Leading the Way: UC San Diego Health’s Role in Creating the Future of Health Care

PATTY MAYSENT, Chief Executive Officer
What is Academic Medicine?

• Interrelationships among teaching, research and service
• Tripartite mission of educating the next generation of physicians and biomedical scientists, discovering causes of and cures for disease, and advancing knowledge of patient care while caring for patients.
• Provides the most advanced therapies, treatments and cures to anyone who needs them.
MISSION
Deliver outstanding patient care through commitment to the community, groundbreaking research and inspired teaching.

VISION
Create a healthier world – one life at a time – through new science, new medicine and new cures.
<table>
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<tr>
<th>By the Numbers</th>
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<tbody>
<tr>
<td>$3.7 Billion+ Health System</td>
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<tr>
<td>1.26M+ Ambulatory Visits</td>
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<tr>
<td>476,000+ Imaging Exams</td>
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<tr>
<td>36,000+ Annual Hospital Admissions</td>
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<tr>
<td>25,000+ Cancer Care Patients Served</td>
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<tr>
<td>13,000+ Health System Team Members</td>
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<tr>
<td>5,000+ Births Each Year</td>
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<td>1,800+ Clinical Trials (at ACTRI)</td>
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World-Class Care

13,493 Health Staff Team Members
(does not include physicians)

1,101 Licensed Beds
381 Hillcrest
418 La Jolla
302 East Campus

36,130 Annual Hospital Admissions¹

1.26M Annual Outpatient Visits & Surgeries¹

¹ American Hospital Association Survey
Clinical Growth: 15% Annual Average Since 2017

Historic Growth

• Our Clinically Integrated Network grew from 349 members in 2018 to 975 in 2023

• Expanded inpatient clinical footprint by adding 245 beds with the opening of JMC in 2017

• Added more than 6,000 surgeries per year with opening of Koman Outpatient Pavilion in 2018

• Hitting capacity on the inpatient side with an anticipated 138 bed gap to meet current demand

Note: Medical Center Operating Revenue (excludes professional revenue).
UC San Diego Health – Awards and Achievements

 Ranked in 10 Specialties
COMMUNITY BENEFITS: Caring for San Diegans

$558M Total annual community benefit programs and services provided by UC San Diego Health in 2022

$501M Government-sponsored care shortfalls and uncompensated charity care
  Medicare, Medi-Cal, State Children’s Health Insurance Programs, other safety net programs, uncompensated charity care, indigent care, in-kind contributions

$55M Health Professionals Education
  Teaching physicians, nurses, students, education scholarships

$2M Insurance Plan Shortfalls
  Emergency, trauma, outpatient, behavioral, palliative, hospice

1) health.ucsd.edu/about-us/benefits
COMMUNITY BENEFITS: COVID Response

Petco Park Vaccine Superstation

Maquiladora Workers Vaccinations

CA Notify Exposure Notification

Vaccine Research

Mobile Vaccination

Community Engagement

Return to Learn: Test Kit Vending
10-YEAR VISION
UC San Diego Health will become a top-10 nationally recognized health system through the development of world-class destination programs and broad community outreach and service.

Our health system must grow and evolved to achieve our vision.

GROWTH STRATEGIES
• Create capacity by leveraging data and AI technology to optimize patient flow while delivering safe, quality care
• Upgrade and expand our flagship academic medical campuses in Hillcrest and La Jolla and optimize efficiencies gained by co-locating multi-discipline medical expertise
• Build a community health model to complement our traditional academic medicine model to provide comprehensive care for more patients, closer to home.
OUR FUTURE: New Inpatient Tower for La Jolla Campus
COASTAL MID COUNTY

Objectives

• Increase capacity for destination services:
  o cancer, cardiovascular, transplant, others
  o while maintaining flexibility to meet changes in clinical demand

• Help alleviate current patient flow challenges (e.g., EDIP’s) by growing clinical & support service capacities

• Volume largely incremental – create positive margin to support overall system growth

Size & Timing

• Initial planning for ~200–250 beds in IP tower
• Target opening 2028 OPP and 2031 for hospital
OUR FUTURE: Hillcrest Campus Redevelopment
MIDTOWN, DOWNTOWN, SOUTH BAY

Large Scale
• $3B+ investment
• 36 of 38 buildings replaced

Development Partnership
• Joint campus/health funding model

$550M Phase 1 *(under construction)*
• Outpatient Pavilion
• Parking Garage
• Street & Infrastructure Improvements

Hospital Replacement
• Driven by seismic requirements
PHASE I: Hillcrest Outpatient Pavilion Opening 2025

• Increases specialty service capacity (focus on procedures & surgery)
• Expanded cancer capabilities to serve central and south San Diego
• Improves efficiency of care teams and patient/caregiver experience
• Positive financial impact
OUR FUTURE: East Campus Medical Center
INLAND MID CITY

EAST TOWER
- 6 stories
- 195 Med-Surg
- 24 ICU
- 20 ED bays; 12 Psych ED (planned)
- 8 ORs, 2 cath labs; 3 GI suites

WEST TOWER
- 4 stories
- Behavioral Health Hub
- 30 Behavioral Health beds
- Projected 92 beds
OUR FUTURE: Rancho Bernardo Hub
INLAND NORTH COUNTY

Opening 2026

• 150,000-sf MOB; Bernardo Center Drive at I-15
• Primary care, advanced imaging, infusion, radiation oncology, outpatient surgery and procedures
• Expands reach, builds market share
• Feeds advanced care at flagship campuses, especially La Jolla
• Public-Private Project (P3); moving forward to select developer
Outpatient Pavilion
• 57,000 sf, 3-story, on-campus MOB
• Shelled space developed as hospital-licensed facility for potential services such as:
  • Urology
  • Advanced imaging
  • Ambulatory surgery
  • Radiation oncology
  • Infusion center
  • Cardiology
  • Gastroenterology
  • Orthopaedics

Potential New Hospital Tower
• Volume estimates and market growth due diligence to inform capacity requirements
• New South Tower could accommodate 192+ beds

Psychiatry Health Facility
• 16-bed facility will provide short-term, IP services
• Working on County partnership to ensure BH patients receive treatment in the right setting

OUR FUTURE: Tri-City Medical Center
COASTAL NORTH COUNTY
MISSION
Deliver outstanding patient care through commitment to the community, groundbreaking research and inspired teaching.

VISION
Create a healthier world – one life at a time – through new science, new medicine and new cures.
Decarbonization Study Update
Energy System Report Development

**Key Challenge**

**Analyze** full cost to reduce fossil fuel-based emissions by 90% by 2045.

Identify living lab and equity, diversity, and justice opportunities.

**Solutions**

Considers regional grid; technical feasibility; costs; environmental impacts; social impacts; and is centered and enhances the mission and goals of the University.

**Unique Value Propositions**

University has opportunity to choose strategies that support multiple Strategic Goals:

- Sustainable infrastructure.
- High Impact Research.
- Student Experience.
- Community Partnerships.
- Diversity and Access.

**Unique Internal Collaborator Relationships**

Academic Senate and Climate Curriculum, Center for Energy Research, Associated and Grad Student Organizations

**Relevant Groups/Parties**

Executive Sponsors, Academic Senate Committees, Student Fellows and Interns, Faculty/Staff/Student Focus Groups

**Key Channels**

Work Groups, Committee Meetings, Campus Community Outreach Events

**Draft Report**  5/24

**Draft Comments**  6/24

**Report Finalized**  7/24

**Targets Set**  1/25

**Plan Developed**  1/26
Energy Systems Analysis
State of the Local Grid

![Comparative Electricity GHG Emission Factor](image-url)
Multipronged Approach-Potential Scope 1 Carbon Emissions Reductions (MTCO2e)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Increase</th>
<th>Decrease</th>
<th>Total</th>
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<tbody>
<tr>
<td>BAU</td>
<td></td>
<td></td>
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<tr>
<td>Sc-1</td>
<td></td>
<td>100,000</td>
<td>100,000</td>
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<tr>
<td>Sc-2A</td>
<td>50,000</td>
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<td>50,000</td>
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<tr>
<td>Sc-2B</td>
<td>30,000</td>
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<td>30,000</td>
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<tr>
<td>Sc-2C</td>
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<tr>
<td>Sc-3</td>
<td>10,000</td>
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<tr>
<td>Sc-4</td>
<td>5,000</td>
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<tr>
<td>Total After</td>
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<td>130,000</td>
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## Energy Systems Scenario Comparisons

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<tbody>
<tr>
<td><strong>20-Year Costs with LRDP Build-Out</strong></td>
<td>Baseline scenario.</td>
<td>Highest commodity costs.</td>
<td>Higher capital cost but potential lower commodity costs.</td>
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<tr>
<td><strong>Challenges</strong></td>
<td>2045 policy and state goals.</td>
<td>Does not maximize efficiency opportunities and demand optimization.</td>
<td>Coordination within dynamic environment. Campus disruption.</td>
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<tr>
<td><strong>Value Opportunities</strong></td>
<td>Continue to provide predictable, reliable energy sources that can serve the mission.</td>
<td>Provide energy efficiency opportunities.</td>
<td>Collaborate with regional partners and activities.</td>
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<td></td>
<td><strong>Sustainable Infrastructure.</strong></td>
<td>Provide innovative student learning and research opportunities.</td>
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<td><em>People and purpose. Student Experience. High Impact Research</em></td>
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<td><strong>Community Partnerships.</strong></td>
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Opportunity: Sustainable Infrastructure

- Maximize solar, combine with distribution piping as feasible
- Maximize energy storage to meet loads and minimize demand charges
- Employ established heat pump technologies at strategic times and locations.

*People and purpose.*
Opportunity: Living Lab

Emerging Themes & Ideas

Curriculum
- Integrate Sustainability Courses into Core Degree Programs
- Integration of Climate and Environmental Justice in All Climate Courses
- Analysis of Decarbonization Plans
- Change Making Skills
- Technical Sustainability Education
- Ease of Finding Climate-Related Courses
- Climate Science Communication

Collaboration
- Greater Collaboration Between Health and Social Sciences
- Collaboration Between Campus and UCSD Health
- Cross-Departmental Projects and Course Offerings
- Internships for Students to get More Directly Involved and Learn Industry Skills in Decarb
- Industry Partnerships
- Expand Community-Based Research

Health
- Scope 3 Decarbonization
- Healthcare Decarbonization Training
- Link Decarbonization Efforts to Health Outcomes
- Study Health Impacts of Climate Change for Where Our Patients Live
- Use Medical Center as an Opportunity for Real Life Learning

Visibility / Transparency
- Tours and Trainings for Students, Staff, and Community
- Benchmarking the Project Before and After the Clean Energy Transition (energy, emissions, water, air, labor, resilience, etc.)
- Regular Updates and Information Sharing Throughout Design & Construction
- Increase Visibility of Climate Research and Collaboration

Innovation
- Training on New Technologies
- Thesis Opportunities for Emissions Analysis, Financial Opportunities, Labor Transition, etc.
- Embodied Carbon Analysis
- Scale Decarb Solutions from the Campus Scale to the Regional and International Scale

Student Experience. High impact research.
Opportunity: Equity, Diversity, and Inclusion

Considerations for energy projects

• Develop and evaluate equity indicators on transition impacts and opportunities

• Incorporate four major climate and environmental justice concepts:
  • Procedural
  • Recognition
  • Distributive
  • Restorative

Community partnership.

Diversity and access.
Roadmap for Next Steps

1. Final Report
   - Additional modeling and analysis, as needed.
   - Provide updates to relevant groups.

2. Prioritize projects. Set targets.

Proposal for Two Departments at SSPPS

Brookie Best, PharmD, MAS
Dean, Professor

April 16, 2024
History and Context

- SSPPS Approved in 2000, enrolled Charter Class in Fall 2002
  - Established with small group of faculty (<10)
  - Dean served (and still serves) as the official Department Chair; entire school functions as a single department
  - Two+ decades: >55 faculty, >30 staff, Top 15 Pharmacy school, Top 5 in Research Funding nationally

- Established Three Divisions in 2016:
  - Clinical Pharmacy (n=27), Pharmaceutical Chemistry (n=14) and Pharmaceutical Sciences (n=17)
  - Division Heads assign committee service, assist with academic files, recruitment and onboarding, and represent SSPPS on some Health Sciences and general campus committees.

- Many governance challenges remain while the official school structure is still a single department.
Faculty Oversight:

- Departments will substantially better align faculty oversight, which is currently informally delegated to Division Heads, even though faculty do not report to the Division Heads. Departments will empower the Department Chair with appropriate faculty oversight authority and the ability to make and enact decisions. This will allow the Dean more time to focus on fundraising, marketing, high-level oversight, and broad collaborations, in partnership with the Department Chairs.

Representation in Professional Organizations:

- SSPPS Department Chairs will be able to participate with equal stature as other pharmacy school Chairs at external professional organization venues that host Chair events and groups, where we currently lack representation.
Rationale (2)

Representation at Health Sciences and General Campus:

• Our Division Heads are currently invited to some, but not all, Health Sciences and Campus Department Chair meetings, where they may or may not be privy to the same background information and context available to the official Department Chairs for the discussions. Further, our Division Head role in some settings is unclear and confusing, given that the Dean is still the Department Chair.

• Departments will further improve SSPPS representation in leadership recruitments that involve department chairs; development and advancement events; and a myriad of other UC San Diego-wide venues, where our entire school is currently only represented by one person, the Dean.

External Visibility for Partnerships, Collaborations, and Recruitment:

• A clearer organizational structure is more understandable to internal (i.e., campus collaborations) and external stakeholders (i.e., health-systems, academics, industry) and enhances recruitment efforts.
Department of Pharmaceutical Sciences

• The vision of the Department of Pharmaceutical Sciences will be to educate students in the skills, critical thinking, and principles in pharmaceutical sciences that will enable their success as future leaders in therapeutics innovation to promote health.

Department of Pharmacy Practice and Sciences

• The vision of the proposed Department of Pharmacy Practice and Sciences is to deliver excellence in clinical pharmacy practice, teaching and research with emphasis on collaborative care and innovative practice models.
Support and Space

• In essence, the school (SSPPS) will use existing funds to fund the two departments. This includes the following components:
  • Dept. of Pharmacy Practice and Sciences: Professional Degree Supplemental Tuition (PDST), support for clinical services, research, FTE base
  • Dept. of Pharmaceutical Sciences: FTE base, research
  • Both departments and central school operations: PDST, core budget allocation

• Pharmaceutical Sciences Building (PSB): 12,000 sq ft of teaching space for health sciences students, 3,500 sq ft administrative space, 35,000 sq ft research and faculty office space

• Additional clinical faculty offices in MTF, Ivy and Laurel trailers

• Space allocations will not substantively change with the establishment of departments.
Educational Programs

- Doctor of Pharmacy
- MS in Drug Development & Product Management
- BS/PharmD with DCBC
- PharmD/PhD with BMS
- UC San Diego & Pfizer Post-doctoral Research Fellowship in Clinical Pharmacology – Oncology
- UC San Diego & PureCare Pharmacy Community-Based Residency Program
Administrative Structure

- Centralized Staffing Model:
  - supporting PharmD curriculum, admissions, student affairs, and school accreditation
  - human resources, contracts and grants, fund management, etc.
  - centrally-funded Administrative Coordinator that currently supports the Division Heads will continue to serve as the Administrative Coordinator for the Department Chairs.
  - SSPPS Associate Dean for Business and Fiscal Affairs will serve as the initial Departmental Business Officer for both departments.

- As the departments grow over time, the support staff structure will be evaluated annually to determine which functions should remain centralized and which functions should be decentralized to the departments. We anticipate most of the administrative support to remain centralized over the long-term, but the department structure will allow for flexibility in each department to supplement the central administration in areas of specific departmental needs.
Questions?
Resolution On UC San Diego Policy On Public Disclosure

Senate Council, Olivia A. Graeve, Vice Chair
Craig Callender, Chair, Committee on Campus Climate Change
George Fuller, Chair, Committee on Research
Motivation

Partnership with external funding entities is central to UCSD’s research and educational mission.

Two decades of research, however, show that in some cases these funding sources intentionally use this influence to further ends in ways contrary to the public good and our own mission.

The tobacco industry, for example, explicitly funded academic research as part of their strategy to delay action on tobacco policy. Evidence housed at https://industrydocuments.ucsf.edu/
A significant influence on U.S. natural gas policy, helping open fracking throughout the country.

The Energy Institute itself was funded by ExxonMobil, Saudi Aramco, Shell, Chevron, Schlumberger, and many other oil and gas companies. The authors sat on boards of directors, owned stock in, took jobs, and more for many interested fossil fuel entities.

None of that was disclosed.
Academic research funded by oil and gas companies tends to treat methane more positively than renewable energy as compared with publicly funded academic research.

Calls To Respond


**BMJ INVESTIGATION**

*Stealing from the tobacco playbook, fossil fuel companies pour money into elite American universities*

Paul Thacker examines how oil and gas companies have funded research to try to weaken messages on climate change and protect their interests

Paul D Thacker freelance journalist

At the turn of the century, a fresh crop of research centres to confront global warming began popping up at prestigious American universities. Promising a sustainable solution to the carbon and climate change problem, Princeton launched the Carbon Mitigation Initiative in 2000. Two similar programmes followed at Stanford in succeeding years: the Program on Energy and Sustainable Development (2001) and the Global Climate and Energy Project (2002). Massachusetts Institute of Technology’s (MIT) Energy Initiative emerged in 2006, and University of California, Berkeley’s Energy Biosciences Institute in 2007. Each initiative grew professorships and money at elite American universities. After learning from Exxon scientists that governments would regulate oil and gas companies to halt global warming, the French fossil fuel industry began funding studies on carbon uptake by oceans at Columbia University in the early 1990s, research that could make climate change seem less alarming. They also began placing engineers at MIT and other institutions to monitor scientific work. In 1998, the American Petroleum Institute, the largest US trade association for the oil and gas industry, laid out a plan to defeat government action on climate change through a multimillion dollar programme, to
Modeled after transformation in biomedical research.

Advocated by AAUP, Pew Charitable Trust, and scores of commentators.

In a Springer Nature “Behind the Paper” 2022 commentary, Columbia University economist Douglas Almond writes “basic financial transparency toward the primary culprit should be a “no brainer” for universities.”
The Resolution

1. All externally-sponsored research projects shall be disclosed yearly in a publicly accessible database. The project sponsor, project title, amount of funding, and the name of the principal investigators will all be disclosed and the registry maintained by the campus.

2. All academic units of the university (e.g., schools, departments, centers, institutes) shall publicly disclose all gifts of $10,000 or more and restrictions on those gifts. These donations should be listed at least yearly. This policy will not supersede the right of donors to remain anonymous.

3. We exhort university researchers to adopt the norm of explicitly disclosing the financial and non-financial relationships that obtain between the funder and researcher in all public communications regarding their research (e.g., articles, websites, presentations) in contexts where they reasonably can be taken to be speaking as a university expert.
The Resolution

1. All externally-sponsored research projects shall be disclosed yearly in a publicly accessible database. The project sponsor, project title, amount of funding, and the name of the principal investigators will all be disclosed and the registry maintained by the campus.

- No new reporting requirements for faculty. All data gathered from existing internal disclosures.
- No change for most faculty, as most funding agencies already publicly disclose, e.g., NIH
- UCOP already discloses most of this in a database: https://www.universityofcalifornia.edu/about-us/information-center/award-explorer
- So does UCSD (behind single sign-on): tableau.ucsd.edu
2. All academic units of the university (e.g., schools, departments, centers, institutes) shall publicly disclose all gifts of $10,000 or more and restrictions on those gifts. These donations should be listed at least yearly. This policy will not supersede the right of donors to remain anonymous.

- No new reporting requirements for faculty. All data gathered from existing internal disclosures.
- Intended for new gifts
- Donors have a legal right to remain anonymous
3. We exhort university researchers to adopt the norm of explicitly disclosing the financial and non-financial relationships that obtain between the funder and researcher in all public communications regarding their research (e.g., articles, websites, presentations) in contexts where they reasonably can be taken to be speaking as a university expert.

- Adoption of a principle...
- No reporting, no policy changes
Benefits

Transparency improves trust in science.

The Resolution will help us maintain that trust.