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**In the News**

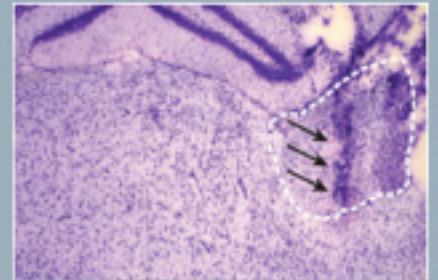
**GenomeWeb**  
[CSHL Team Publishes Method for Large-Scale Identification of Potent shRNAs](#)  
 February 24, 2011

**Science**  
[Will Computers Crash Genomics?](#)  
 February 11, 2011

**BigThink**  
[Why there may never be a cure for autism](#)  
 February 9, 2011

**Tracing the depression circuit: An overlooked brain region might be the key**

A multi-institutional study co-led by CSHL Professor Fritz Henn and Assistant Professor Bo Li, which appears in the journal *Nature*, identifies a tiny, previously overlooked structure in the brain called the lateral habenula (LHb) as being an important focal point in the brain circuitry that contributes to depression's pathology.



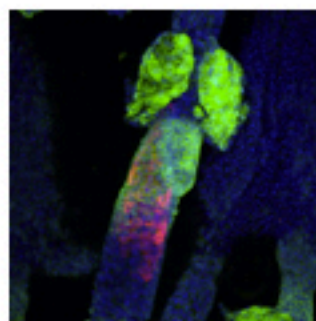
The lateral habenula in a rat brain (area enclosed by dashes)

In rats that were bred to mimic certain depression symptoms seen in humans, the scientists found that the neurons in the animals' LHb area were abnormally hyperactive. This alteration, as Dr. Henn explains in this [video](#), in turn led to the inhibition or dampening of signals that leave the LHb for other parts of the brain, including an area that constitutes the brain's "reward center." Using deep brain stimulation – a novel form of electrical stimulation – of the LHb, the scientists were able to reverse depression-like symptoms in the rats.

**Upcoming Events**

- DNA Learning Center Summer Camps  
[Registration opens soon!](#)
- 4/4/11 Public Lecture: [Neuroeconomics and the Biological Basis of Decision-Making](#)
- 4/8/11 Meeting: [Cell & Developmental Biology of Xenopus](#)
- 4/9/11 [Labapalooza!](#)
- 4/15/11 Concert: [Two Plus One](#)
- 4/16/11 National DNA Day [Scavenger Hunt](#)
- 4/29/11 Concert: [Jennifer Johnson](#)

**A stem cell origin of skin cancer**



Stem cells (red and green) in skin

Associate Professor [Alea A. Mills](#) and her team recently identified the long sought stem-cell origins of carcinoma and the genetic lesions that occur within these cells and push them to become malignant. The new [study](#), published in the journal *Cell Stem Cell*, adds [new insight](#) to the role of stem cells in cancer.

Skin cancer is now the most common form of human cancer, and basal cell carcinomas account for more than 90% of skin cancer cases in the United States. Associate Professor [Alea](#)

**Powerful boost to RNAi efficiency**

CSHL Professors [Scott Lowe](#) and [Gregory Hannon](#) have co-led a research team that has overcome an important problem in the field of RNA interference (RNAi), a [widely used](#) way of zeroing in on a particular gene within a cell and shutting down its activity. To solve the problem of choosing the correct RNAi trigger – each gene could potentially have up to 5000 triggers, most of them ineffective – the scientists have [devised](#) a powerful assay, [described](#) in the journal *Molecular Cell*, that can simultaneously test thousands of candidates and reliably identify the most potent RNAi triggers.

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