



SHU CHIEN-GENE LAY DEPARTMENT OF BIOENGINEERING

ANYTHING BUT OLD SCHOOL

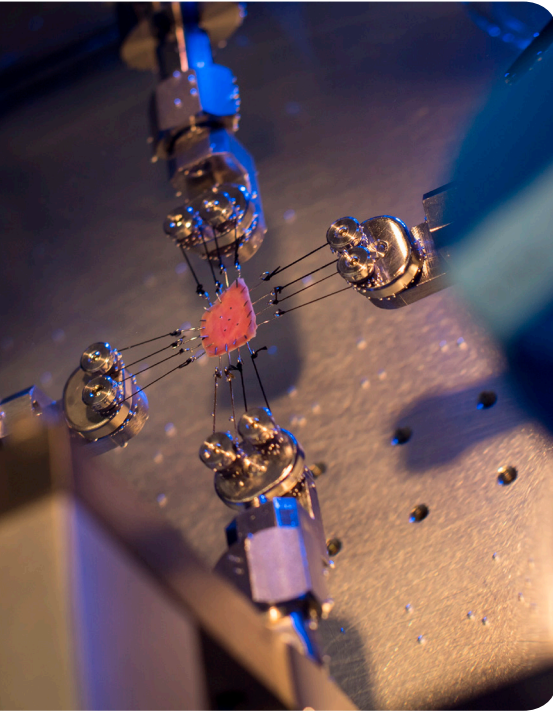
FIRST AND FOREMOST – SINCE THE BEGINNING

For nearly 60 years, UC San Diego Department of Bioengineering has been in the vanguard: We were one of the very first bioengineering programs in the nation when we opened our doors to students in 1966, and it was UC San Diego faculty members who launched the region's first biotechnology company – Hybritech – in 1978. Since then, our undergraduates, graduate students, faculty and alumni have gone on to transform the field as innovative entrepreneurs, visionary researchers and inspirational mentors, sharing expertise with academic institutions across the country and paving the way for transformative bioengineering breakthroughs.

So it is no surprise that our students and faculty are continuing to push the boundaries of the known and the possible. We are training a new breed of bioengineer, one equipped to apply engineering analysis to clinical research and to develop solutions to humanity's most challenging health issues. Signature faculty-led clinical applications range from detecting and preventing breast cancer to treating diabetes. UC San Diego's robust innovation ecosystem unites with our world-class health sciences enterprise – which includes a medical school, pharmacy school, school of public health and health system. Partnerships with biotechnology companies across the region provide the final link in advancing diagnostics, biotherapeutics, medical devices, health data and sustainable materials that ultimately improve health and quality of life worldwide.

SHU CHIEN-GENE LAY

DEPARTMENT OF BIOENGINEERING



For more information about how the Department of Bioengineering is making our world a better place, please contact:

Adam Engler

Professor and Department Chair,
Shu Chien-Gene Lay
Department of Bioengineering
Jacobs School of Engineering
(858) 246-0678
bechair@ucsd.edu

Patrick Stewart

Executive Director of Development
Jacobs School of Engineering
O: (858) 246-2722 | C: (786) 815-2223
p4stewart@ucsd.edu

▶ **FIRST BIOENGINEERING PROGRAM IN THE NATION**

Formed in 1966 by father of biomechanics and UC San Diego Professor Emeritus Y.C. Fung, Marcos Intaglierra, and Benjamin Zweifach

▶ **38**

Full-time faculty, largest number in University of California system

▶ **1,000+**

Companies around the world use or have used technology created at UC San Diego.

▶ **328**

Number of copyright or patent applications filed by department faculty since 2018 – 12% of all intellectual property on campus despite bioengineering accounting for only 1% of faculty

▶ **47%**

Of undergraduate students in the department are women; 21% are from underrepresented groups

▶ **INNOVATIVE MASTER'S PROGRAMS**

Designed to bring bioengineering students into clinical settings and translate devices into health care practice

▶ **150+**

Undergraduate students receive degrees each year

▶ **10TH IN THE WORLD FOR BIOMEDICAL SCIENCES**

In 2022, *Nature Index* ranked UC San Diego 10th in the world among the top 200 institutions in biomedical sciences in their assessment based upon published research in a targeted set of high-quality scientific journals.

▶ **4TH**

The Milken Institute identified UC San Diego among the top five in the nation for startup creation in their 2017 report, "The Best Universities for Technology Transfer."

▶ **\$21 MILLION**

Annual research awards to department faculty in fiscal year 2021–22, the most of any bioengineering program in the University of California

▶ **TOP IN CALIFORNIA FOR RESEARCH EXPENDITURES**

With annual expenditures of more than \$1.1 billion (BestColleges.com), the National Science Foundation ranked UC San Diego seventh in the nation for total research and development expenditures in 2021

UC San Diego

JACOBS SCHOOL OF ENGINEERING