, although many neurons in the auditory cortex are "tuned" to low or high frequencies, most do not transmit their information directly to the striatum. Rather, their information is transmitted by a much smaller number of neurons in their vicinity, which in turn convey their "votes" directly to the striatum. Read about it **here**.



Raising autism awareness by lighting up blue



During April the Carnegie library was lit up with blue light in support of autism awareness month. Several groups at CSHL have research focused on understanding autism; all at the Lab were very happy to support **Autism Speaks** through this initiative. Learn more about our autism research **here**.

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Founded in 1890, Cold Spring Harbor Laboratory (CSHL) has shaped contemporary biomedical research and education with programs in cancer, neuroscience, plant biology and quantitative biology. CSHL is ranked number one in the world by Thomson Reuters for impact of its research in molecular biology and genetics. The Laboratory has been home to eight Nobel Prize winners. Today, CSHL's multidisciplinary scientific community is more than 360 scientists strong and its Meetings & Courses program hosts more than 12,500 scientists from around the world each year. Tens of thousands more benefit from the research, reviews, and ideas published in journals and books distributed internationally by CSHL Press. The Laboratory's education arm also includes a graduate school and programs for undergraduates as well as middle and high school students and teachers. CSHL is a private, not-for-profit institution on the north shore of Long Island.