Cold Spring Harbor Laboratory June 2012 NetLetter

::: **CSHL in the News**

Times Beacon-Record (North Shore)
CSH's Zachary Lippman has a taste for tomatoes
May 29, 2012

ScientificAmerican.com
The Brain's Highways: Mapping the Last Frontier
by Partha Mitra
May 22, 2012

Science
Submitting Your Best-Possible R01 Application
May 11, 2012

GEN News Highlights
Bioeconomy Blueprint Embraces Public-Private Efforts, Avoids Grand Challenges
May 3, 2012

Artemis
Live Imaging Shows Response to Cancer Drugs Can Be Boosted by Altering Tumor Microenvironment
May 2, 2012

Scienceline
Solving The Genomic Jigsaw Puzzle
May 1, 2012

::: **Upcoming Events**

DNA Learning Center Summer Camps
Registration Open!

June 2
CSHL Urban Barcode Project Presentations at the World Science Festival

June 3
Dorcas Cummings Memorial Lecture"Send in the Clones" by Dr. Rob Martienssen

June 6
Student Award Ceremony for the Urban Barcode Project 2011-2012

June 9-10
LI 2-Day Walk

June 12
CSHL's 19th Annual Golf Tournament

June 26
Public Lecture: Follow Your Genes - Decision Making and Your Personal Genome

Make A Gift →

::: **LabDish**

05/25/2012
2012 Biology of Genomes in 140 characters

::: **Stay Connected**

'Heinz' tomato and its wild ancestor are sequenced

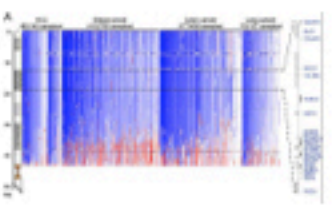
Starting with the Human Genome Project in the mid-1990s, CSHL scientists have been part of international efforts to sequence the genomes of various species. This month, Assistant Professor **Zach Lippman** and his collaborators at CSHL joined more than 300 researchers in the Tomato Genome Consortium as co-authors in a study that published the genome sequence of the domesticated tomato - the so-called "Heinz" tomato - along with that of its wild South American ancestor, which was **sequenced in a parallel effort** at CSHL. The study appears in ***Nature***.

Together, the sequences are helping researchers understand how the domesticated variety evolved and diverged from the wild species following breeders' efforts to cultivate it for certain desirable traits such as taste. This information is providing insights that can help boost tomato production worldwide.

High Honors for Gregory Hannon

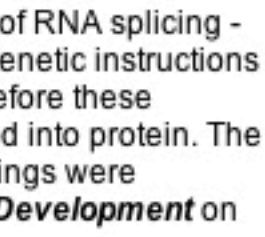
One of the world's leading experts in the study of the naturally occuring gene-regulating process known as RNA interference (RNAi) - CSHL Professor and HHMI Investigator **Gregory Hannon** - has been **elected to the National Academy of Sciences (NAS)**. In addition to publishing some of the most frequently cited studies of RNAi mechanisms and pathways, Hannon is known, among other things, for his work in assembling short-hairpin RNA libraries, powerful tools for investigating gene function and indentifying new drug targets for various types of cancer.

Clusters of cooperating tumor-suppressor genes in cancer



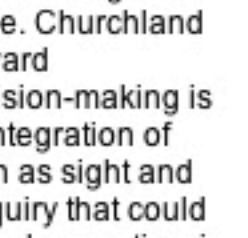
Large chunks of chromosomes are often missing or deleted in the genomes of most types of cancer cells. By focusing on one such deletion in a mouse model of human liver cancer, scientists led by Professor **Mike Wigler** at CSHL and collaborators at Memorial Sloan-Kettering Cancer Center have found that such deleted areas harbor a large number of tumor-suppressor genes that **work together synergistically**, and not individually, to suppress cancer. Their collective loss, it is suggested, gives tumors a survival advantage. The new study appears in the ***Proceedings of the National Academy of Sciences***.

Exceptions are found to RNA splicing rule



Even decades-old rules about well-documented biological processes such as RNA splicing **can have exceptions**. In the last two years, Professor **Adrian Krainer's** group has found two, in research that alters the our view of RNA splicing - the process that edits genetic instructions encoded within RNA before these messages get translated into protein. The team's exceptional findings were published in ***Genes & Development*** on May 15.

Churchland named McKnight Scholar



Neuroscientist **Anne Churchland** is one of six recipients of the **2012 McKnight Scholar Award**, given to early-career scientists pursuing a basic research problem that could make a significant contribution to solving an outstanding clinical issue. Churchland will apply her award toward understanding how decision-making is enhanced through the integration of multisensory inputs such as sight and sound. It's an area of inquiry that could help clarify conditions such as autism in which such integration is impaired.

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.