

Peter Kuhn on the White House lawn

In the past two months, renowned USC [Michelson](#) cancer scientist Peter Kuhn has presented his work on a national stage: he's made two trips to the White House.

Kuhn, who invented a method to detect and characterize circulating tumor cells (CTCs) in patient blood samples, helped create CancerBase, which he presented at the first White House Cancer Moonshot summit this summer. CancerBase creates a map that could help patients understand the progression of their cancer and the treatment models. It is a grassroots partnership between patients, USC and Stanford University scientists and social media companies to enable researchers to gather basic data. For more information on CancerBase, please see: <http://www.cancerbase.org/home>.

Hundreds of patients and scientists attended the Cancer Moonshot summit, and the satellite events held across the country, to discuss the efforts to fast track research and improve patient outcomes. For more information on Cancer Moonshot, please see: <https://www.cancer.gov/research/key-initiatives/moonshot-cancer-initiative>, and <https://news.usc.edu/103435/mapping-cancer-a-new-way-to-help-patients-deal-with-the-disease/>. And, Vice President Joe Biden will likely mention Kuhn's blood profiling research as part of an upcoming news conference on the outcomes of the Cancer Moonshot Task Force.

Kuhn's more recent visit to the White House was to attend South by South Lawn, an event modeled on the popular South by South West annual event. Cancer Moonshot was prominently featured at the event. At the booth for Cancer Moonshot, visitors interacted with cutting edge technologies that are changing the future of cancer care. For more information on the South by South Lawn event, please see: <https://www.whitehouse.gov/SXSL>.

Other current areas of focus for Kuhn include both a three-year colon cancer project launched by the Foundation for the National Institutes of Health Biomarkers Consortium, and the Blood Profiling Atlas—akin to the Human Genome Project in that it's a large-scale, global effort to attack cancer. It uses the same approach that Kuhn and colleagues are using to define the characteristics of cancer in the patients using blood samples.

Kuhn explained that too often, cancer is still a guessing game, “We are at a point now where every patient is like a James Bond movie,” Kuhn said. “You understand the story but there are still too many surprises. We need cancer to be more predictable all the way.”



Peter Kuhn, continued

To that end, Kuhn is working with his colleagues through the Michelson Center to expedite the detection and cure of some of the most intractable health problems today.

He says the collaboration that the university is encouraging and promoting is the way toward possible solutions to some of these diseases.

The convergent bioscience effort at USC involves scientists, engineers, technology experts, students and others.

“The problem is not owned by any one person or any one group,” Kuhn said recently. “We have to stop saying that someone else is going to do this or that... We have to collaborate, team up...but it’s so complicated, so expensive, it has to be worth it.

“It has to have a big, societal benefit,” Kuhn said. “We are one of the few places in the world with tremendous experience and the commitment to do it.”

Michelson Hall, which will open next fall as the largest building on campus, will house many of these scientists and engineers and others.

Kuhn, who currently works in a set of trailers set in a parking lot at USC, says the building will have a lot of shared spaces so that experts and students can easily collaborate. It’s the type of science in which everyone speaks the same language, Kuhn said.

“We don’t do anything in isolation,” he said. “We take down the intellectual silos at USC and connect them into pillars and build bridges across them.”