

TECHNOLOGY SANDBOX

Advanced discovery in biological science is the key to better living. Charting the cures to devastating diseases and disorders, mitigating the impacts of climate change, enhancing the resilience and productivity of food systems.

As great minds experiment and play, life-changing solutions emerge.

BY THE NUMBERS

global academic institution for biomedical research (Nature Index)

SILG BILLION sponsored research dollars secured by UC San Diego (FY 2022)

lst public global life sciences institution (Times Higher Education, 2020)

2nd most prolific among public research institutions in the U.S. for high-quality science (Nature Index)

THE VISION

The Goeddel Family Technology Sandbox is a facility bringing together ingenious scientists, creative students and innovative technology. In the Sandbox, partners in our scientific community will accelerate exploration of the biological mysteries underlying life itself.

OUR MODEL

Located in historic Revelle College, the Sandbox will house advanced instrumentation platforms needed for path-breaking discovery. Appealing to teams across campus and industries, approaches include cryo-electron microscopy and tomography, cell biophysics, computational analysis, and integrative modeling. Innovation promises advances in:

- » Bacterial cell biology, helping to decipher and defeat drug-resistant bacteria
- » Nuclear periphery of the cell, offering deeper understanding of genetic disorders
- » Molecular basis of circadian rhythms, pivotal to daily wellness
- » Algorithmic modeling of cells and systems, in partnership with Halıcıoğlu Data Science Institute

(Continued)



A key asset of the Sandbox, the Titan Krios is the most powerful and flexible high resolution Cryo-EM for threedimensional characterization of bio-molecules.



WHY INVEST IN US?

At UC San Diego, innovation breaks across conventional boundaries. It's a place where thinkers and learners come together with disrupters and adventurers to achieve the unquestionably new. The Goeddel Family Technology Sandbox will enlarge that profile, offering workshops to students, faculty and industry partners on groundbreaking technology at the intersection of high-powered computation and ingenuity in biological science.

BENEFITS OF SUPPORT

Workforce preparation

Series of the students work side by side with faculty and industry partners, learning to operate tools for measuring, characterizing and quantifying phenomena. Undergraduate student research assistants will get hands-on experience early in their scientific careers.

Industry partnerships

» Aligned private sector companies invited to partner in projects will connect their research teams with academic scholars. Education in the Sandbox will extend into industry, enhancing the skills and capacities of industry scientists.

Recognition opportunities

» Gifts will be recognized on a highly visible donor wall within the facility, in the naming of laboratory bench space, or for the academic support of a named graduate scholar.

DIG AROUND WITH US IN THE SANDBOX

The Goeddel Family Technology Sandbox is a new cross-campus asset, creating the space for multidisciplinary exchanges and cross-pollination across areas. The development of large data sets contextualizes our partnership with the renowned Halıcıoğlu Data Science Institute (HDSI), supporting analysis that in its application will impact the world. Connecting the advanced technical and applications knowledge of data scientists to deep specialization in biological systems, materials, and structures will uncover new insights and opportunities.

With the support of visionary philanthropic partners, the Sandbox will be the place where campus scientists, visiting collaborators, industry partners and students come together to dig around and build new biological knowledge. By optimizing the use of powerful equipment and kick-starting new projects, we will seed new solutions.

CONTACT

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