Amy Rappaport

Cornell University
National Institute of Health Predoctoral Trainee and Barbara McClintock Fellow
“Dissecting tumor suppressor and tumor maintenance genes in poor prognosis acute myeloid leukemia”

Drawn to pursue a Ph.D. at the Watson School by CSHL’s “intense, collaborative scientific environment,” Rappaport says that her thesis work in Howard Hughes Medical Institute Investigator Scott Lowe’s laboratory benefitted immensely from her interactions with “brilliant and passionate postdocs and clinical fellows.”

Rappaport’s research has revealed critical molecular and genetic interactions that underlie progression of a type of acute myeloid leukemia (AML) that has poor prognosis. Combining genetic analysis of human samples, mouse cancer models and RNA interference technology—a cutting-edge way of studying gene function—Rappaport has identified potential drug targets as well as strategies for effective targeted therapies for AML. She heads to a postdoctoral fellowship at the biotech company Genentech in San Francisco where she will continue to investigate cancer and find ways to combat it.

Claudio Scuoppo

University of Turin, Italy
Curt Engelhorn Scholar - The Angel Foundation
“Architectural models of tumor suppression in lymphoma”

Scuoppo’s desire to understand the genetics of cancer dates to his pre-graduate school days when he worked at the University of Turin, Italy on an aggressive childhood cancer and the genes that cause it. During his thesis research in Professor Scott Lowe’s lab at CSHL, Scuoppo identified nine genes that do the opposite—suppress cancer. Scuoppo found the tumor suppressors, as these genes are called, by first analyzing samples from patients with lymphoma and then modelling the loss of candidate genes in a mouse model of lymphoma. Focusing on two of the genes, he discovered a new tumor suppression mechanism and how lymphomas evade it to survive and grow.

“I’ll never forget the feeling of excitement that derives from being constantly exposed to new and provocative ideas at CSHL,” he says. His experience has motivated him to “keep finding future projects in which I can develop new ideas that significantly impact the lives of cancer patients.”