New Delhi: Four scientific institutions – University of California, San Diego, J. Craig Venter Institute, La Jolla Institute for Allergy and Immunology and The Scripps Research Institute – have teamed up to create the “Mesa Consortium,” a new scientific hub for the Human Vaccines Project.

Under a collaborative agreement, the Mesa Consortium and the Human Vaccine Project aim to transform current understanding of the human immune system and expedite development of vaccines and biologics to prevent and treat many global diseases.

The Human Vaccines Project is a new global initiative that brings together leading research centers, pharmaceutical companies and state-of-the-art machine-learning methods to tackle the unprecedented mission of decoding the human immune system to accelerate the development of new vaccines and immunotherapies against major infectious diseases and cancers.

“Vaccines have helped us eradicate smallpox and nearly eradicate polio, but we have not yet experienced the same vaccine successes for global killers like HIV/AIDS, tuberculosis, malaria, cancer and other diseases,” said Wayne C. Koff, PhD, president and CEO of the Human Vaccines Project. “We need new approaches to address major gaps in knowledge, leverage recent technological advances and hasten vaccine development.

“To this end, the Mesa Consortium brings an unparalleled and complementary set of scientific capabilities in the areas of immunology, vaccines and immunotherapeutic research to the Project’s network. We look forward to major contributions toward deciphering the key principles of human immunity and ushering in a new era of global disease prevention and control.”

The Mesa Consortium will carry out extensive immunological analyses from the Project’s clinical research studies designed to answer specific questions about human immunity. The Mesa Consortium will also serve as the Project’s bioinformatics core.
“Driven by partnerships with leading academic centers, and enabled by new technologies and a scientific plan focused on solving the main barriers to developing new immune-based interventions, we believe our collaboration with the Project could help to transform global efforts in vaccine and immunotherapeutic development,” said UC San Diego Chancellor Pradeep K. Khosla.

“New genetic and immune monitoring technologies are enabling an unprecedented look at the human immune system, and are generating extensive amounts of data,” said J. Craig Venter, PhD, founder, chairman and CEO of the J. Craig Venter Institute. “When combined with sophisticated bioinformatics analyses, we may soon be able to unlock the principles of how to stimulate and direct immune responses against some of the world’s most pressing diseases. We are very pleased to be bringing the Mesa’s unparalleled scientific capacity to this global – and potentially transformative – initiative.”