

UCSF2025 GAME SUMMARY

# UCSF2025: Mapping the Future

PART OF THE UCSF 2.0 PROJECT | OCTOBER 22, 2013

**UCSF  
2025**

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Play the game. Make the future of UCSF.  
MAP THE FUTURE OF EDUCATION, RESEARCH, AND HEALTH

**UCSF**  
University of California  
San Francisco

**FORESIGHT  
ENGINE**

## **ABOUT THE INSTITUTE FOR THE FUTURE**

The Institute for the Future is an independent, nonprofit strategic research group with 45 years of forecasting experience. The core of our work is identifying emerging trends and discontinuities that will transform global society and the global marketplace. We provide our members with insights into business strategy, design process, innovation, and social dilemmas. Our research generates the foresight needed to create insights that lead to action and spans a broad territory of deeply transformative trends, from health and health care to technology, the workplace, and human identity. The Institute for the Future is based in Palo Alto, California. | [www.iftf.org](http://www.iftf.org)

## **ABOUT UCSF**

UCSF is a leading university dedicated to promoting health worldwide through advanced biomedical research, graduate-level education in the life sciences and health professions, and excellence in patient care. It includes top-ranked graduate schools of dentistry, medicine, nursing and pharmacy, a graduate division with nationally renowned programs in basic biomedical, translational and population sciences, as well as a preeminent biomedical research enterprise and two top-ranked hospitals, UCSF Medical Center and UCSF Benioff Children's Hospital. | [www.ucsf.org](http://www.ucsf.org)

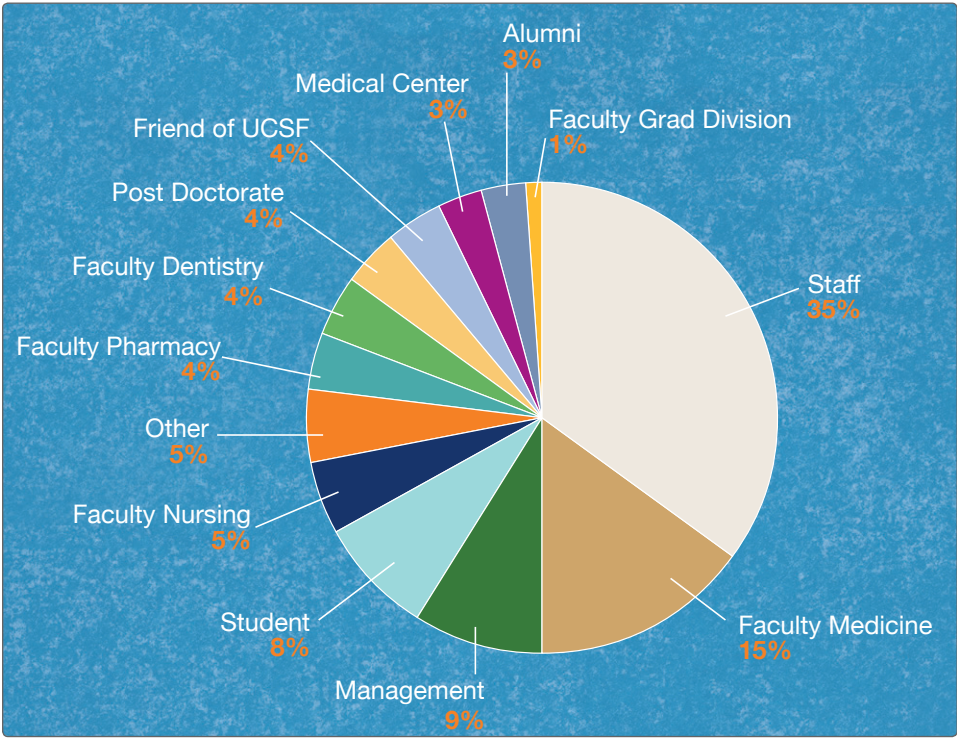
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# Executive Summary

On **September 11–12, 2013**, the UCSF community convened to run a forecasting game about the future of UC San Francisco in the year 2025. 2,583 players ranging from faculty and staff to students, alumni, and friends of UCSF registered to play and shared 24,711 ideas in response to the question: **What if you could map the future of UCSF in just 36 hours?**

Player affiliation, self-selected during pre-registration



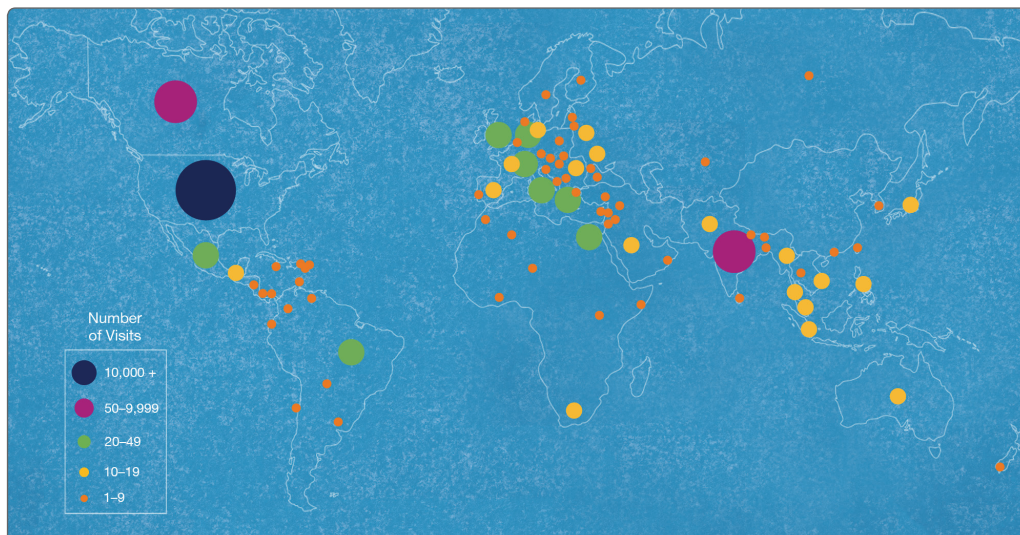


## Foresight Engine Game Mechanics

UCSF2025 took place primarily on an online platform called Foresight Engine™, which the Institute for the Future developed to engage large numbers of people in a fast-paced ideation effort to map the future. Here are some of the basics about the UCSF2025 game:

- **The game began with a video scenario:** a peek into a possible future for UCSF. This video was designed to be provocative; to invite players to think about how the world is changing and how those changes might change opportunities for themselves and for UCSF.
- **Game participants “played cards”:** *Positive Imagination* cards suggested how UCSF can be a worldwide leader in human health in 2025 while *Critical Imagination* cards were used to highlight urgent challenges UCSF will face in 2025. Players then built on these starting-place ideas with *Momentum*, *Antagonism*, *Adaptation*, and *Investigation* cards.
- **Each idea was a micro-contribution:** 140 characters that captured the basics. Multiple players built on these ideas with additional cards, creating long chains that developed the ideas. Players also won points whenever anyone built on their ideas, so you could see how other people responded to what you shared.
- **The game dashboard tracked ideas and points:** showing the flow of ideas in the game and the points that players accumulated. To find out game highlights, players visited the game blog, which featured ideas that rose to the top.
- **The game was facilitated by a skilled group of gamemasters from IFTF:** who marked cards as *Super Interesting*, or called a card out as *Conventional Wisdom* if it didn’t push beyond current boundaries. Gamemasters also synthesized the themes, highlighted exceptional players for special recognition, set challenges for the group, and gave awards.

Global player distribution by visits



## Analysis

With an unprecedented number of participants and cards, gameplay was fast-paced and exciting. Both during the game and after, Institute for the Future staff followed individual cards, players, and discussions that developed between players to pull out common ideas and interesting themes. When putting together this post-game analysis, a number of elements were examined, including the game’s leaderboard, prominent “builds” or conversations, and word frequency analysis, which are elaborated on below.











**Leaderboard** | The game’s final leaderboard included a group of outstanding individuals—ranging from player **Esther**, a recent master’s grad to player **Alex**, a physician—and everything in between. Others played as teams who collaboratively contributed like **TeamAging** and team **CPC\_Ag**. We applaud this innovative way of cooperating to compete.

**Big Builds** | The large number of cards played and the high percentage of follow-on cards combined to create a highly conversational game in which people engaged in long chains of ideas building off of one another. Often these “big builds” unfold from an initial, seemingly simple idea that then sparks a robust, innovative conversation. In this game, the biggest build was 781 ideas deep. Topics of big builds ranged from strategic directions around aging and open science to operational priorities like how to rethink space use and cut the costs of education. Chain analysis of big builds is one of the most promising directions for further analysis of the game cards. Chains connect multiple ideas, topics, and issues together, suggesting the potential for new synergetic solutions.

**Methods** | The methods used to analyze cards were mostly qualitative, using a variety filtering processes. In addition, Institute for the Future also used a quantitative tool called Data Analytics to get a sense of the scale of interest in various themes.

This program is used mainly as a discovery tool, primarily scanning the word frequency list for “surprising” occurrences of words (since we were looking for outlier ideas). Then, all the cards with those “surprising” words were extracted and examined for ideas or clusters of ideas that were novel or important.

Game Leaderboard

MOST FORECASTING POINTS	
	<b>Esther</b>  Mountain West <b>96134</b>
	<b>TeamAging</b>  Laurel Heights, VA, Parnassus <b>77744</b>
	<b>aucontraire</b>  Laurel Heights <b>66310</b>
	<b>Cary Sweeney</b>  UCSF Laurel Heights & Parnassus <b>46762</b>
	<b>CPC_Ac</b>  San Francisco <b>46272</b>

### Analysis (cont.)

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Of course, *surprising*, *novel*, and *important* are all subjective terms, so like the other filters, this tool is ultimately a qualitative one. But in a very large volume of cards, it allows one to quickly scan the range of topics that appeared and focus on those that seem to have innovative potential.

It should be noted that the extremes of the frequency list—the lowest and highest—are generally the less interesting zones of discovery, while the middle zone (say, 30 to 75 occurrences) is likely to produce a more interesting set of topics. Nevertheless, sometimes a very high frequency for an unexpected word, such as *free*, invites staff to look a little more closely.

Qualitative analytics also leveraged the game mechanics built into the game: points tabulations for collaborative game play, length of build builds, and more.

**Operational Ideas** | Over the course of the game analysis, IFTF staff came across several excellent near-term operational ideas (in contrast to the longer-term strategic ideas highlighted in his memo). Though not detailed in this game summary, these ideas—which addressed things such as improving employee engagement, health and wellness, “simple solutions,” transit, sustainable campus life, and procurement—have been shared inside of UCSF.

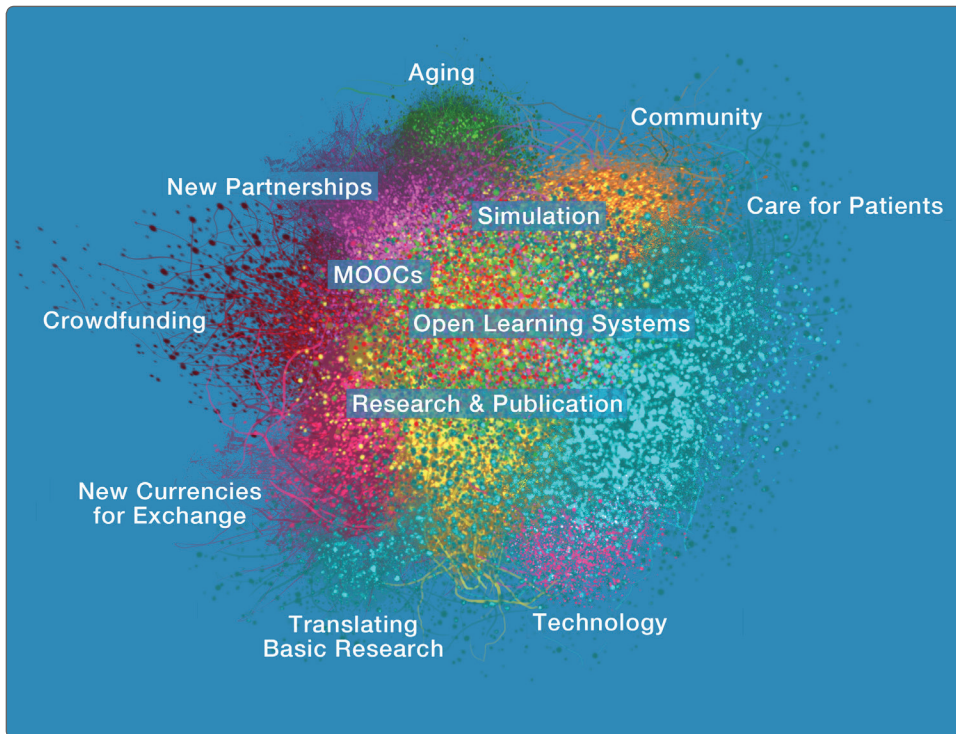
## Results

Ultimately, analysis of this game took the pulse of the university, and resulted in several key zones to which UCSF should pay special attention:

**Opportunity Spaces** | These Opportunity Spaces make up the core of the memo: negotiate new partnerships, pioneer new funding models, rethink research and publication, re-envision health sciences education, and transform patient care.

**Outlier Insights** | These Outlier Insights, detailed in the Appendix, are grouped into categories: people, practices, tools, capacities, and leadership.

Game theme clusters showing inter-relationships of ideas





## Mapping Opportunity Spaces: Overview

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### 1 | NEGOTIATE NEW PARTNERSHIPS

UCSF has built its foundation as a brick-and-mortar biomedical research campus in San Francisco, with ties to both local communities and to the more than 50 countries around the world in which it works. Increasingly, medicine, health sciences research, and education are breaking out of their local silos to reach out across industries and around the world for more knowledge, more partnerships, and greater impact.

Over the next decade, new data sharing, innovative ways of collaborating and learning at a distance, and digital tools for practicing medicine remotely will expand UCSF's already impressive global reach.

**The opportunity space:** As medical and research resources around the world are untethered from traditional institutions, UCSF could strive to expand its footprint of influence, action, and impact while maintaining strong bonds with local Bay Area communities and experimenting with new, unexpected partnerships.

#### Key themes:

- COLLABORATE ON HEALTH DATA
- LEVERAGE PARTNERS WITHIN & ACROSS UC SYSTEM
- PARTNER FOR INFLUENCE
- BUILD THE BIOSILICON VALLEY
- PARTNER WITH K-12

### 2 | PIONEER NEW FUNDING MODELS

From medical research to higher education and patient care, traditional sources of funding are becoming increasingly uncertain. The large institutions that have distributed funds—state and federal government, insurance companies, and large corporate investors—are all facing new challenges themselves, while philanthropy is facing increasing demand from all sides. In short, traditional funding is no longer a sustainable model for supporting the future of health.

Meanwhile, nascent experiments in financial alternatives are already remaking the landscape of investment and entrepreneurial funding. Crowdfunding, peer-to-peer insurance and lending, and even alternative currencies and time banking are providing new ways for people to get what they need to support their education, their work, and their health.

## Mapping Opportunity Spaces: Overview (cont.)

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**The opportunity space:** As a major institution, UCSF could work to transform its financial infrastructure in order to take advantage of new and more sustainable funding opportunities—all in one short decade.

**Key themes:**

DEVELOP EXPERTISE IN BOOMERS, CONVERT INTO LOYAL COMMUNITY  
MASTER CROWDFUNDING  
EXPLORE NEW CURRENCIES FOR EXCHANGE

### 3 | RETHINK RESEARCH & PUBLICATION

In the next decade, research will increasingly leverage human-software symbiosis as smart machines and software enter almost every domain of our lives. Simulation and visualization tools in particular will change the flows of research, extending human capabilities and enabling us to do things in new ways and to accomplish previously unimaginable tasks. Research flows will increasingly include acknowledgement of micro-contributions; that is, lightweight contributions by hundreds or thousands to create a greater sense of the big picture. At the same time, the publication flows and peer review systems that have formed the backbone of traditional research and publication will continue to feel like overly encumbered systems.

**The opportunity space:** UCSF could continue to lead in traditional research and publication methods while also taking advantage of new simulation tools and new flows for producing real-world value—from learning to connection to reputation. All of this would optimize the impact of what happens in labs and classrooms.

**Key themes:**

LEAD IN SIMULATION  
REVAMP THE PUBLISHING PROCESS  
CREATE SHARED PLATFORMS FOR PROTOCOLS  
DEVELOP STRENGTH IN TRANSLATING BASIC RESEARCH

### 4 | RE-ENVISION HEALTH SCIENCES EDUCATION

Across disciplines and around the world, education is undergoing a transformation as profound as the founding of universities and the introduction of public education. With growing costs and diminished funding for traditional classrooms—and with rapid evolution of knowledge in a highly interconnected online world—learning at every level is moving into digital spaces, both public and private.

## Mapping Opportunity Spaces: Overview (cont.)

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Today, a new generation of players is entering the field to provide learning services, from global tutors and mentors to new institutions unencumbered by legacy systems, bureaucracy, regulations, and expectations. These new learning systems are creating a different kind of student, with unique skills, learning goals, and expectations of the role of education in their work lives.

**The opportunity space:** UCSF could pioneer new platforms and practices in health sciences education that attract the most forward-focused and skilled learners, while integrating them into a rapidly changing landscape of health and medicine.

**Key themes:**

- CREATE OPEN LEARNING SYSTEMS
- STRATEGICALLY LEVERAGE MOOCS (MASSIVELY OPEN ONLINE COURSES)
- GET CREATIVE ABOUT SPACE

## 5 | TRANSFORM PATIENT CARE

Over the past decade, new health care players have begun to redesign the patient care marketplace. From retail health outlets for flu shots to full-body scanning services to digital diagnostic equipment, patient care is moving out of traditional hospitals and clinics and into homes, workplaces and new health care businesses. At the same time, hospitals are beginning to specialize, with big corporate contracts to serve employees seeking particular procedures (such as heart care).

This process will accelerate over the next decade, as cheap sensors and advances in biosciences make our brains, genes, microbiomes, biomarkers, activity levels, and even emotional health metrics available to people outside the walls of traditional health institutions—and as these institutions struggle to balance legal demands for more systematic processes with consumer demands for more personalized care.

**The opportunity space:** Given the rapidly-shifting ecosystem of health service providers, technologies, and consumer practices, UCSF could work to super-charge its patient care.

**Key themes:**

- MOVE PRECISION MEDICINE UPSTREAM
- HIGHLIGHT HUMAN CONNECTION IN COMMUNITY
- INNOVATE TECHNOLOGY INFRASTRUCTURE FOR LEARNING & PATIENT-CENTERED CARE

# Opportunity Spaces

What will UCSF look like a decade from now? How will it change the landscape of education, research, and health? How should UCSF position itself in order to continue to lead in basic and clinical discoveries, revolutionize human health and disease, and educate the best and brightest? Thematic analysis of these questions resulted in a set of key Opportunity Spaces for UCSF to consider.

## 1 | Negotiate New Partnerships

UCSF has built its foundation as a brick-and-mortar biomedical research campus in San Francisco, with ties to both local communities and to the more than 50 countries around the world in which it works. Increasingly, medicine, health sciences research, and education are breaking out of their local silos to reach out across industries and around the world for more knowledge, more partnerships, and greater impact.

Over the next decade, new data sharing, innovative ways of collaborating and learning at a distance, and digital tools for practicing medicine remotely will expand UCSF's already impressive global reach.

**The opportunity space:** As medical and research resources around the world are untethered from traditional institutions, UCSF could strive to expand its footprint of influence, action, and impact while maintaining strong bonds with local Bay Area communities and experimenting with new, unexpected partnerships.

**Key theme:** COLLABORATE ON HEALTH DATA

Players envisioned partnering with industry—from food retailers to car companies to game developers and tech innovators—to team up around health data and innovative service delivery. Some heralded a deeper focus on tech partners to leverage UCSF's geographic proximity to Silicon Valley while others warned that too narrow a local focus might hinder growth as a global player. In addition, clusters of cards revolved around partnerships with citizen scientists and communities around health data:

*Develop game platforms such as eyewire and foldit for citizen science human-based computations\**

*Develop a self search engine (working with Google) based on illness metrics, so search results for the most likely ills come up first. #CPC*



\*Please note: All italicized segments represent cards played during the game. Given the 140 character length constraint for each idea, some ideas utilized abbreviations and shorthand to make their point in constrained space. This memo balances fidelity to the exact card as played with limited edits in an effort to ensure the core idea is clear.



## 1 | Negotiate New Partnerships (cont.)

*Partner with game devs (Zynga? EA?) for health science themed games to youth. Why candy when you can CureCancerWithFriends? #CPC*

*Health IT interns from Google + Apple creating self-learning Epic that tailors itself to each user's preferences.*

*Collaborate with Apple to develop a 24/7 eWrist monitor. Data uploaded to a UCSF eDoctor who diagnoses and prescribes.*

*UCSF maps healthy neighborhoods and sells to real estate apps.*

*Communities invest in health to drive home values up. #funding #cpc*

*A partnership with local government and #healthtech startups to track citizens' health*

*How can big data empower UCSF without damaging patient-centered care? What partnerships could UCSF cultivate? Safeway? AAA? Ford? Intuit?*

*UCSF Mobile Health –What would a Ford + UCSF partnerships look like, i.e., a health mobile?*

*What if UCSF partnered with Apple or Google to develop a worldwide health monitoring and prevention system?*

*UCSF will need to partner in the design of cheap noninvasive hardware for individuals to record, transmit and receive health information #BRM*

*By being at the forefront of emergent technologies. Being so close to Silicon Valley, it's imperative to partner to marry tech with health.*

*Take advantage of our proximity to silicon valley to focus on IT and health. Bravely go where no health institution has gone before.*

*Champion Open Data Standards in Healthcare. Increases transparency, reduces costs of IT systems and scale for global collaboration. #CPC*

*Global epidemics are often spotted by Veterinarians, how about UCSF talks with ichthyologists, and etymologists, or large animal vets*

*San Francisco is unsustainable as a geographic home/boundary for a UCSF2025 with worldwide impact.*



## 1 | Negotiate New Partnerships (cont.)

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### Key theme: LEVERAGE PARTNERS WITHIN & ACROSS UC SYSTEM

Players pushed at the edges of the so-called “collaborate to compete” model, with ideas about cross-institutional funding models and regional alliances. Given increasingly permeable institutional boundaries, players encouraged UCSF to think bigger. Several players contributed cards about specific amplified capacities UCSF could gain by partnering within the UC system—from materials science to computer science. Still others suggested ideas for better partnering internally—with the procurement function, for instance:

*Current funding models often create competitive models between institutions. Lose synergies. Different model could award cross-institution.*

*Develop regional educational alliances within and outside UC system leveraging collective talent non-competitively*

*#education will mean taking classes at UCSD on Monday, UCLA on Tuesday, and UCSF on Wednesday-Friday. #TeamIT*

*Let's think bigger with distance #education and UC as a whole. #TeamIT*

*Partner with other UCs in developing a post-grad course in engineering and medicine; logistics, develop health metrics, comp analysis*

*Partnering with Berkeley and other leading academic institutions in the Bay Area is very important to our growth in global health*

*Another reason to collaborate with Stanford and/or Berkeley is for their computer science program which we need to stay relevant.*

*Yes collaborate w/Stanford and UCB but also combine expertise into 5th School of Global Health @UCSF –economics, law, social sci #globalhealth*

*How about a reuse/recycle program? A consignment marketplace for lab equipment across the UC system or even available externally? #Esther*

*Procurement must become a strategic partner to research and transcend transaction management. #CPC*



## 1 | Negotiate New Partnerships (cont.)

### Key theme: PARTNER FOR INFLUENCE

Players generated a cluster of ideas around partnerships that could be leveraged for brand-building (through entertainment media, social media and community engagement), for legislative advocacy (through stronger advocates in Sacramento and at the federal level), and more. A hot theme within funding conversations called for greater collaboration with industry building on the UCSF brand. Some players called for more ventures with the UCSF name, citing other universities pioneering this move. Others call out “idling” money in industry-sponsored research, though only accessible with relaxed restrictions. Still others highlight the one tension inherent to closer ties with industry—maintaining high standards while bringing in new revenue.

In addition, a robust discussion arose around expanding UCSF’s impact and influence by growing globally. And one player contributed a provocative headline-from-the-future: what if UCSF received no more funding from the state of California to become “the first Federal Health Service University?”

*Partnerships with major Hollywood studios in order to insert UCSF into major motion pictures.*

*Hollywood has done more to promote MIT success stories than MIT in recent years. Can we have them make a show or movie on one of ours?*

*Let’s partner with the entertainment industry to create a UCSF movie or TV show to entertain AND promote our vision of worldwide health #BRM*

*Teach folks how to create and use research to influence policymakers, the media, and the public.*

*Fully engage with local, CA and global communities by using social media, open online edu (for certificates to inform public health)*

*Aside from partnerships with corporations (already in play), UCSF should be a stronger advocate at UCOP and Sacramento.*

*A marketplace for ideas/partnerships/innovation protection relationships. Not one marketplace for all of UC. One of several possibly. #Esther*

*Create incentives to support CA-wide alliances with unique access to funding support.*

*#funding UCSF needs to consider more business ventures using their brand name. A handful of universities have moved into new markets.*

*We can generate an incremental \$200MM/year in industry sponsored research if we focus on it, and relax our own restrictions #funding, #cpc*



## 1 | Negotiate New Partnerships (cont.)

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*Funding will always be at the top of the list of challenges. How can UCSF maintain high standards without being bought out by big pharma?*

*Become a manufacturer of generic medications and use the revenue to fund education, research, and access to care for underserved communities*

*Create an economics department that can focus on the true way to reduce health care costs at the national/global level. #NateSilver*

*#why stop at city borders? Lets lead in #regional #national and #global communities too! #cpc*

*Why limit our funding to the NATIONAL level? Outreach to the Chinese Ministry of Health & other countries to solicit sponsored research. #CPC*

*YES! & UCSF can serve as hub of a network of global health universities—with close linkages to strengthen global capacity in public health*

*Linked with personalized biobanks by region, this could spread research and precision medicine globally*

*Globalize med education to be free and open to the world, not just schools licensed by one government structure—create global licensing?*

*UCSF integrates videographic office walls, allowing for interactive meetings with people from across the world...even from Kuala Lumpur*

*In order to make good on the promise of precision medicine, we need to share data globally and crowd source micro experiments*

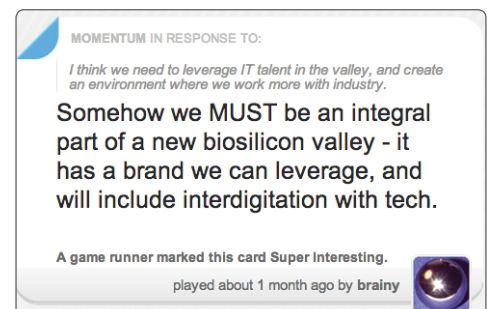
*#Funding With state funding cut off, UCSF asks congress to sign Morrill Act 2.0, making the campus the first Federal Health Science Univ*

### Key theme: BUILD THE BIOSILICON VALLEY

UCSF is clearly as much a place as it is an institution—and a place very aware of the community and culture that surrounds it. One vision of that changing geo-cultural context is captured in a series of cards that imagine a Biosilicon Valley in 2025:

*UCSF is a leader in a new #biosilicon\_valley, others being Facebook, Google (or their 2025 counterparts) and novel biotech organizations.*

*Exactly – but without us necessarily having to hire the talent, just benefit from it. Part of the future #biosilicon\_valley vision*





## 1 | Negotiate New Partnerships (cont.)

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*Yup, part of the #biosilicon\_valley vision for 2025. but it will have to be more than just partnering – new kinds of entities may be formed.*

*We can't by ourselves, but can if we re-envision a health-focused Silicon Valley and lead in that new ecosystem, the new #biosilicon\_valley*

*Very interesting. Wasn't what I was thinking originally. but at least one arm of #biosilicon\_valley might be a new ecosystem for startups*

### Key theme: PARTNER WITH K-12

According to some players, it's never too soon to start creating the health science leaders of the future:

*Formalize partnerships between UCSF faculty/staff and high schools to generate excitement for basic, clinical, and translational research*

*Foster Health Science Education. Partner with industry to create K-12 curriculum in SF, San Mateo and Santa Clara counties. #CPC*

*Start "recruiting" in elementary school. Reveal the vision early and help provide mentors.*

*UCSF partners with local elementary schools to start "So You Think You Can Diagnose" initiative. #cpc*

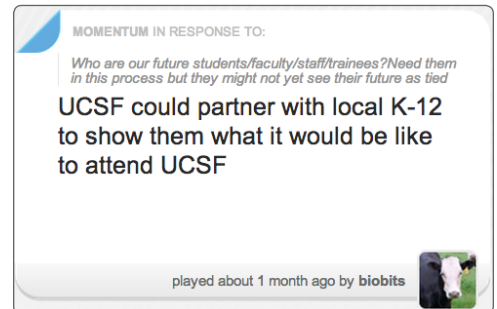
*Engage local elementary/middle/high schools & universities in the academic*

*NH—reduce ageism and promote intergenerational learning!*

*Host a science fair for elementary school students.*

*Great idea. Should be for all students, elementary through high school. Could be in spring to complement Bay Area Science Fest.*

*Could these high schoolers be trained to help identify at-risk senior citizens in the community? Conduct simple health-care screenings?*



## 2 | Pioneer New Funding Models

From medical research to higher education and patient care, traditional sources of funding are becoming increasingly uncertain. The large institutions that have distributed funds—state and federal government, insurance companies, and large corporate investors—are all facing new challenges themselves, while philanthropy is facing increasing demand from all sides. In short, traditional funding is no longer a sustainable model for supporting the future of health.

Meanwhile, nascent experiments in financial alternatives are already remaking the landscape of investment and entrepreneurial funding. Crowdfunding, peer-to-peer insurance and lending, and even alternative currencies and time banking are providing new ways for people to get what they need to support their education, their work, and their health.

**The opportunity space:** As a major institution, UCSF could work to transform its financial infrastructure in order to take advantage of new and more sustainable funding opportunities—all in one short decade.

**Key theme:** DEVELOP EXPERTISE IN BOOMERS, CONVERT INTO LOYAL COMMUNITY

As UCSF continues to deepen expertise in aging, some players suggested taking intentional steps to build a brand and a loyal following around that strength. Several cards called out the fact that boomers will be the recipients of the greatest wealth transfer in history (estimated at 41 trillion USD), and that UCSF should take this into account in designing its own future:

*Perhaps we should make a health center directed toward the boomer generation? As both patients AND caregivers? #teamaging*

*UCSF Center for Boomers? Could work. Would be a prime way to position UCSF for 2025.*

*I agree—there needs to include a re-branding of “Geriatric” care—many boomers in denial that they’ve actually reached the demographic.*

*Be the center for understanding the brain and the aging process. Here is where the highest order of genomics, technology and medicine meets.*



## 2 | Pioneer New Funding Models (cont.)

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*To lead 21st century health care, UCSF must lead in care of older adults – highest HC utilizers and fastest growing segment of the population.*

*But the Boomers are just arriving. Given current life expectancies, there is time, but the time is NOW #TeamAging*

*The baby boomers will thank us for this*

*The biggest donors are baby boomers = provide them & their elderly parents with good care and they will fund us #TeamAging*



### Key theme: MASTER CROWDFUNDING

Enthusiasm around crowdfunding was in full force throughout game play—some using proven platforms such as indiegogo and other suggesting entirely new ones like health research investment accounts. Some players suggested there might be particular niches for crowdfunding, such as pilot studies, and that patient input (whether monetary or data-donations) would be essential. To truly lead in this space, new capacities will need to be built, so one player highlighted the idea of keeping documentarians on staff to tell the story of crowdfunded projects:

*UCSFKickstart: platform for PhDs and MDs to receive direct funding for projects big and small + let public follow research they have funded*

*Too much in your health savings account this year? Put the overage into a health research investment account. #funding*

*For pilot research, consider Crowd Funding such as via “Indiegogo”*

*What if our patients could decide what research gets funded?*

*Research funding is proportionate to community health factors. Encourages community members to supply data to get their cause represented.*

*Partner with patients directly to make meaningful breakthroughs where traditional funding models don’t work (i.e. orphan drugs)*

*UCSF retains a team of documentarians to create engaging movies of future work to be crowdfunded #funding*

## 2 | Pioneer New Funding Models (cont.)

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### **Key theme:** EXPLORE NEW CURRENCIES FOR EXCHANGE

Some players discussed alternative currencies for value exchange, outside of traditional fiat currency, even considering valuations like “potential” as an alternative currency. Others shared ideas about how intra-institutional valuation systems must change by 2025. Lastly, some players played cards about changing the funding game altogether by imagining a time-based alternative community currency tied to your personal investment in the well-being of other patients, with UCSF as something of a bank to store your time reserves for when you need it. Time banking has been on the rise all over the world, and these players imagined how a new currency like this could layer onto existing funding models at UCSF:

*UCSF should award each Incoming student with 'X' free mana points. Mana points can be exchanged for research services or hire GA's/TA's etc...*

*@MTCowbug – Currency inherently is fiat = perceived value. We could perceive it to be free :)*

*With Education and therefore Potential, being a valid currency, Education will Finance itself. Also Pipelined Financing both micro, macro.*

*Change our academic currency. Writing formal papers and grant applications is good for bureaucracy, not health.*

*Alternative currency based on helping: Accrue points by helping other patients, use when you get injured instead of \$ #funding*

## 3 | Rethink Research & Publication

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In the next decade, research will increasingly leverage human-software symbiosis as smart machines and software enter almost every domain of our lives. Simulation and visualization tools in particular will change the flows of research, extending human capabilities and enabling us to do things in new ways and to accomplish previously unimaginable tasks. Research flows will increasingly include acknowledgement of micro-contributions; that is, lightweight contributions by hundreds or thousands to create a greater sense of the big picture. At the same time, the publication flows and peer review systems that have formed the backbone of traditional research and publication will continue to feel like overly encumbered systems.

**The opportunity space:** UCSF could continue to lead in traditional research and publication methods while also taking advantage of new simulation tools and new flows for producing real-world value—from learning to connection to reputation. All of this would optimize the impact of what happens in labs and classrooms.

### 3 | Rethink Research & Publication (cont.)

#### Key theme: LEAD IN SIMULATION

This cluster of player ideas is all about building and incorporating a robust series of virtual, online, and laboratory patient simulation experiences for all student levels. In several cases, personalized feedback—whether for students or even patients—seems vital:

*Kits with denatured viruses ready to be programmed? Or virtual evolution simulations. Game of life on steroids. #cpc*

*Robust interactive patient education tools on iPads, 3-D demonstration of heart defect, showing blood flow in wrong direction.*

*Video game simulation of patient care – helps medical students learn to prioritize tasks in regular resident day-to-day and in emergency.*

*UCSF Fab Lab can specialize in simulating disease spread across cities. Governments pay to run their city data thru program #cpc*

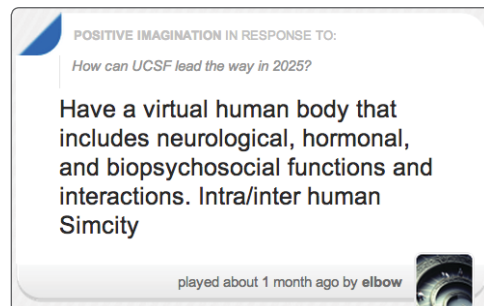
*Visualization for health counseling. (A 2013 example includes a computer simulation of your aging future based on current health habits).*

*How can we virtually simulate and scale the interaction between teacher and student?*

*What are critical secondary skills/training for the future: large scale simulation and visualization, global health law.*

*Great, and live simulations with tablets/smartphones. Learn from everywhere you like.*

*IPE activities are currently running in the TLC and Kanbar Simulation Center. Expanding these programs is a good place to start. #education*



#### Key theme: REVAMP THE PUBLISHING PROCESS

Players had a lot to say about the shortcomings of the current peer review and publishing processes. Some focused on incentivizing multi-authorship and team publication. Others were interested in changing the entire timetable—from periodic to continuous publishing of data. They also proposed new funding models and systems for crediting those who input into the publishing process:

*Peer reviewed journals are an archaic method of reporting data. We need more real time ways of communicating science.*

*Publish as you go, not just at the end of a long story. As data is made available the data itself is more important than the result.*



### 3 | Rethink Research & Publication (cont.)

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*We need open access platforms that encourage sharing of positive AND negative data.*

*Establish a registry of trials and publication of all trial results. Allow participants to review & comment on results. No Hidden trials.*

*Find alternatives to peer reviewed #funding? see [http://www.rand.org/content/dam/rand/pubs/research\\_reports/RR100/RR139/RAND\\_RR139.pdf](http://www.rand.org/content/dam/rand/pubs/research_reports/RR100/RR139/RAND_RR139.pdf)*

*Listing many, small donors in publications reminds me of the model some use on Kickstarter. Maybe explore a discovery #experienceconomy?*

*Initiate a change in the current authorship and funding system to get collective institutional publication and money*

*Create a separate faculty track for team scientists.*

*Incentivize team science, teaching, education. Incentivize teamwork and strong leadership that supports people to do their best work.*

*Teamwork and collaboration should be the modus operandi & the norm. Incorporate this value into performance reviews and career advancement*

*Too many NIH/CSR peer reviewers are under-qualified for the task. We must lobby for minimum qualifications & volunteer as reviewers.*

*Re: volunteer peer reviewers to fill gaps, what new metrics will be important in terms of reputation, trust etc. to make this “go?”*

*We don't need journals as conduit anymore. Use arXiv, Open Science Framework, etc. Distributed, open peer review.*

*Knowledge bots will look for connections in publications/datasets & pose potential research questions to optimized teams of investigators.*

*Bio-experimentalists and data processors would receive credit for optimizing protocols/methods that pass standard testing vs publication*

*Focus on “translating” patient-facing publications. Medical can collaborate with admin staff to rewrite these publications. #teamcls #career*



### 3 | Rethink Research & Publication (cont.)

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#### **Key theme:** CREATE SHARED PLATFORMS FOR PROTOCOLS

Early on in gameplay, players highlighted the shortcomings of the peer reviewed journal process, as well as the need to change incentives for research and publication. Other players highlighted the value of a unified platform for capturing research and treatment protocols:

*Peer reviewed journals are an archaic method of reporting data. We need more real time ways of communicating science*

*Micro-attribution routes credit to where credit is due, making thick paywalls less important.*

*As research output grows, UCSF actively engages with making its publications and data openly accessible, helping advance science.*

*Develop a global currency for health care. Contributions to care, scientific discovery reimbursed with global health currency. #social*

*Incentive points for salary or research money when you make a new diagnosis or provide an effective therapy*

*Would be cool to have software on a tablet at a bench-call up protocols, take photos, record notes (stylus or voice), search, make calcs*

*But I do agree that a Yelp system for lab reagents/protocols/antibodies is a good idea...we just need enough people to write reviews...*

*Integrate information systems into a single platform. Grants management + research protocols for IACUC and HRPP*

*Not just for research ideas, but for protocols, data, etc. A timely forum for people to communicate and respond to their research community.*

*Is competition stifling collaboration? How many researchers are afraid to share protocols for fear of getting their ideas swiped? #cpc*

#### **Key theme:** DEVELOP STRENGTH IN TRANSLATING BASIC RESEARCH

The task of translating basic research into clinical practice and even consumer health practices prompted a lot of discussion. While there were differences of opinion about how to balance basic research, translational research, and clinical research, a number of cards focused specifically on developing UCSF's strength in translational research, not only for basic biomedical research, but for physics, engineering, and the social sciences:

*Wow! Need an INSTITUTE focused on translation of physical science/engineering solutions to clinical needs*

### 3 | Rethink Research & Publication (cont.)

*We need to integrate and translate findings from both basic science and social science together, in order to make a real impact.*

*I'm an anthropologist and historian interested in the rise of translational research. We have lots of research that could aid this endeavor*

*20 yrs of spectacular advances in basic sci of aging/longevity, but little impact so far. Who will create Translational Geriatrics? #teaming*

The methods for rapidly growing translational research ranged from partnering with corporations to collaborating with the public to implementing new kinds of technical systems:

*We need to recognize the multi-translational potential of research. There is no one way, and corporate models are not inherently superior.*

*Other methods of clinical translation=community collaborative research methods; health services/health policy.*

*Translate faculty discoveries into information the public can access, understand and apply to their own health, wellness.*

*Create systems to quickly and easily translate research findings into a clinical setting.*

*And then translate to the front lines and into #primarycare. Systems based translation will be key.*

*Going beyond what Google does; help translate knowledge to a global base of consumers who need access to evidence, and ways to use information*

*UCSF could take a different approach to education in those areas eg. concentrate on ideas for translation*

*Wow! Need an INSTITUTE focused on translation of physical science/engineering solutions to clinical needs*


*Can look at CTSI as a model for how to institutionalize/support/promote translation & see how to adapt to social & political translation.*

*How many ways can we find that investment in core facility scientists impact on discovery and translation to the bedside?*

*Putting all clinical research in one facility to ease up collaboration and resource sharing (e.g. IT)*

MOMENTUM IN RESPONSE TO:  
*Lack of shared community between basic and clinical faculty*

**this is very true! Currently it feels like basic science is pushed into translational research. Instead, we should develop a true bridge.**

played about 1 month ago by SamA 

ADAPTATION IN RESPONSE TO:  
*It can increase its focus on preventative healthcare and all-around wellness instead of focusing strictly on disease.*

**UCSF needs to pay more attention to translating its work to the profit-seeking private sector for long-term, self-sustained growth.**

played about 1 month ago by noeljee 

## 4 | Re-envision Health Sciences Education

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Across disciplines and around the world, education is undergoing a transformation as profound as the founding of universities and the introduction of public education. With growing costs and diminished funding for traditional classrooms—and with rapid evolution of knowledge in a highly interconnected online world—learning at every level is moving into digital spaces, both public and private.

Today, a new generation of players is entering the field to provide learning services, from global tutors and mentors to new institutions unencumbered by legacy systems, bureaucracy, regulations, and expectations. These new learning systems are creating a different kind of student, with unique skills, learning goals, and expectations of the role of education in their work lives.

**The opportunity space:** UCSF could pioneer new platforms and practices in health sciences education that attract the most forward-focused and skilled learners, while integrating them into a rapidly-changing landscape of health and medicine.

**Key theme:** CREATE OPEN LEARNING SYSTEMS

Alongside the traditional institutional landscape of education is a new ecology in which learning is best conceived of as an open flow, where learning resources are not scarce but widely available, opportunities for learning are abundant, and learners increasingly have the ability to autonomously dip into and out of continuous learning flows. Some players imagined what some of the early UCSF open learning systems might look like—social, contextual, abundant, and marked by permeable boundaries:

*#education will mean taking classes at UCSD on Monday, UCLA on Tuesday, and UCSF on Wednesday-Friday. #TeamIT*

*Open education lets family members become informed care providers*

*Family members get course credits for the home care they've provided—facilitate turning the care team into health professionals.*

*OpenScience = less duplication, broken silos, and true collaboration. Imagine how much faster to get to good health for all #globalhealth*

*Champion OpenScience. Intellectual property law is getting in the way of research. #OpenScience*

*What about using social media to get students and faculty to that want to work on your idea too - make progress faster*

*In today's world, clear evidence of significant contribution to successful and substantive collaboration should be expected of faculty...*

#### 4 | Re-envision Health Sciences Education (cont.)

**Key theme:** STRATEGICALLY LEVERAGE MOOCS (MASSIVELY OPEN ONLINE COURSES)

How much will the surge of new learning tools impact universities as we know them? Players voiced both the promise and limitations of MOOCs:

*I came here through Coursera. Online learning with proctored assessment is the way of the future.*

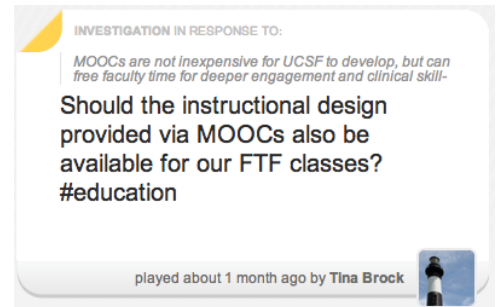
*Fully embrace online learning, with NO cap for enrollment.*

The need for UCSF to be agile in developing policy and design around MOOCs was voiced by several players, as no existing institution will have the luxury of remaining unchanged:

*Define a policy for what MOOCs (from UCSF and elsewhere) to approve for credit at UCSF. Quickly.*

*More online learning and continuing education for health care professionals will gain momentum. Course chairs should start planning now!*

*Emily Schneider at Stanford could be linked with our growing MOOC designers to enable faculty to do a great job without knowing theory.*



Others discussed areas where UCSF might consider staking a claim to exert leadership in the MOOC space:

*UCSF could lead the way in developing MOOCs relevant to global health issues. No need to wait until 2025.*

*Create free "MOOCs" that teach people around the world about smoking cessation, exercise, diet, etc. Link with mobile tools to monitor.*

*MOOCs like UCSF's Nutrition class in coursera could also serve as a platform to educate the public & other professionals on such findings.*

*Create courses in biology/health/medicine aimed at programmers. Offer as MOOCs and/or evenings/weekends. Recruit by successful example.*

*From MOOCs to #MOPs (Mentored Online Programs)—use technology to strengthen what we do: elite hands-on training in integrated programs*

At the same time, several players expressed concerns about the limitations of MOOCs:

*MOOCs r gr8, BUT can they replace dedicated/enthusiastic faculty? Inspiration 2 change/grow is often a more human Xchange.*

*MOOCs are great for learning. The assessment is where they fail. Formal qualifications will always count for more with employers.*

#### 4 | Re-envision Health Sciences Education (cont.)

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*Exactly. But most MOOCs do not have the capacity/infrastructure to accurately identify individual skill. Limited course #s + exams can. #CPC*

*How to harness opportunities for “virtual classes”/online learning without reinforcing disparities in access to quality #globalhealth educ.?*

*How do we avoid the San Jose State MOOC debacle?*

**Key theme:** GET CREATIVE ABOUT SPACE

As everyone in the Bay Area knows, space is at a particular premium in the 49 square miles of San Francisco. So it's not surprising that players highlighting all sorts of new ways to use space. Many discussed creating dedicated innovation spaces to bring together people across various fields to work together.

And while lots of players mentioned creating a more open floor plan and eliminating offices, others pushed instead for creating more flexible, modular space instead of a space that is merely “open.” There were some particularly interesting ideas about how to maximize the value of this new, modular UCSF space by sharing it with others, like community organizations or citizen scientists after work hours. And then there were a host of great ideas on how different jobs and services with healthcare could be moved outside the home to cut down on issues of space limitations. Space management may seem like a near-term, operational issue. But these cards make it clear there is more there than it may seem at first glance. Really this is about how UCSF can leverage brick-and-mortar spaces in new ways, to attract and retain talent, to yield more interdisciplinary breakthroughs, and to deliver care in ways that optimize resources:

*SPACE. There is a constant struggle for departments/offices to find appropriate office and clinical space.*

*Some of this is culture, no? I see lots of hoarding of space. If all were released and allocated by need there is more than anyone thinks.*

*One building per campus site is dedicated space for shared resource (cores) for collaborative problem solving involving many technologies.*

*True that privacy is important and in an activity space there are primary rooms for all to use. Open space promotes collaboration.*

*Focus less on open space and more on mobility, people work in the environment. They need at the time for collaboration or privacy #space*

*There is a new workspace café downtown. Really cool. Maybe we all drink enough coffee already to pay the bill for just working there?*

*Interesting point. Do you think the café is the office of the future?*

*Rejuvenate physical library spaces/operations to produce digital (global) collaboratories.*



#### 4 | Re-envision Health Sciences Education (cont.)

*Develop flexible activity based work space, reconfigure to accommodate research overnight!*

*How would we do that? [growing community groups for collaborative innovation and initiatives]? I'm thinking that offering space on the weekends for science related work might be interesting...*

*Virtual house calls—access to a physician through your SMART TV. Cutting need of resources for space, parking.*

*Patient gets to choose kind of doctor's office they want to be seen in – empty room with yoga mats, café table with coffee, comfy couch.*

*So we could definitely have more than one outpatient facility. we already do. Maybe some at Safeway?*



#### 5 | Transform Patient Care

Over the past decade, new health care players have begun to redesign the patient care marketplace. From retail health outlets for flu shots to full-body scanning services to digital diagnostic equipment, patient care is moving out of traditional hospitals and clinics and into homes, workplaces and new health care businesses. At the same time, hospitals are beginning to specialize, with big corporate contracts to serve employees seeking particular procedures (such as heart care).

This process will accelerate over the next decade, as cheap sensors and advances in biosciences make our brains, genes, microbiomes, biomarkers, activity levels, and even emotional health metrics available to people outside the walls of traditional health institutions—and as these institutions struggle to balance legal demands for more systematic processes with consumer demands for more personalized care.

**The opportunity space:** Given the rapidly-shifting ecosystem of health service providers, technologies, and consumer practices, UCSF could work to super-charge its patient care.

**Key theme:** MOVE PRECISION MEDICINE UPSTREAM

This cluster of ideas focused on taking precision medicine upstream to benefit patients. It's all about leveraging big data, placing an intentional focus on the social determinants of health, and carefully crafting patient-specific experiments. Some of the ideas players contributed might even be described as “precision prevention.” Cards included things like assigning every patient a dedicated student advocate. This tactic, they argued, would not just provide for more focused and helpful care for the patient. It would also give students increased hands-on experience while emphasizing the importance of empathy and relationship building in healthcare.

## 5 | Transform Patient Care (cont.)

From the site of care delivery to the way the data are collected, in these players' visions of patient-centered care, no one variable is taken in isolation from the big picture. Resource shortages have always been a major challenge in healthcare, but one theme to emerge from gameplay is the idea that patients themselves—especially activated patients—are a huge underutilized resource:

*Precision medicine is also an opportunity to integrate social data and identify upstream determinants. #socialdeterminants*

*\*\*\*Precision Prevention\*\*\* Root behavioral causes (activity, sleep, stress, envt) mapped onto biomarkers of preclinical disease processes*

*I like the “bio-behavioral” approach that helps unify biomedical and behavioral approaches. Behavior is a key part of biomedical solutions!*

*CDC almost reorganized out of disease silos into risk factors—UCSF would lead health innovation and improvement with that org approach*

*To really advance health, modify social, behave. & envr factors=70% of deaths. Integrate all -omes, include h-o-m-e. <http://bit.ly3HKQrJ> [Article titled: Solving our Healthcare Problem Will Not Resolve Our Health Disaster]*

*Each patient who comes to UCSF clinic or hospital gets student health advocate! #Educate*

*Precision medicine and patient centered care –treating the WHOLE person/ mutimorbidity – most diseases don't occur in isolation #TeamAging*

*Patients who are less ill can be cared for in their homes using info from devices that send #biosensor info to providers in #routingcenters*

*New version of house calls! Instead of every pt driving to see MD or NP, have team vans that go to neighborhoods. See pts in own enviro #SON*



### Key theme: HIGHLIGHT HUMAN CONNECTION IN COMMUNITY

An important and often overlooked part of transforming patient care is about people interacting with other people. In the growing tension between systematic documentation and agile personalization, players remind us to keep in mind the vital role of human interaction in the healing process. The essential human quality of listening is a key skill in the future—and also one strategy for the chorus of players who kept reminding game players to keep including the most vulnerable patients and communities in innovative work:

*Teach all med/dent students how to BE with and touch people, and to know surface anatomy and topography through ancient healing art of massage.*

## 5 | Transform Patient Care (cont.)

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*Patients feel cared for, connected and listened to...better communication, trust, and “compliance.” Give each patient a digital patient advocate – “someone” who’s in charge of coordinating their care, and checking in with them. #care*

*For vulnerable populations we need to proactively listen and follow the lead of people from the communities impacted.*

*Group appointments – could allow for seeing larger #s of patients, also provide ppl with a social network which could enhance compliance*

*Redefine Home Health. UCSF buys small apartment complexes. Docs or students live in building and care for tenants.*

### **Key theme: INNOVATE TECHNOLOGY INFRASTRUCTURE FOR LEARNING & PATIENT-CENTERED CARE**

As patients come to expect more customized care—anyway, on their terms—the need to innovate technology infrastructure to provide care in virtual environments will be great. Virtual care will change the way in which care providers and researchers engage in commuting and telecommuting. Here are a few ways that players added dimensionality to this vision:

*Interactive pharmacy! Where you can face time with a pharmacist! This does not exist at the moment.*

*UCSF + Google driver-less vans go to home –patient enters van and can skype with provider, enter basic medical info, weight, bp #cpc*

*Develop apps which can be tied to the smartphone. Initial eye exams can be done with high-res photos via the phone and sent to the doctor.*

*Yes, with things like GoogleHangout and WebEx, we have no excuse not to be able to triage via videochat. #Team1344*

*Lead tech development for HIPPA teleconferencing healthcare for those w/mobility difficulties for care access via video from home/LTC/etc*

*Provision of all care needs to be able to be provided remotely, telehealth, while maintaining personal human contact for those in need*

*Establish a leading telemedicine program to meet healthcare needs in rural areas with limited healthcare access.*

# Appendix: Outlier Insights

During game play, players were urged to push beyond “conventional wisdom” to arrive at truly outlier insights. These outliers were not central hubs of conversation during the game. Rather, they made interesting use of combinatorial innovation and sometimes surprising reframes to push UCSF into exploring a more complete set of possibility spaces for 2025.

## 2025 People

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From leveraging the people in UCSF’s backyard (Giants fans!) to connecting the dots between UCSF’s geriatric care practice and local jail populations, many players contributed outlier ideas that involved thinking about **people** in new ways.

### Outlier idea: THINK GIANT IDEAS

An outlier thread explored ways to leverage UCSF’s proximity to the Giants stadium to raise funds—and the health of the community overall:

*Can the university earn significant revenue by permitting advertisement on strategically placed electronic screen displays [in context of Giants games]*

*During giants game we have 40K people in the neighborhood. How can we take advantage of that?*

*Crowd interventions during the game—everyone can learn something or take home a free health kit, tool, diagnostic test, etc at each game.*

*UCSF launches “giants genomics” for health with brief health surveys and specimen collection.*

*Post health facts & tips on the big screen between plays. It’s baseball, so there’s loads of down time.*

### Outlier idea: CONNECT THE DOTS BETWEEN AGING POPULATIONS & JAIL POPULATIONS

Recognizing the aging of prison populations and the extreme needs of that community, #TeamAging highlighted several connections between geriatric care and care of the incarcerated:

*Older jail inmates with complex illness increasing at 5x rate of overall jail population—need UCSF to support jail clinicians! #TeamAging*

*This means UCSF supporting the training of jail Clinicians by our Geriatrics Experts. This is Contributing to our community. #TeamAging*

## 2025 People (cont.)

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*Exactly! And UCSF researchers/clinicians can learn from the knowledge/expertise of jail clinicians in care of vulnerable pops. #TeamAging*

*Student training experiences for interprofessional care of older adults. Identify unique sites-like the jail! #TeamAging*

The team even suggested the possibility of a “jail holodeck”:

*A “jail holodeck” would be ideal to simulate certain unsafe situations that might occur in clinical practice in that setting. #TeamAging*

## 2025 Practices

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Players imagined new **practices** in the year 2025—from the groupification of monitoring devices (an extension of today’s Quantified Self movement) to a practice of quantifying neighborhoods, starting in San Francisco, to a change in practices around waste disposal as it relates to global health.

### **Outlier idea:** PIONEER THE GROUPIFICATION OF MONITORING

This card suggests going beyond traditional uses of new popular health monitoring devices to bring games into group environments:

*Partner with tech to gamify #wellness behaviors. Go beyond wii and fitbit, find ways to bring the game into group environments, workplace.*

### **Outlier idea:** QUANTIFY NEIGHBORHOODS

Among the many ideas for community engagement and activism was the idea of a Neighborhood Health Watch, analogous to the safety networks that support Neighborhood Watch programs for crime:

*Neighbors! Community activists! Neighborhood Health Watch*

This neighborhood focus suggests the possibility of amplifying individual interest in the “quantified self” movement to create “quantified neighborhoods.”

## 2025 Practices (cont.)

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### Outlier idea: ENSURE SAFE WASTE DISPOSAL

Some players noted that building honest global impact may not always be as sexy as knowledge exchanges and field assignments. To lead the way as a global health champion, they said, UCSF could focus on ensuring that practices at home do not negatively impact health and well-being abroad, specifically through ensuring for safe waste disposal:

*Aided by technology to advance health science, UCSF leads in ending global illness and death caused by manufacture & disposal of technology.*

*Yes and global toxic electronic waste! Are we advancing health worldwide or exporting pollution & illness to Africa & Asia*

*Truly Advance Health Worldwide, by leveraging tech companies to build recyclable products, instead of global dumping of toxic e-waste*

## 2025 Tools

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Tangible **tools** were important to several players who offered outlier insights around new health sciences toolkits:

*experiments with open source hardware (think: Arduino), to create new maps of the city leveraging ethnographic methods for insight into 2025 health and health infrastructure in the local Bay Area.*

### Outlier idea: HACK A HEALTH SCIENCES KIT

The potential to put health and health science into kits intrigued some players:

*Where's the health sciences and healthcare LEGO kits? #startyoung #cpc*

*Exactly...tailored vitamins, tailored solutions, tailor tools/home kits, tailored cog-neuro stimulators. What are your ideas? #Esther #CPC*

*Also sells kits to detect changes in the microbiome so vitamins are constantly re-tailored #cpc*

Some of these ideas specifically supported a vision of UCSF as an anti-cancer bulwark:

*Use cytology methods to improve upon smear techniques and develop smear kits for developing countries, with portable tests. #CPC*

*UCSF offers at home kits for colon-rectal screenings to community to increase participation in test & early detection of cancer.*

*Design an affordable blood test kit to look for cancer markers. How about two kits: one targeted at women and another one targeted at men.*



## 2025 Tools (cont.)

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### Outlier idea: EXPERIMENT WITH OPEN-SOURCE HARDWARE

Open hardware paradigms, some said, will let people make their own diagnostic tools:

*Low-cost hacking of prosthetics using 3D printers, arduinos, sensors and robot scrap pile #cpc*

*Use Arduino / open hardware paradigms to let people make their own diagnostic tools. UCSF knowledge leader for home bio-tech #education #cpc*

*Open up the bio fablab for high school students and general public at selected time to build their own #maker style projects*

*What can the scientific research community learn from the tech & maker communities open code, open hardware models? #socialstruct*

### Outlier idea: MAP THE CITY USING ANTHROPOLOGY

Among all the social sciences, anthropology was highlighted as having particular value as UCSF becomes more global. One interesting idea was to engage anthropological experts in mapping the health—and health infrastructure—of the city:

*Commission an anthropological evaluation of SF and map different communities, #tech, #UCSF and other. Make the map available everywhere.*

## 2025 Capacities

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By auditing current **capacities** and thinking through their potential for impact in 2025, several players surfaced outlier insights about how to build on today's expertise for future benefit. These ranged from amplifying design and creative endeavors to building on research expertise into behavioral health in order to lead in addiction research.

### Outlier idea: INSCRIBE DESIGN THINKING INTO UCSF

Many players brought up design, and design thinking, as an interesting area for future advancement:

*Collaborate with designers to create therapeutic and fashionable clothing for patients.*

*Involve everyone from math background or arts or fashion and design to make one contribution to healthcare each year*

*Our research scientists can collaborate with SF State's Fashion/Design program or FIDM.*

*Excellence in design is increasingly key to success. Create a focus on design for healthcare delivery, research and education*

## 2025 Capacities (cont.)

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*Invite students from other UC campuses to participate in design competitions and health + lifesciences #hackathon creating new solutions*

*Designer collaboration would be ideal. Promoting sustainable fashion with data tracking yet lightweight material would be essential. #Esther*

*What kind of #wearabletech could be integrated for less cumbersome/wire-ful vitals tracking?*

*Not sure, but let's collaborate with designers at gap, uniqlo, etc. i'm sure we can figure it out!*

*Grow design focus degree program in healthcare system design*

### **Outlier idea: CAPTURE CREATIVE AND ARTISTIC INNOVATION**

A few ideas focused specifically on the role that art can play in health and healing. Beyond simply engaging local artists to enhance the UCSF environment, players suggested that artists have a role in inspiring health practices:

*Local artists, staff, students & faculty contribute. Inspire the achievement of health world wide through art and community. #TeamCLS*

*Collaborate with the growing movement of artists working in code. Like the Bay Bridge Lights #cpc*

### **Outlier idea: LEAD BREAKTHROUGHS IN ADDICTION**

Many game cards focused on behavior health and consequences for obesity, diabetes, and other results of so-called “addictive” behaviors. A handful of cards suggested that UCSF should consider ways to apply their existing addiction research more effectively in clinical settings:

*UCSF is a leader in Addiction Research.*

*UCSF Center to treat patients with drug addiction.*

*Agreed. Behavioral health is a huge (and often overlooked) component of why a patient does not do well in HC. Include addiction studies?*

*San Francisco leads the way in addiction recovery and treatment...instead of just addiction.*

Some players focused specifically on using sensors and models to understand addiction, anticipate relapses, and intervene before the relapse, sometimes automatically:

*Build addiction recovery facilities. Use sensors tracking data to forecast relapses. Look at patterns along bio-behavioral profiles. #care*

## 2025 Capacities (cont.)

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*Can this be done using tools like apps (maybe administered in the community), instead of building all-new facilities?*

*Can researchers research on antidote/signal for the wanting of a particular substance and plant it in patient's brain?*

*If that could happen for a variety of addictions—an on/off signaling switch for behavior—it would be groundbreaking.*

## 2025 Leadership

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Several players articulated a vision of areas in which UCSF might consider exerting **leadership** among its peers over the next decade. Each idea represents a continuation and deepening of current areas of expertise in an interesting way—from making the next installment in UCSF's commitment to LGBT health, to supporting aging well and dying well, to anticipating climate change.

### **Outlier idea: BECOME AN LGBT HEALTH CHAMPION**

From innovating patient care that assumes non-binary gender identifications, to investing in LGBT research and thought leadership, players suggest multiple ways in which UCSF could build on its LGBT health legacy:

*San Francisco was a leader in HIV research, #lgbt rights, marriage equality. UCSF can continue the legacy by advocating #transgender care.*

*UCSF should strive to become a #global leader in #LGBT health disparities research.*

*Become THE domestic and global leader in LGBT health*

*UCSF can be an innovator in transgender healthcare. This population faces unique challenges accessing appropriate care. #lgbt #transgender*

*Provide infrastructure support for the Center of Excellence for Transgender Health (CoE)*

*We could also partner with the other universities leading the way: #Columbia, #Duke, and U of Arizona. #transgender #lgbt*

*Begin to acknowledge non-binary gender identities in mainstream medicine, not just lgbt specific care. #lgbt #transgender*

## 2025 Leadership (cont.)

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### Outlier idea: SUPPORT AGING WELL, DYING WELL

Players suggested that expectations around aging will be redefined, with an emphasis on dying well. Some at UCSF have already been hard at work on this future, so they named the importance of this aspect of rewriting the rules of aging:

*How will we define health—what is the end goal: longevity or eliminating chronic illness?*

*Advocate and model a system of end-of-life care that is financially sustainable AND upgrades the conversation around death and dying.*

*Clinicians must be trained differently in end of life care: patient's quality of life concerns in the forefront, not longevity at any cost.*

*Imagine experts from fields like neurology, geriatrics, HIV, global health, industrial engineering, and chaplaincy coming together on aging*

### Outlier idea: ANTICIPATE CLIMATE CHANGE

Climate change is on the radar of at least some players of the game. While some worried about impacts on the UCSF infrastructure, others were concerned with new medical challenges and new ways to meet those challenges:

*Due to global warming tropical disease will be pushed north. Lets be prepared*

*A tech-centered problem-based learning curriculum in which issues like global warming and obesity are explored thru personal health queries.*

*Globalization and climate change are issues that will continue to affect us and we need to prepare for the related health issues.*

*Climate change and multiple destabilizing effects on health of populations globally*

*I agree! There are likely health outcomes to global warming, and we all need to think of the medical consequences*

## UCSF 2.0: THE PROJECT

# The Big Picture

**THE PROJECT** | Today, UC San Francisco is at the forefront of patient care, discovery in biomedical research, and education. As each of these domains evolve, UCSF must pursue bold innovations, evolving to navigate the changing opportunity landscape. UCSF needs foresight and insight generated through innovative tools and provocative future scenarios, combined with expert and group facilitation to map the bold new ideas that will make UCSF a leader in the next decade and beyond.

The goal of The UCSF 2.0 Initiative is to engage the broad UCSF community in generating ideas that transcend current strategic plans to

- **Tap the wisdom** of the broad network at UCSF—including internal and external constituents—using a cutting-edge game platform.
- **Engage key stakeholders**—including both senior and junior leaders—in a series of facilitated discussions to identify, define, and develop winning ideas for the university to pursue.
- **Co-create a bold visualization** of these ideas that can be used to drive vision and action.

**PHASE 1 – A GAME OF IDEAS** | The first phase of the project is a broad call to action. UCSF will launch a 36-hour event to uncover thousands of new ideas that can reinvent the very concept of a health sciences university. This event will take place in classrooms, department offices, and even public lounges across the university. The event itself is a cutting-edge gaming platform called Foresight Engine. It's designed to spark new ideas and inspire collaboration among hundreds of people.

**Expect a tone of urgent optimism** as participants share rapid-fire tweet-like contributions to build long chains of visions and strategies. Game moderators will highlight the boldest ideas to push beyond the obvious.

**THE CHANCELLOR'S CHALLENGE** | In her TEDMED talk in May 2013, Chancellor Susan Desmond-Hellmann said: “We have unprecedented ways of connecting big data and sciences to where our patients are. Could we make a Google map for health—a more flexible dynamic system” for health innovation and health care delivery?

What if you could build a new map of human health around the world—to track everything from the smallest molecules to global indicators of the wellbeing of billions? What if there were a Google map for health, and everywhere you clicked on it, you found a UCSF innovation? This is the call to action for faculty and students, researchers and care providers, alumni and stakeholders from the broader community: to imagine a new map of human health and the leading role that UCSF will play in building that map around the world. We need your help in engaging not only to build this map, but also to explore a vision for the future of education and research.

**THE OUTCOME** | The UCSF2025 game is the first step in reinventing UCSF's leadership role in the next decade. It will produce volumes of ideas that will help shape all the visions and strategies to follow. In addition, it will

- **Take the pulse** of the community by surfacing themes that matter
- **Identify new voices** of leadership and outlier insights
- **Build a new literacy** in thinking about the future of the university

While the UCSF2025 game is the first step, it's not the only step. Follow-on workshops and collaborative mapping exercises will build on what we start with the game.

You can pre-register to play UCSF2025 and map the future of UCSF by signing up at [UCSF2025.org](https://ucsf2025.org). Join us September 11th–12th to make your future at UCSF and to map UCSF's place in the world of 2025.