

## **Caltech Breaks Ground on Resnick Sustainability Center**

*The Resnick Sustainability Center will be a hub for research and education endeavors aimed at advancing new innovative sustainability solutions*

Today, philanthropists Lynda and Stewart Resnick, owners of The Wonderful Company, joined Caltech president Thomas F. Rosenbaum, California governor Gavin Newsom, Pasadena mayor Victor Gordo, and other distinguished guests and members of the Caltech community to break ground on the Resnick Sustainability Center (RSC).

The 79,500-square-foot project, which will grace the western edge of the Caltech campus, was made possible by a \$750 million pledge from the Resnicks to Caltech. The gift, made in 2019, is the largest in the Institute's history and among the largest ever for environmental sustainability research.

When completed in 2024, the Resnick Sustainability Center will open new figurative portals to sustainability in the realms of research, education, and societal impact.

"For Lynda and me, this is an incredibly significant investment," said Stewart Resnick, chairman and president of the Wonderful Company, speaking at the ceremony on behalf of himself and Lynda Resnick, co-owner of the Wonderful Company.

"Caltech has always been a place where we humans turn in moments of extreme vulnerability for reassurance when the ground moves under our feet—to help us comprehend terrible scenes of fire and drought here in the west. We put our faith and the entirety of our support into the brilliant minds at Caltech. The achievements that will emerge from this sustainability institute, housed in what will be this world-class center, will help make our world safer, more healthy, more sustainable, and a better home for generations to come. Lynda and I and every one of our colleagues at the Wonderful Company are proud to call Caltech partners."

In his remarks, Governor Gavin Newsom (noting that he was the only politician in the world who could get away with it) recalled a comment from the former head of the *Grateful Dead*, Jerry Garcia: "He had a wonderful quote that, as I'm sitting here, I reflected on: He said that you don't want to be the best of the best; you want to be the only one that does what you do. And I think about that statement in the context of where we are at Caltech. No one does what you do. You are not the 'best of the best'—you reinvented the space. But so have the Resnicks, in terms of their largesse, in terms of their remarkable entrepreneurial spirit, and the two are coming together at this remarkable moment.

"California has more scientists, more researchers, more Nobel laureates, venture capital, patents, than any place on the globe," Newsom added. "This is a remarkable place—this conveyor belt for talent. Caltech is a dominant part of that. So thank you, all of you, for being part not just of this moment but all the moments that created the institution and the moment of opportunity that we'll be celebrating more formally here in just a moment."

Since its founding on campus in 2009, the Resnick Sustainability Institute (RSI) has brought together scientists and engineers from across Caltech's six academic divisions and from JPL, which Caltech manages for NASA, to pursue solutions to the most pressing challenges in water, energy, food, and waste in a world confronting rapid climate change.

To date, Caltech researchers have made significant progress in artificial photosynthesis, envisioned new approaches for capturing and transmitting solar energy, and discovered a way to speed up carbon sequestration in the ocean, among other breakthroughs.

"All this has been made possible through the unparalleled generosity of Lynda and Stewart Resnick. They have invested in Caltech to permit interventions at a scale worthy of the climate challenge, and through the Resnick Sustainability Institute only ask that we dedicate ourselves to asking important questions and finding impactful solutions," said Caltech president Thomas F. Rosenbaum, Sonja and William Davidow Presidential Chair and professor of physics. "This building will amplify the creativity and energy of young scholars as they dedicate their efforts to understanding the fundamental workings of nature and to translating that understanding into action."

The future Resnick Sustainability Center, which will serve as the physical hub for the Institute's sustainability initiatives, was designed by the Yazdani Studio of CannonDesign and will incorporate a variety of sustainable materials and features, putting it on track to earn LEED platinum certification, the highest level of the LEED (Leadership in Energy and Environmental Design) rating system.

Rather than housing the offices and labs of individual faculty members, the new building will provide specialized equipment, space, dedicated staff members, and resources that will be accessible to research groups and innovators across Caltech. Dedicated research facilities and instrumentation have also been designed to support the core initiatives of RSI: Sunlight to Everything, Climate Science, Ecology and Biosphere Engineering, and Water Resources.

For instance, the center will house a translational science and engineering facility that will provide agile space to scale up and test early-stage technologies for potential translational impact, as well as a solar roof, where photovoltaic devices can be tested under real-world conditions.

"Caltech's outsized impact derives from its small and hence intimate environment, our remarkable students and faculty, and access to extraordinary facilities run by brilliant research staff. The Resnick Sustainability Center brings these key ingredients together under one roof, laser focused on developing technologies that will address the challenges of climate change and stewardship of our precious resources," said RSI director Jonas Peters, Bren Professor of Chemistry.

A hallmark of RSI's efforts has been the institution of the [Resnick research grants program](#) that has enabled Caltech to invest millions of dollars annually since 2020 in interdisciplinary research projects, all faculty led, aimed at advancing new ideas, innovations, and instrumentation that have a direct impact in the world. For example, RSI-funded researchers are investigating the use

of underground arrays of fiberoptic cables to monitor groundwater and aquifer recharge in California's Owens Valley and developing bio-composite materials from algae and agricultural waste to replace plastics and engineered woods. Recently, another RSI-sponsored project that created a new method to capture carbon dioxide from ocean waters to fight global warming [was awarded \\$1 million by the XPRIZE Carbon Removal competition](#).

The new center is expected to further catalyze such efforts by providing faculty and students across campus with access to state-of-the-art instrumentation and technologies and in bringing individuals from different fields together to advance solutions.

"Because of Lynda and Stewart's generosity, Caltech is exploring new avenues in sustainability research and education that we couldn't imagine a few years ago" said Caltech provost David A. Tirrell, Carl and Shirley Larson Provostial Chair and Ross McCollum-William H. Corcoran Professor of Chemistry and Chemical Engineering. "The Resnick Sustainability Center will be a magnet for scientists and engineers—including students who will be the scientists and engineers of the future—who want to solve some of the planet's most pressing problems."

The RSC will also serve as [a gateway for sustainability education](#). The new building will replace the now-demolished Clifford S. and Ruth A. Mead Memorial Undergraduate Chemistry Laboratory, home to Caltech's undergraduate chemistry labs for 40 years. Because all first-year students are required to take a chemistry lab course, every future Caltech undergrad will have at least one class in the building, where they will be introduced to the concept of sustainability through a reimagined curriculum that grounds their education in an understanding of society's environmental challenges and instills an imperative to search for solutions across disciplines.

In addition, the RSC will include teaching and learning spaces, open to courses in all disciplines across campus, which are designed for flexibility and to allow room for hands-on inquiry; provide state-of-the-art laboratory space for chemistry training; and feature active-learning classrooms.

"Every time I turn around, Caltech isn't hitting it out of the park, Caltech is hitting it out of the universe," said Mayor Gordo. "I want to congratulate all of you for this incredible achievement."