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La Jolla Institute receives $5 million gift from Pfizer

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The largest philanthropic contribution in Institute history will fund the Pfizer Endowed Chair and support cancer immunology and oncology research

LA JOLLA, CA—La Jolla Institute for Allergy and Immunology (LJI) has received a $5 million gift, which will help establish the Mission Support for Cancer Immunology and Oncology Research, the Institute announced today. The gift has been made by Pfizer Inc., one of the world's largest pharmaceutical companies, in recognition of LJI's impact on the field of immunology over the last three decades and the immune system's important role in fighting cancer.

The Institute will use the majority of the funds to establish the Pfizer Endowed Chair in Cancer Immunology and Oncology and support research on the immune system and oncology.

"We believe that Pfizer's visionary support of La Jolla Institute validates our pioneering contributions in the field of immunology," said President and Chief Scientific Officer Dr. Mitchell Kronenberg. "It will allow us to initiate daring new projects that will help advance our understanding of the intersections of the immune system and cancer."

"This gift is a testament to Pfizer's commitment to fostering the growth of the immunooncology research community, and to the promising work being done by the La Jolla Institute," said Robert Abraham, Ph.D., Senior Vice President and Head of Pfizer's Oncology-Rinat Research & Development Group.

The idea to mobilize the immune system to fight cancer has been around for decades but the painstaking fundamental research that revealed how the immune system works only recently started to pay dividends in clinical practice. But it is still unclear why cancer immunotherapy works well in some patients but makes little difference in others, or even none at all.

The knowledge gained from projects supported by the Pfizer gift will potentially enable immunologists to refine immunotherapy-based strategies by studying the molecular mechanisms that allow tumors to hide from the immune system and how the immunological invisibility cloak can be pulled off; how tumors interfere with T cells' ability to kill cancer cells; how cancer vaccines can teach the immune system to recognize tell-tale proteins produced by cancer cells themselves; how the immune system can potentially be revved up to destroy cancer cells while minimizing the risk of autoimmunity and seek answers to other important questions in the area of immuno-oncology.

Dr. Anjana Rao, a world-renowned immunologist and cell biologist at LJI and a member of the National Academy of Sciences, will be the inaugural holder of the Pfizer Endowed Chair in Cancer Immunology and Oncology. Her work focuses on how proteins in the cell nucleus respond to signals from outside the cell and control gene expression.

Dr. Rao discovered and molecularly characterized the transcription factor NFAT and demonstrated that NFAT proteins regulate the diverse programs of T cell activation and exhaustion in autoimmune disease, which has potential implications for stimulating the immune response to cancer. Work in her lab, also identified the ORAI family of store-operated calcium channels, which play a key role in diverse cellular activities, most notably in the differentiation and activation of T cells. More recently, Dr. Rao and her team determined that members of the TET (short for ten-eleven translocation) keep a lid on the uncontrolled cell proliferation of cancer cells by preventing genome instability and mutations that drive cancer cell growth.

Studies in Dr. Rao's laboratory will investigate how proteins that modify one of the four bases of DNA also prevent harmful mutations and the associated genomic instability that can lead to cancer. "This philanthropic gift gives our organization a power that will enable Dr. Rao and other scientists here to make major leaps in new cancer-related directions where they see promise," says Dr. Kronenberg.

ABOUT LA JOLLA INSTITUTE

La Jolla Institute for Allergy and Immunology is dedicated to understanding the intricacies and power of the immune system so that we may apply that knowledge to promote human health and prevent a wide range of diseases. Since its founding in 1988 as an independent, nonprofit research organization, the Institute has made numerous advances leading towards its goal: life without disease®.

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