

# Eight new faculty



Camila dos Santos

## Camila dos Santos

**Assistant Professor | Ph.D., Universidad Estadual de Campinas, Brazil, 2006**

Among the changes that occur during pregnancy, those affecting the breasts have been found to subsequently modify breast cancer risk. My laboratory investigates how the signals present during pregnancy permanently alter the way gene expression is controlled and how these changes affect normal vs. malignant mammary development.



Douglas Fearon

## Douglas Fearon

**Professor | M.D., Johns Hopkins University School of Medicine, 1968**

I'm studying how to harness the power of the immune system to fight cancer. Our underlying premise is that the microenvironment within a tumor suppresses the immune system. We have found a way to eliminate this suppression in a mouse model of pancreatic cancer, which has led to development of a drug for human pancreatic cancer that entered phase I clinical trials in 2015.



Justin Kinney

## Justin Kinney

**Assistant Professor | Ph.D., Princeton University, 2008**

From regulating gene expression to fighting off pathogens, biology uses DNA sequence information in many different ways. My research combines theory, computation, and experiment in an effort to better understand the quantitative relationships between DNA sequence and biological function. Much of my work is devoted to developing new methods in statistics and machine learning.



Je Lee

## Je Lee

**Assistant Professor | M.D., Ph.D., Tufts School of Medicine, 2002**

Cells are amazingly complex, with the ability to sense, and remember timing, location and history. I am exploring how cells store this information, and how their surroundings influence their communication with other cells. I am also developing various imaging and molecular sequencing methods for tracking genes, molecules, and cells to understand how cancer cells arise and evolve.



Dan Levy

## Dan Levy

**Assistant Professor | Ph.D., University of California, Berkeley, 2005**

We have recently come to appreciate that many unrelated diseases, such as autism, congenital heart disease and cancer, are derived from rare and unique mutations, many of which are not inherited but instead occur spontaneously. I am generating algorithms to analyze massive datasets comprising thousands of affected families to identify disease-causing mutations.



Jason Sheltzer

## Jason Sheltzer

**CSHL Fellow | Ph.D., Massachusetts Institute of Technology, 2015**

Nearly all tumors exhibit a condition known as aneuploidy—their cells contain the wrong number of chromosomes. We're working to understand how aneuploidy impacts cancer progression, in hopes of developing therapies that can specifically eliminate aneuploid cancers while leaving normal cells unharmed.



Adam Siepel

## Adam Siepel

**Professor | Ph.D., University of California, Santa Cruz, 2005**

I am a computer scientist who is fascinated by the challenge of making sense of vast quantities of genetic data. My research group focuses in particular on questions involving human evolution and transcriptional regulation.



Jessica Tollkuhn

## Jessica Tollkuhn

**Assistant Professor | Ph.D., University of California, San Diego, 2006**

I am interested in how transient events during early childhood development program neurons to take on a specific identity and function. More specifically, I am studying how estrogen and testosterone generate sex differences in the brain and behavior.

**CSHL welcomes these seven professors and one CSHL Fellow to our multidisciplinary research community! The Laboratory has a legacy of investment in scientists poised to innovate and discover. Our faculty members are forging the future of biology and genetics. Find out more about them in the CSHL Faculty section at [www.cshl.edu](http://www.cshl.edu)**

