## UC SANTA BARBARA



October 23, 2014 Shelly Leachman

## **Investing in Ideas**

Charlie Munger was first introduced to physics as a college student in 1941. That particular encounter was rather brief — World War II saw to that — but the hard science made a strong impact.

After his service with the Army, Munger went on to become first a lawyer, then an investor — arguably one of the world's best. Today, as he has since 1978, he helps helm Berkshire-Hathaway with friend and business partner Warren Buffett. And still he credits physics, and its fundamental approach to problem-solving, for some of his success.

"Physics has enormously helped me in life — the logic and power of it," Munger said. "Once you see what a combination of calculus and Newton's laws will do and the things you can work out, you get an awesome appreciation for the power of getting things in science right. It has collateral benefits for people. And I don't think you get a feeling for the power of science — not with the same strength — anywhere else than you do in physics."

He'd put money on it. And he is.

With a gift of \$65 million to UC Santa Barbara, Munger is funding a new visitor housing facility for the campus-based <u>Kavli Institute for Theoretical Physics</u> (KITP), the world's leading collaborative study hub of its kind. Funded continuously by the National Science Foundation since 1979, the KITP also receives additional operational support from the Burroughs Wellcome Fund, the Kavli Foundation, the Gordon and Betty Moore Foundation, the National Institutes of Health and the Simons Foundation.

Construction of the KITP Residence by The Towbes Group Inc. is expected to commence this October, and should be complete in two years. Munger's gift to fund the project is the largest single donation to UCSB in its history.

"The Kavli Institute for Theoretical Physics has been hosting thousands of the world's top scientists since 1979. It is being emulated by numerous universities and is the envy of the physics community all over the world," said UC Santa Barbara Chancellor Henry T. Yang. "We are absolutely thrilled and honored that through Charlie's vision, unbelievable generosity, his love of physics, and his unique architectural and engineering genius and passion, we have been gifted such an unimaginable guesthouse for the visitors of KITP to enjoy and to enable them to continue their groundbreaking research at the endless frontier of physics."

Distinguished theoretical astrophysicist Lars Bildsten, director of KITP and the Gluck Professor of Theoretical Physics at UC Santa Barbara, characterized Munger's donation as a game-changer for the institute which is already an international model for facilitating productive and sustained scientific collaboration.

"KITP's mission is to bring together the world's leading scientists to collaborate on the most challenging and exciting questions in theoretical physics and related fields," Bildsten said. "Charlie's commitment to this mission is profound. Our visitors now spend their day in Kohn Hall, the center of interactions, but once the Residence is complete they will continue those interactions into the nights and weekends. I'm confident we will see an increased number of collaborations and scientific progress."

The three-story KITP Residence will provide housing for the visiting scientists including preeminent physicists from across the globe — who participate in the institute's programs each year. The design was achieved through a yearlong collaboration led by Munger that included Bildsten, KITP Housing Coordinator Monica Curry, Murray Duncan Architects, and the architect of record, pk:architecture. More importantly, with a variety of common areas meant to foster informal and impromptu gatherings, it will enable the continuation of synergistic interactions that are both a hallmark of KITP's programs and a cornerstone of theoretical science.

That latter point was among Munger's motivations for his own big investment at the Kavli Institute in particular.

"There is no place like KITP anywhere else — and no better programs — so it's a great thing to be able to give them a nice home of their own," Munger said. "Also physicists gain enormously from knowing one another and talking to one another and trusting one another. That's been recognized for a great many decades, but for a long time it just wasn't feasible. Now we can get people together from all over the world and these people can cross-fertilize each other. Physics is getting so hard now, they need all the help they can get. This is a hugely important thing. This isn't a field where we want to be behind."

Carlos Frenk can speak to that.

Winner of the Gold Medal of the Royal Astronomical Society in 2014, now-renowned cosmologist Frenk spent six months at UCSB in 1983-1984, for a program at what was then known as ITP (it was named for prolific physics benefactor Fred Kavli in 2002). That extended program on the structure of the universe would become, in Frenk's words, a "landmark workshop."

"What emerged from that program, to put things in context, was later to be recognized as the standard model of cosmology," said Frenk, director of the Institute for Computational Cosmology at UK-based University of Durham, where he is also the Ogden Professor of Fundamental Physics. "Something of this magnitude happens once in a generation. What did it?

"Many factors came together, and the subject was ripe for a breakthrough," Frenk continued. "But the nucleus of our group, we were all housed in the same building. That erased any boundaries between work and life, one just merged into the other. One of the key ideas that came out happened by the pool. The freedom of no walls, an informal environment — that's a key part of theoretical science. Sparks fly, electricity is created and that, I think, is vital to the creative process."

Whether those sparks result in a breakthrough as they did for Frenk, or lay the groundwork for future advancements, Munger hopes to foster that creative process for scientists around the world by way of the KITP Residence. It's yet another expression of respect for the discipline he describes as "the most powerful science."

"In my own life, I don't regret one hour of the physics training I do have," Munger said. "It's been very helpful to me and I believe it's a subject that everyone who's capable of doing so ought to have the basics in. "And, of course, UCSB having risen in my lifetime to the position it now holds in physics is a huge academic achievement. It's hard for me to think of anybody their size that's come up that fast," continued Munger, whose grandson is a UC Santa Barbara alumnus. "This residence is going to be hugely helpful to UCSB. This building will be about as good as it can get and offer as good an experience as a physicist can have — and I don't think you could have a better place on earth to do it."

Munger came to the project, and to KITP, by way of close friend Glen Mitchel, who lives in Santa Barbara. A regular visitor to <u>institute events and public talks</u>, it was Mitchel who first heard about the housing project from Bildsten and shared it with Munger during one of their frequent fishing trips.

"The more Charlie looked into it and saw the importance of KITP and the colloquia they hold, how prestigious it is and the quality of people they attract, he became so enthusiastic he spent hours hand-drafting plans for a residence in accordance with his thoughts," Mitchel said of Munger, one of his best friends of 60 years. "That's how it's progressed. Charlie has been involved all the way along — helping design even the lay out of apartments so they're the most efficient for this use. His ideas have been welcomed and worked into the picture. Of course he's a brilliant guy and he's capable in many areas. He's done a remarkable job here. This building is going to be absolutely fabulous."

## About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.