How a cancer defender learned to switch sides

One of the most extensively studied of the 21,000 odd genes in the human genome is called TP53. It enables cells to manufacture a protein called p53, whose main function is to suppress the formation of tumors. p53 is likely the most powerful of all the tumor suppressing proteins in nearly every human repertoire. Mutant versions of the protein that suppress tumors are seen in many cancers.

A discovery by CSHL's Dick Kasid, and colleagues has added a surprising wrinkle to the p53 story. Bonella and colleagues, they've discovered a previously unnoticed "cousin" of p53 - a protein called p33W (the Greek letter "psi") that acts like an "evil twin," to borrow from the, "Star Wars." In the discovery, p33W, the team found, can reprogram non-malignant cells to acquire pro-metastatic features, including the ability to unhitch from tissue moorings and travel elsewhere in the body. It's likely that p33W evolved to help heal wounds. Did a mutant form of p53 hijack its cousin's pro-growth program to help cancers proliferate? Read more

Simons gift to CSHL focuses on Quantitative Biology

Jim and Marilyn Simmons announced a gift of $50 million to Cold Spring Harbor Laboratory to establish the Simons Center for Quantitative Biology. The SCOG will serve as a base for the strong "QB" program that has developed over the last seven years. Faculty includes Drs. Mickey Atwal, Ivo losseloff, Justin Kinney, Alex Kuzelikov, Alex Krenitarz, Dan Levy, Partika Mitra and Mike Schatz. CSHL has announced the hiring of Dr. Adam Siegel, of Cornell University, who will be SCOG Chair. CSHL Board Chairwoman Jamie C. Nichols thanked the Simonses for their "transformative gift." Complete details.

Research roundup

Deputy Director of the CSHL Cancer Center, Prof. David Tuveson and a colleague published a brief paper in the prestigious New England Journal of Medicine suggesting how antioxidants might actually accelerate cancers in certain circumstances, and why supplements don't provide the anticipated protection. They suggest that genetic or pharmacologic inhibition of antioxidant proteins might be the basis of a new therapeutic approach. The key challenge, they say, is to identify antioxidant proteins and pathways that are used only by cancer cells and not by healthy cells. Details.

A beautiful day for golf - and CSHL

Once again, a beautiful day in June at the Piping Rock Club provided the backdrop for a very successful golf tournament - the 21st - organized to raise funds for research and education at Cold Spring Harbor Laboratory. This year's event honored Ed Travin/Iard, TD Bank Long Island president and dedicated CSHL Board member. In all, 190 golfers took part and over $270,000 was raised.

A friend in need: CSHL's Debra Waterman

Debra Waterman, Director of Development, CSHL is a Charles Lindbergh Trustee and a key supporter of the Lab. Her father, Charles Lindbergh, was awarded the Nobel Prize in Medicine in 1934 for his pioneering flight across the Atlantic on May 20, 1927. Debra Waterman is pictured here with her daughter, Emily, at CSHL's 2015 Gala. Golden Awards. Your generosity and support are needed more than ever. Together we can build a stronger CSHL. Help us achieve our vision of a healthier future. Make a Gift now.