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### The Parker Foundation Unifies World's Leading Cancer Centers to Create Unprecedented Research Collaboration

\$250 million grant focuses on advancing groundbreaking research in the fight to cure cancer

**LOS ANGELES – April 13, 2016 –** The Parker Foundation today announced a \$250 million grant to launch the Parker Institute for Cancer Immunotherapy, a collaboration between many of the country's best scientists, clinicians and industry partners to lead an unprecedented cancer immunotherapy research effort. The gift is the largest single contribution ever made to the field of immunotherapy.

The Parker Institute's goal is to accelerate the development of breakthrough immune therapies capable of turning cancer into a curable disease by ensuring the coordination and collaboration of the field's top researchers and quickly translating their findings into patient treatments.

The Parker Institute includes over 40 laboratories and more than 300 researchers from the country's leading cancer centers: Memorial Sloan Kettering Cancer Center, Stanford Medicine, the University of California, Los Angeles, the University of California, San Francisco, the University of Pennsylvania and The University of Texas MD Anderson Cancer Center. Each Parker Institute research center receives comprehensive funding, access to dedicated research, clinical resources and the key technologies needed to accelerate research discoveries in cancer immunotherapy. In a unique agreement between the centers, the administration of intellectual property will be shared, enabling all researchers to have immediate access to a broad swath of core discoveries.

"We are at an inflection point in cancer research and now is the time to maximize immunotherapy's unique potential to transform all cancers into manageable diseases, saving millions of lives," said Sean Parker, President of The Parker Foundation. "We believe that the creation of a new funding and research model can overcome many of the obstacles that currently prevent research breakthroughs. Working closely with our scientists and more than 30 industry partners, the Parker Institute is positioned to broadly disseminate discoveries and, most importantly, more rapidly deliver treatments to patients."

While advances over the last decades have been made in chemical, radiation and targeted treatment options for cancers, patient outcomes have remained stagnant: metastatic cancer still kills at roughly the same rate as it did 20 years ago. This makes discoveries in immunotherapy one of the most important medical advances of our time, and the first approach with the potential to generate long-lasting remissions for all types and stages of cancer.

First-generation drugs have achieved unprecedented remissions in advanced melanoma and leukemia, among many other tumor types. In the 1990s, scientists Jim Allison, PhD, and Jeff Bluestone, PhD, independently discovered that, to prevent autoimmunity and overreactions, a molecule called CTLA-4 acts as a "brake," or checkpoint, on the immune response. This discovery led to a new class of checkpoint blockade treatments that have fundamentally changed the treatment of

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multiple cancers. In separate studies, the development of cancer-targeting T-cell therapies, termed CAR-Ts, pioneered by Carl June, MD, and others, has led to impressive results in several blood cancers in children and adults. Drs. Bluestone, June and Allison share the leadership with other outstanding scientists and clinicians at each of the founding institutions.

"Immunotherapy represents a fundamentally new, breakthrough treatment paradigm in the fight against cancer – it harnesses the body's own powerful immune system to mobilize its highly refined disease-fighting arsenal to engage and eliminate the cancer cells," said Dr. Jeff Bluestone, CEO and President of the Parker Institute. "Our scientists are leaders in the field and will now work together to make discoveries to treat and potentially cure cancer."

The Parker Institute's scientific advisors and site leaders have crafted a scientific roadmap, which allows the Parker Institute scientists to make big bets on major cross-cutting collaborative research projects as well as fund individual research projects at its sites. The Parker Institute has identified three key areas of focus to start, and will augment its research agenda as it evolves:

- In cell-based therapy, known as CAR-T (Chimeric Antigen Receptor T-cell) or TCR (T-cell Receptor) therapy, the immune system's main anti-cancer warriors, T-cells, are harvested from a patient's blood and modified to target the patient's tumor. To increase the utility of Tcell therapy, next generation cells must be designed to be safer, remain active longer and be more effective. The research team will develop novel approaches to modify T-cells to enhance their function, and then <u>develop a new generation of more effective T-cell therapies.</u>
- 2. Despite the tremendous success of checkpoint blockade agents such as anti-PD-1 and anti-CTLA-4, many patients still do not respond, or in some cases relapse. Researchers will compare responders, non-responders, and patients who relapse to discover novel pathways and treatments to improve the rates of durable responses and broaden the use of these checkpoint blocking agents, alone or in combination to treat more types of cancer.
- 3. The Parker Institute is conducting research to advance DNA sequencing, antigenic peptide discovery efforts and immune monitoring technologies to identify novel individual and shared tumor antigen targets. The goal is to understand how to target tumors more effectively ultimately developing new vaccines and T-cell therapies to treat tumors.

Because of the large number of patients in its network, the Parker Institute can take discoveries from bench to clinical trials to bedside more quickly than siloed research models.

To support scientists, the Parker Institute is investing extensively in the development of core resources and partnerships that will provide all of our researchers with dedicated and easy access to the tools and capabilities that will allow them to pursue their research aims most efficiently, including immune monitoring, genomics and sequencing, bioinformatics, and IP development and licensing. The Parker Institute has established relationships with more than 30 strategic partners, from industry to nonprofit to academia. These individuals and organizations will provide insight to help inform the organization's research agenda, access to cutting edge tools and technology, and resources to help speed treatments to market.

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### About the Parker Institute for Cancer Immunotherapy

The Parker Institute for Cancer Immunotherapy brings together the best scientists, clinicians, and industry partners to build a smarter and more coordinated cancer immunotherapy research effort. The Parker Institute is an unprecedented collaboration between the country's leading immunologists and cancer centers: Memorial Sloan Kettering Cancer Center, Stanford Medicine, the University of California, Los Angeles, the University of California, San Francisco, the University of Pennsylvania and The University of Texas MD Anderson Cancer Center. The Parker Institute was created through a \$250 million grant from The Parker Foundation.

The Parker Institute's goal is to accelerate the development of breakthrough immune therapies capable of turning cancer into a curable disease by ensuring the coordination and collaboration of the field's top researchers, and quickly turning their findings into patient treatments. The Parker Institute network brings together:

- 6 centers
- 40+ Labs
- 300+ of the nation's top researchers focused on treating the most deadly cancers

### **About The Parker Foundation**

The Parker Foundation is a private foundation established in 2015 through a \$600 million gift by Sean Parker. Based in San Francisco, the foundation builds upon Sean Parker's philanthropic efforts over the last 10 years and capitalizes on his pioneering work in the fields of technology, media, company building, and public policy. The foundation aggressively pursues large-scale systemic change in three areas: Life Sciences, Global Public Health and Civic Engagement. More information about the Parker Foundation can be found at <u>www.parker.org</u>.