Dr. Shu Chien
Professor, Department of Bioengineering and Medicine
Director, Institute of Engineering in Medicine

"Shu is able to foresee key directions in science, medicine, and engineering well before they become apparent to many of us." – Irwin Jacobs

Dr. Shu Chien has been a part of the UC San Diego community since 1988 when he joined the bioengineering program. As the founding chair of the Department of Bioengineering, Dr. Chien has played a major role in establishing UC San Diego’s bioengineering program as one of the top programs in the country. In 2008, he became the founding director of the Institute of Engineering in Medicine (IEM), an initiative that synergizes UC San Diego’s unique strengths in engineering and medicine. He also established the UC Systemwide Bioengineering Institute of California (BIC), which facilitates cross-collaboration in research and training among the ten UC campuses.

Dr. Chien’s ability to see the value of collaboration extends to his interactions and relationships with donors. He helps donors understand why bringing engineering and medicine together is so important, and he offers them opportunities to make a significant impact on people's health and well-being. UC San Diego Foundation Trustee Drew Senyei notes that, “The combination of engineering and medicine have produced numerous advances in health care that would not have been possible without his tenacity.”

As the faculty lead for the Siebel Scholars Program, Dr. Chien maintains strong relationships with both scholars and alumni, is active in the stewardship of the Siebel Scholars Foundation, and oversees the administration of the $2 million grant. To date, 50 talented PhD students have joined the prestigious group recognized for academic excellence and leadership achievement.

Dr. Chien also serves as the convener of the Tang Prize, overseeing four selection committees in the categories of Sustainable Development, Biopharmaceutical Science, Sinology, and Rule of Law. Since he arranged to include the Tang Prize Lecture at the annual Experimental Biology conference, held every other year in San Diego, attendance at the Lecture has increased dramatically, from about 500 to an expected 5,000 in 2020, benefitting UC San Diego and the entire community.

Dr. Chien is one of a very small number of scholars who are members of all three national academies: the American Academy of Arts and Sciences, National Academy of Engineering and Institute of Medicine, and the National Academy of Sciences. Despite global recognition and countless awards, including the Revelle Medal for sustained, distinguished, and extraordinary service to campus, he is most often described by friends and colleagues as “gracious” and “humble” and is highly regarded as an example of how to succeed both in research and in life. It is said that in hallways and corridors of campus, one can hear echoes of the mantra “be like Shu.”
Dr. Brian Keating is a professor at the Center for Astrophysics and Space Sciences (CASS) in the Department of Physics, associate director of the Arthur C. Clarke Center for Imagination, and was recently appointed as chair holder to the Chancellor’s Distinguished Professorship of Physics. He is the director of the Simons Observatory, and is on both the San Diego Air and Space Museum Board of Directors and the Ruben H. Fleet Museum Advisory Council. A best-selling author and host of the podcast series Into the Impossible, he is also the proud father of five children all under the age of eight. Finding time on Dr. Keating’s calendar is truly an astronomical feat.

Despite the many demands for his time and attention, teaching has been a top priority for Dr. Keating since his years as a graduate student and NASA fellow at Brown University. A requirement of the program was to share his knowledge in local classrooms, ranging from kindergarten to 12th grade. It was so rewarding that he continues the practice to this day.

Although his work focuses on the biggest questions in the universe, when Dr. Keating works with donors, he has no trouble helping them grasp the impact of their philanthropy. He notes that there is no instant gratification in funding cosmology, which, by the very nature of the subject matter’s age, demands a certain level of patience. Instead, Dr. Keating points to how philanthropy impacts undergraduate and graduate students in CASS—whom he refers to as “the best in the universe.”

To help build and run the $95 million Simons Observatory is an opportunity of a lifetime for Dr. Keating, and it would be inconceivable without private support for the project. A significant portion of this funding is the result of Dr. Keating’s longtime relationship with Jim and Marylin Simons, founders of the Simons Foundation and 2018 Chancellor’s Award Medalists. Established to advance the frontiers of research in math and basic science, the Simons Foundation has contributed over $50 million to cutting-edge science at UC San Diego. This support was instrumental to the development of the Simons Observatory, a collaborative effort of 35 institutions around the globe, with UC San Diego leading the way.

Colleagues and friends describe Dr. Keating’s engagement and stewardship efforts as “exceptional” and “consistently above and beyond.” According to Division of Physical Sciences Dean Steven Boggs, he has “done exceptional work advancing the mission of the university” through his work with donors, his commitment to championing women in physics, and his support for other units and programs across campus. From Dr. Keating’s perspective, however, it is just his way of giving back to UC San Diego and of fulfilling the sense of duty he first experienced in a classroom: to be a part of the infinite chain of educators and students revealing the wonders of the universe.
The EnVision Maker Studio was established through a collaboration between the Jacobs School of Engineering and the Division of Arts and Humanities to provide undergraduate engineering and visual arts students with a space where theory and hands-on experience intersect. As staff director, Jesse DeWald develops educational projects and empowers students to use the studio to design their own future. He has proven to be a valuable partner to Advancement colleagues by identifying the most pressing needs of EnVision, acting as an advocate in the community, and leading important stewardship initiatives and events.

Shortly after EnVision opened in January 2016, Jesse recognized the need to increase the size, capacity, and accessibility of the space. With the help of the Charles Lee Powell Foundation, he secured philanthropic support to double studio’s size and capacity and add dedicated lecture classrooms that allow the studio to be open for student use even when classes are in session.

In response to students’ appetite for more hands-on, practical experience, Jesse developed and implemented two internship programs. In the summer of 2016, nearly one hundred students participated in a series of projects and workshops designed to improve their leadership and mentoring skills. Student volunteers who have completed their internship program run the day-to-day operations of EnVision, putting their new skills to work and helping students who are new to the studio environment.

Jesse also developed the Summer Engineering Experience (SEE), an internship program designed to mirror industry experience as closely as possible. As a result of his ongoing stewardship efforts, the Powell Foundation agreed to expand their support to fund the program. In 2018, ten students were selected from an applicant pool of over 100 to participate in the ten-week program which immersed in the full design process—from pitching an idea to working with clients and from project management to team building. They worked with Birch Aquarium at Scripps Institution of Oceanography to translate the work of researchers into an exhibit for display. As a result of the success of the program, an even larger group of applicants is expected in 2019.

Jesse strives to improve students’ experience and jump-start their future success. When he identified a gap in student preparedness for what comes after graduation, his idea to create EnVision Alumni 101 “Lessons from Industry” workshops resonated with alumnus Sam Knight ’73, and a new engagement platform was formed. The workshops now bring students and alumni across campus together to discuss topics like interviewing, career options, and overcoming new challenges. Sam says, “Jesse doesn’t simply manage the EnVision Maker Studio. He is passionate about making the whole student experience meaningful, and it is his commitment to the students that makes Jesse a star.”