

# Frontline Cancer: National Cancer Institute Cancer Centers Council (C3) combine efforts in San Diego

By [Dr. Scott Lippman](#) ([/staff/dr-scott-lippman/](#)) 3:27 p.m. July 28, 2016

## — **FRONTLINE CANCER:**

When it was first announced three years ago, the San Diego National Cancer Institute Cancer Centers Council (C3) was described as a new way to leverage the combined powers in local cancer research. San Diego is among just a few places in the country home to multiple National Cancer Institute-designated cancer centers: Moores Cancer Center at UC San Diego Health, the region's only comprehensive cancer center (research, education and treatment) and the Salk Institute Cancer Center and the Cancer Center at Sanford Burnham Prebys Medical Discovery Institute (SBP), both NCI-designated centers for basic research.

C3 was created to deepen and expand the synergies of researchers and doctors working together at these institutions to discover, develop and deliver new cancer drugs and treatments. That sounds good, but actions speak louder than words and so I'm happy to report that C3 has been very, very active. Earlier this month, faculty and staff from the C3 institutions held our fourth annual retreat at the Sanford Consortium for Regenerative Medicine to discuss the practical business of cancer research, get updates on current C3 projects and announce new C3 pilot grants.

Funding for these grants is provided by donations raised by cyclists participating each year in Padres Pedal The Cause, headed by Moores Board Executive Committee member Bill Koman. Proceeds stay in San Diego to fund research, including seven exciting pilots this year, each grant totaling \$75,000.

In an era when there are multiple demands for every science dollar, funding new and perhaps out-of-the-box ideas is particularly challenging. These grants do that — and critically, they bring together researchers from the different institutions. Each grant involves at least two principal investigators representing either Moores, Salk or SBP. The value of C3 and the pilot grants pays off in more than just getting exciting ideas off the ground, it allows people with shared interests, missions and goals to connect. Achievement begins with a conversation.

Three years ago, Kristiina Vuori, president of SBP, noted that cancer research was in the midst of transformation, with new or improved tools emerging almost daily: whole genome sequencing, high-throughput drug screening and nanotechnology, for example. These tools were making it possible to personalize cancer treatments in ways previously unimagined. There are more than 200 types of cancer, but for each cancer patient, there is only one type — the disease that is unique to them.

Part of the retreat addressed a topic that is much on the minds of cancer researchers and physicians: immunotherapy. The idea — to equip or stimulate a patient's own immune system to work harder or smarter at attacking cancer cells — isn't new, but recent developments and findings have elevated immunotherapy from a terrific idea to reality. San Diego is fortunate in that many of the leading lights in cancer immunotherapy are here, including Sandip Patel, Ezra Cohen, Dan Kaufman, Dennis Carson, Judy Varner, Tom Kipps, Pablo Tamayo, Andrew Sharabi and Razelle Kurzrock at Moores; Clodagh O'Shea at Salk; Carl Ware at SBP; and Stephen Schoenberger at La Jolla Institute of Allergy and Immunology, one of C3's newest affiliates.

At the retreat, many of these leaders discussed the challenges and opportunities of immune oncology research and translation across the Mesa. A lot of places and institutions are touting immunotherapy these days, but the proof is in the people and the resources behind them. At Moores, for example, there are currently 40 open next-generation immunotherapy trials with novel immune checkpoint inhibitors for patients with every cancer type. We have one of the top five or so programs in the United States in this field. The program continues to expand in depth and breadth across the Mesa, now including the development of personalized vaccines in collaboration with Craig Venter. No one else in the region — and very few places in the country — has C3's ability to help fulfill the potential of immunotherapy.

And always, we look ahead. This year's retreat keynote speaker was Elizabeth Blackburn, the Salk Institute president and 2009 Nobel laureate in physiology or medicine for her work in discovering the molecular nature of telomeres — the ends of chromosomes that serve as protective caps to preserve genetic information. Blackburn spoke about her seminal work, including the critical link between chronic perceived stress and telomere length, the Cancer Moonshot (President Obama's initiative to dramatically boost cancer research funding over the next several years) and, ultimately, ending a cancer scourge that kills almost 565,000 Americans each year.

C3 will play a significant role in the Moonshot. Last month, it helped host a summit meeting at SPB in connection with other institutions, the federal government and cancer groups across the country. Maria Elena Martinez, a Moores scientist who specializes in studying cancer disparities (why groups of people are affected differently by the disease and in their treatment) spoke at the event.

Martinez is a member of the Blue Ribbon Panel that will advise Vice President Joe Biden in how best to direct the Moonshot initiative.

There is no timetable, obviously, for defeating cancer. It's a battle every day — for patients, doctors and scientists. But collaborative efforts like C3 are making progress that is measurable, visible and more than just words.

— Scott M. Lippman, M.D., is director of UCSD Moores Cancer Center. His column on advances from the front lines of cancer research and care appears in the La Jolla Light the fourth Thursday of each month. Reach Dr. Lippman at [mcc-dir-lippman@ucsd.edu](mailto:mcc-dir-lippman@ucsd.edu)

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