

The Regents of the University of California

COMMITTEE ON GROUNDS AND BUILDINGS

January 21, 2016

The Committee on Grounds and Buildings met on the above date at UCSF–Mission Bay Conference Center, San Francisco.

Members present: Regents Davis, Elliott, Oved, Ruiz, Sherman, and Zettel; Ex officio members Lozano and Napolitano; Advisory members Hare and Schroeder; Staff Advisors Acker and Richmond

In attendance: Regents Blum, De La Peña, Gorman, Gould, Island, Lansing, Ortiz Oakley, Pattiz, and Reiss, Regents-designate Brody and Ramirez, Faculty Representative Chalfant, Secretary and Chief of Staff Shaw, General Counsel Robinson, Provost Dorr, Executive Vice President and Chief Financial Officer Brostrom, Executive Vice President and Chief Operating Officer Nava, Senior Vice Presidents Henderson and Peacock, Vice President Duckett, Chancellors Block, Blumenthal, Gillman, Hawgood, Wilcox, and Yang, and Recording Secretary McCarthy

The meeting convened at 11:05 a.m. with Committee Vice Chair Sherman presiding.

1. **APPROVAL OF MINUTES OF PREVIOUS MEETINGS**

Upon motion duly made and seconded, the minutes of the meeting of November 18, 2015 and of the joint meeting of the Committee on Grounds and Buildings and the Committee on Finance of November 19, 2015 were approved.

2. **DISCUSSION OF MISSION BAY NEUROSCIENCES RESEARCH BUILDING (BLOCK 23A), SAN FRANCISCO CAMPUS**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Associate Vice President Sandra Kim introduced this discussion of UCSF's proposal to construct a 270,000-gross-square-foot building for research in psychiatry and neuroscience on Block 23A at Mission Bay. The campus was seeking feedback in anticipation of its request for preliminary plans funding at a future meeting.

Chancellor Hawgood observed that the Neurosciences Research Building would represent a significant investment by UCSF in expanding its neuroscience research program on its Mission Bay campus. The building would provide a primary home for a new Neurosciences Institute at UCSF, with bench laboratory research programs in psychiatry, neurology, neurosurgery, and basic neuroscience, desktop research programs particularly in memory and aging, clinical research space, and other support space. In

UCSF's presentation of its capital strategy to the Regents in July 2015, the Neurosciences Research Building was part of UCSF's plan to consolidate its campus locations to address seismically challenged facilities and to expand critical strategic programs. The building is also part of UCSF's long-term strategy to provide new wet laboratory facilities for programs moving from Parnassus Heights and to expand upon UCSF's established world-class neuroscience programs.

Chancellor Hawgood recalled that the Regents had approved preliminary plans funding in September 2015 for two Mission Bay construction projects: the East Campus Phase 1 Block 33 Building and the Precision Cancer Medicine Building. In addition, the planned Psychiatry Research Building at 2130 Third Street would provide a new home for the Department of Psychiatry's clinical, teaching, and administrative programs. However, it would not be economically feasible to include wet laboratory research in the Third Street building that would be essentially an office building. Expanding psychiatry wet and bench laboratory research would be housed in the Neurosciences Research Building.

Chancellor Hawgood described UCSF's vision for Mission Bay neuroscience, which would encompass the full spectrum of basic, clinical, and translational research. UCSF currently has one of the largest neuroscience complexes in the world at Mission Bay, in Rock Hall and the Sandler Neurosciences Center. Research into the mechanisms of the brain and the nervous system, and neurologic and neurodegenerative disease is generating exciting new discoveries and is a cornerstone of UCSF's research and clinical strategies for the future. Additional space for neuroscience research is needed to provide for expanded research programs and capture the exciting advances in this field. UCSF intends to be at forefront of the current revolution in neuroscience and in blending the currently isolated disciplines of psychiatry, neurology, neurosurgery, and fundamental neuroscience into one discipline of neuroscience, in part to help erode the stigma of mental health problems. UCSF is also at the forefront of research on the genetic components of psychiatric disorders, and translating that research to advance the understanding and treatment of developmental and mood disorders, schizophrenia, autism, and the many other mental illnesses that afflict modern society. New collaborative research projects among existing principal investigators in psychiatry, the UCSF Memory and Aging Center, and the new Kavli Institute for Fundamental Neuroscience, among others, are creating demand for additional research space. These programs are attracting significant philanthropic support, including in the last six months \$177 million from Atlantic Philanthropies for programs in memory and aging, and \$20 million to establish the new Kavli Institute for Fundamental Neuroscience at UCSF.

The new Neurosciences Institute, to be housed in the proposed new building, would bring the neuroscience community together as never before, with a translational focus and would maximize collaborative opportunities among neurology, psychiatry, neurosurgery, basic neurosciences, and the Institute for Neurodegenerative Diseases. By providing a collaborative space for neuroscience research along with genomics and informatics, and significantly increasing bench laboratory psychiatric research space, the new research building on Block 23A would complement the existing Mission Bay neuroscience

research facilities, forming a cohesive cluster of neuroscience facilities ringing the Koret Quad, close to the proposed psychiatric clinic building at 2130 Third Street.

The proposed Neurosciences Research Building program would be complex, including clinics on the first floor, dry research areas particularly for memory and aging on the second floor, wet laboratory research with integrated dry computational areas, and a vivarium with high biosafety levels to support the critical vivarium work associated with these programs. Plans are at an early stage and the ways in which these different program elements would affect one another and the final project cost would be determined through further programming and design analysis. Current plans call for a 270,000-gross-square-foot building, with six stories above grade. The campus would provide more detailed cost and programming analysis at the future meeting at which it would request funding for preliminary plans. The campus' current preliminary working budget is \$336 million, to be funded with \$50 million in gifts and \$286 million in debt. UCSF has already received a signed pledge for \$15 million. Of the project's \$286 million in external financing, the campus has a signed pledge for \$125 million, including yearly interest payments, which would be paid for by gifts in the form of a bequest. Additional gifts have been secured to fund programs in the new building. New researchers in the building would also generate funding that would provide new overhead revenue for the campus to apply toward operating and debt service costs. UCSF has already accounted for this project in its ten-year campus capital financial plan and fully expects to be able to fund the building and meet all debt ratios.

Regent Zettel expressed support for expanding research about mental conditions associated with aging and those affecting some veterans returning from combat duty. She asked about space vacated at Hunters Point when the vivarium is moved to the new building. Chancellor Hawgood responded that the campus is studying various options for the four-acre Hunters Point mixed-use, densely industrial site, including developing the property for UCSF housing or selling it. Regent Zettel asked if UCSF would collaborate on its neuroscience research with other UC campuses. Chancellor Hawgood said there is already active collaboration in neurosciences across all UC campuses. The \$177 million gift from Atlantic Philanthropies is a joint program with Trinity College, Dublin, Ireland, with the goal of training as many as 600 individuals from around the world in advanced dementia care.

Regent Davis asked if this project would be reviewed by the Committee on Health Services and if other UC campuses were included in planning discussions to determine if this building would be beneficial from a systemwide perspective. Chancellor Hawgood said the project would be discussed at the February meeting of the newly reconfigured Committee on Health Services. The location of this project was not discussed with other UC campuses, because the project is a critical part of UCSF's strategy around neuroscience, one of the campus' key strategic goals. UCSF faculty are actively engaged with their colleagues at other UC campuses and at other universities. Faculty recruited to work in the new UCSF building would have maximum opportunities for collaboration.

Regent Blum asked if the campus needed such a large building and if programs at the proposed Neurosciences Research Building would generate sufficient research income to service the project's debt. Chancellor Hawgood expressed UCSF's confidence that the proposed building would be a sound strategic investment. Mission Bay's Sandler Neurosciences Center has no research space remaining and no space for psychiatry. A major strategic goal for the proposed building is to bring psychiatry, neurology, neurosurgery, and basic neuroscience together, allowing UCSF to become a national leader in fundamental neuroscience applied to mental health conditions and linked to enhanced clinical programs. The proposal is driven by the success of the Sandler Center and the rapid explosion in neuroscience research. Chancellor Hawgood added that the proposed Neurosciences Research Building would include space for more than just research. The first floor would house neurology clinics that would be moved from the Parnassus and Mount Zion locations to consolidate clinical and research efforts in neuroscience at Mission Bay. The second floor would predominantly house a memory and aging center, which currently occupies 12,000 square feet in the Sandler Center and had recently received a \$177 million gift purely to support its program, which would require expanded space. Chancellor Hawgood said the project's \$286 million in external financing would be offset by a solid pledge for \$125 million, which would also include interest payments to support borrowing \$125 million until the bequest becomes available. The campus would provide a detailed financial plan, including information about UCSF's overall debt capacity, when it requests preliminary plans funding.

Committee Vice Chair Sherman asked how many people would occupy the proposed building. Chancellor Hawgood responded that the building's first floor clinical space would accommodate probably 40,000 patient visits annually. The other floors' wet and dry laboratory space would accommodate about 40 principal investigators with their six-to-ten-person teams. Existing UCSF personnel would be moved from Genentech Hall and Rock Hall to consolidate programs, and the campus anticipates a significant number of new hires in the field of neuroscience to develop new therapies for mental health. He noted the success of fundraising to support the hiring.

3. **APPROVAL OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM, AND APPROVAL OF EXTERNAL AND STANDBY FINANCING, 2016-25 STATEWIDE ENERGY PARTNERSHIP PROGRAM**

The President of the University recommended that:

- A. The 2015-16 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

Systemwide: 2016-2025 Statewide Energy Partnership Program Phase 1 – preliminary plans, working drawings, construction, equipment – \$67,405,000 to be funded from external financing (\$50,138,000), energy efficiency incentive payments from California utilities (\$15,849,000), and auxiliary sources (\$1,418,000).

- B. The President be authorized to obtain external financing not to exceed \$50,138,000 to finance the 2016-2025 Statewide Energy Partnership Program Phase 1. The President shall require that:
- (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - (2) As long as the debt is outstanding, general revenues from the Irvine, Los Angeles, San Diego, and Santa Cruz campuses shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.
 - (3) The general credit of the Regents shall not be pledged.
- C. The President be authorized to obtain standby financing not to exceed \$14,444,000 for the 2016-2025 Statewide Energy Partnership Program Phase 1. The President shall require that:
- (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - (2) Repayment of the standby financing shall be from energy efficiency incentive payments from California utilities. In the event that the incentive payments are insufficient and some or all of the standby financing remains outstanding, unrestricted campus funds of the Irvine, Los Angeles, and San Diego campuses shall be used to repay the portion of the standby financing that relates to each campus' respective energy projects and to meet the related requirements of the authorized financing.
 - (3) The general credit of the Regents shall not be pledged.

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President and Chief Operating Officer Nava introduced Associate Vice President of Energy and Sustainability David Phillips.

Mr. Phillips said this item sought approval for several actions necessary to extend the extremely successful Statewide Energy Partnership Program, a broad, systemwide energy conservation program that provides campuses a framework for implementation of energy conservation projects. UC campus energy managers identify campus-specific programs that would result in long-term energy savings. Once the projects are fully vetted, the work is implemented in concert with local utilities, which provide structured incentives based on verified energy savings back to the campuses to help fund the projects. The balance of the projects' costs are then centrally financed, with the campuses ultimately paying the debt service using funds they already have in place to pay purchased utilities. The

Program has been successful for 11 years, with participation from all ten campuses and all UC medical centers. Systemwide, net energy use has been cut by one-third through these programs, reducing UC's greenhouse gas emissions by 16 percent to date. The Program is by far the least expensive way to make ongoing progress toward UC's 2025 Carbon Neutrality Initiative goal.

The Program has also significantly reduced campus operating costs. After making debt service payments, the University is saving about \$28 million per year on its utility bills, with cumulative savings of \$166 million since the Program began. The Program's projects also help address campus deferred maintenance projects, such as replacement of outdated lighting, and heating and cooling systems.

Mr. Phillips recalled that the Regents approved external financing for the Program in 2009 and two extensions in 2010 and 2013. This item requested another extension through 2025, to allow continued aggressive energy conservation work in close alignment with UC's 2025 Carbon Neutrality Initiative. Mr. Phillips anticipated the University's moving to more complex, longer-term projects over the upcoming decade. Four UC campuses would participate in the initial round of financing; other participating UC campuses already have funding available from previous rounds of financing. It is anticipated that all UC campuses and medical centers would participate in later rounds of financing. Subsequent phases of the project would be brought to the Regents for approval based on need, debt capacity, and qualified savings proposals. The Regents were being asked to approve the Program budget of \$67.4 million, including \$50,138,000 in external financing, with additional funding from auxiliary sources and energy efficiency payments from the utilities. Approval was also sought for \$14,444,000 in standby financing to bridge project expenditures until the utilities pay the incentives at the completion of the project.

Regent Ruiz commended the progress made on finding new ways to generate energy for the University and asked for clarification of the goals of the 2025 Carbon Neutrality Initiative. Mr. Phillips said the goal of the Carbon Neutrality Initiative is to have zero carbon emissions in University operations by 2025. For example, using solar energy to power a campus would have a zero carbon footprint. Regent Ruiz asked if that goal could be reached earlier than 2025. Mr. Phillips expressed his view that reaching the goal by 2025 was an enormous challenge. The University is striving to achieve carbon neutrality as quickly as possible. In addition to the environmental benefits, these projects also save the University money.

Regent Zettel asked if any projects had been set aside because they were financially infeasible. Mr. Phillips said some projects are set aside, for instance if unanticipated expenses are encountered when exploring a possible project in depth. Projects are vetted very thoroughly before they move forward.

Committee Vice Chair Sherman asked if the University had explored using public-private partnerships for these projects, given the significant energy tax credits available to private providers. Mr. Phillips said public-private partnerships were often used for renewable

energy projects, such as power purchase agreements. The Internal Revenue Service Section 179D energy-efficient commercial building deduction provides some tax incentives. The University was beginning to explore such possibilities. Committee Vice Chair Sherman suggested that multiple campuses might be able to participate together in such an agreement.

Upon motion duly made and seconded, the Committee approved the President's recommendation and voted to present it to the Board.

4. **ANNUAL REPORT ON SUSTAINABLE PRACTICES 2015**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Executive Vice President and Chief Operating Officer Nava introduced this report on the work occurring on all UC campuses with regard to UC's Sustainable Practices Policy. The University is considering ways to increase its efforts further to reach the ambitious goal of its Carbon Neutrality Initiative by 2025. *Sierra Magazine* selects universities for its Cool Schools rankings for their "deep and thorough commitment to protecting the environment, addressing climate issues and encouraging environmental responsibility." UC Irvine was ranked as the coolest school in the nation for the second year in a row; five UC campuses were ranked in the top 20 and seven in the top 50. UC campuses were recognized as top sustainability performers by *Princeton Review*, and *U.S. News and World Report*. UCSF and UCLA medical centers earned awards from the healthcare sustainability organization Practice Greenhealth.

Ms. Nava highlighted some sustainability events of the past year. In October 2015, UC hosted the Summit on Pathways to Carbon and Climate Neutrality: California and the World at UC San Diego's Scripps Institution for Oceanography, sponsored by the President's Global Climate Leadership Council. The Summit brought together UC climate change researchers, State and federal officials, corporate sustainability leaders, and green technology entrepreneurs to discuss scalable solutions for achieving significant greenhouse gas reductions. The Summit received national press coverage and positioned UC and California as leaders at the December 2015 Paris United Nations Conference on Climate Change. A highlight of the Summit was the unveiling of the landmark report "Bending the Curve" on ten scalable solutions for achieving global climate neutrality, led by UC San Diego's Scripps Institution of Oceanography Distinguished Professor Veerabhadran "Ram" Ramanathan, with co-authorship and participation by more than 50 UC faculty and researchers from UC's ten campuses and two UC-affiliated National Laboratories. The report includes a set of recommended actions that researchers, policymakers, philanthropists, and institutions can implement immediately to achieve progress around climate change and make significant strides toward carbon neutrality. The report was a valuable resource for negotiators at the 2015 Paris climate conference.

The prior month, UC joined the Breakthrough Energy Coalition, an influential group of investors led by Bill Gates, committed to investing in technology that can help solve the

urgent energy and climate challenges facing the planet. UC, the sole institutional investor among the 29 coalition members from ten countries, would play a central role in reaching out to other institutional investors and leading research universities to expand participation and to develop criteria for evaluating technologies for investment.

The past fall, UC launched an online carbon reduction pledge campaign called the Cool Campus Challenge. The Challenge had 19,000 participants including UC staff, faculty, and students from all ten UC campuses and the Office of the President, who each pledged to reduce their individual carbon footprint. UC Irvine, UC Merced, and UCLA were the top three campuses in the Challenge competition.

Ms. Nava discussed student engagement in sustainability. UC students' passion for learning about and acting on sustainability challenges continues to grow, with more than 235 student sustainability groups across the UC system. The President's Global Food Initiative (GFI) and Carbon Neutrality Initiative (CNI) Student Fellowship Programs were launched in 2014-15 with 52 GFI fellows and 36 CNI fellows systemwide, including undergraduate and graduate students. Currently in its second year, the fellowship program's 44 GFI and 37 CNI 2015-16 fellows are working on projects addressing topics as varied as climate action plans, carbon offset studies, building efficiency data systems, community gardens, food pantries, urban agriculture, and food waste.

Associate Vice President of Energy and Sustainability David Phillips described four examples of the University's progress toward its goal of achieving carbon neutrality by 2025. He emphasized that the University is blazing new ground in this area and faces large challenges. Energy conservation has always been at the core of UC's climate action efforts. The Statewide Energy Partnership Program has allowed the University to invest in energy efficiency projects that generate significant operational savings. In 2015 alone, UC received \$6.7 million in incentives from the Partnership to implement 72 projects. UC has saved \$28 million per year and \$166 million cumulatively in the Partnership's 11 years. With the extension of the program until 2025, the University will be able to continue to scale up these efforts to help it achieve carbon neutrality by 2025.

The University's first priority has been to install as much renewable energy directly on UC campuses as possible, with the original goal of ten megawatts of on-campus renewable energy generation by 2014. The University has surpassed that goal by threefold. By the end of 2015, UC had 36 megawatts of on-campus renewable energy generation, with an additional 28 megawatts to come from projects in development. Most of this energy comes from solar photovoltaic panel projects, but UC's renewable energy portfolio also includes biogas energy derived from landfill, a sewage treatment plant, and agricultural waste. In 2015, the University's private business partners broke ground on the first of two off-campus large solar projects in Fresno County, expected to go online before the end of 2016. These two solar projects would provide an additional 80 megawatts of renewable power to UC, about 20 percent of the electricity needed systemwide.

As UC continues to grow, achieving carbon neutrality would require all new or renovated building space to meet the highest possible levels of energy efficiency. By the end of 2015, UC had earned 225 Leadership in Energy and Environmental Design (LEED) certifications for its buildings, including new construction, renovation, faculty housing, building operations, and maintenance projects, more than any other university. By policy, a minimum LEED Silver certification is required for new UC buildings. Of the 2014-15 LEED certifications, 13 were at the highest LEED Platinum level and nearly all UC new buildings currently achieve at least LEED Gold certification.

The University's total carbon emissions have declined slightly over the past three years, in spite of continued growth in its building space. However, in order to achieve carbon neutrality by 2025, the University must urgently scale up its efforts. Toward that end, in the coming year, UC would develop an updated strategic framework with intermediate targets to ensure UC takes the steps necessary to reach its 2025 goal. The Office of the President would work with UC faculty who wrote the "Bending the Curve" report to integrate its ten scalable solutions into UC's plan.

Mr. Phillips observed that UC's sustainability initiative is broader than just climate and energy. In July 2014, President Napolitano launched the Global Food Initiative (GFI) to rally the UC community from a wide range of disciplines to work toward a sustainable and nutritious food supply for the world's growing population. Leading by example, five UC campuses and three medical centers have exceeded the 2009 sustainable foodservice policy goal of having 20 percent of food and beverages meet one or more sustainability criteria.

UC continues to bring its considerable research, education, UC extension, and operations expertise to help the state respond to the drought crisis. UC Agricultural and Natural Resources houses the California Institute for Water Resources, which has the mission to integrate research, outreach, and education programs to develop solutions to water resource challenges. The Institute has organized more than 100 training workshops and seminars to distribute UC-developed drought information to communities throughout California and beyond. UC campuses and medical centers also instituted many drought-response measures during the past year, such as irrigation cutbacks, increased leak detection and corrections, and restroom fixture retrofits. Drought-response actions already reduced water consumption significantly in the last fiscal year at UC Davis, UC Santa Cruz, and UCSF, and should result in significant reductions for UC overall in the current fiscal year.

In fiscal year 2014-15, UC diverted 66 percent of its municipal solid waste away from landfills. UC will need to further advance zero-waste strategies in procurement and on campuses in order to meet its zero-waste goal by 2020. At 82-percent diversion achieved through a campus-wide recycling and composting program, UC Irvine is the only UC campus close to achieving zero waste. Zero-waste sporting events are prevalent on many UC campuses, including all UC Davis football games and UC Berkeley basketball games.

Mr. Phillips concluded by stating that UC has set very ambitious sustainability goals for itself and intends to model ways to overcome the difficult challenges of achieving carbon neutrality and zero waste.

Regent Reiss congratulated those responsible for these good results and expressed appreciation for President Napolitano’s leadership in sustainability.

Regent Pattiz commended UC students for their important activism in sustainability, and UC leaders and researchers for their accomplishments.

President Napolitano observed that UC is a unique institution in its ability to address large global issues. UC’s efforts in sustainability also educate its students.

The meeting adjourned at 12:00 p.m.

Attest:

Secretary and Chief of Staff