The Regents of the University of California

INVESTMENTS COMMITTEE
May 16, 2023

The Investments Committee met on the above date at the UCLA Luskin Conference Center, Los Angeles campus and by teleconference meeting conducted in accordance with California Government Code §§ 11133.

Members present: Regents Anguiano, Cohen, Pouchot, Robinson, and Sherman; Ex officio member Leib, Advisory members Ellis and Steintrager; Chancellor Khosla; Staff Advisor Lakireddy

In attendance: Regents Hernandez, Park, and Timmons, Regents-designate Raznick and Tesfai, Secretary and Chief of Staff Lyall, General Counsel Robinson, Chief Investment Officer Bachher, Chancellor Hawgood, and Recording Secretary Li

The meeting convened at 2:00 p.m. with Committee Chair Sherman presiding.

1. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of January 17 and March 16, 2023 were approved, Regents Anguiano, Cohen, Leib, Pouchot, Robinson, and Sherman voting "aye."[1]

2. **PUBLIC COMMENT**

Committee Chair Sherman explained that the public comment period permitted members of the public an opportunity to address University-related matters. The following persons addressed the Committee concerning the items noted.

A. Kaitlyn Legros, UC Santa Barbara staff member, called attention to staff vacancies and burnout at UC. Staff with already large workloads were forced to complete the work of multiple positions without additional compensation and were juggling competing responsibilities. She emphasized that each of these responsibilities were crucial to campus operations, and that failure to complete them in timely manner harmed the financial outlook, research output, and reputation of the University.

B. Melissa Wilcox, Chair of the UC Riverside Department of Religious Studies, called for a solution to dire staffing issues at UCR. Without a graduate student affairs officer for nearly two years, her department has lost promising students to other UC campuses or other universities. Students were not able to pay for housing, food, and tuition due to fellowship funding delays, and some students were threatened with

[1] Roll call vote required by the Bagley-Keene Open Meeting Act [Government Code §11123(b)(1)(D)] for all meetings held by teleconference.

disciplinary action or termination of their financial aid because staff were not available to file necessary paperwork. Many staff were exhausted from doing the work of multiple positions and were demoralized by the campus' inability to attract and retain high-caliber students.

C. Ahilan Arulanantham, Professor at UCLA School of Law and Co-Director at the Center for Immigration Law and Policy, spoke in support of the proposed strategy of the Opportunity for All campaign. He stated that this strategy allowed the University to change course and avoid liability in the event it is challenged by the federal government. He noted the risk of first seeking federal court approval, such as UC's lack of control over outcomes during litigation. Mr. Arulanantham asked UC to consider implementing the proposed strategy without litigation, and he asked for an opportunity to explain this in more detail.

D. Karely Amaya Rios, UCLA undocumented student, asked UC to fully implement the proposed strategy of the Opportunity for All campaign. Ms. Rios noted that the rights of undocumented people in the U.S. varied based on the politicians in office, and that undocumented students were not afforded the same opportunities as other UC students. Ms. Rios called for the involvement of undocumented students in decision-making, asked UC not to engage in litigation, and offered to provide the Regents with a memorandum explaining the implementation and associated risks.

E. Vanessa Diep, representative of the UC Divest coalition, expressed outrage that UC, instead of addressing high education costs and the lack of job security, has used wealth acquired from students and workers to invest in companies such as Blackrock and Blackstone. She stated her belief that UC was choosing not to divest from these companies for the sake of profit, and that neglect from the Regents has led to the United Auto Workers (UAW) strike and calls by American Federation of State, County and Municipal Employees (AFSCME) members for a $25 minimum wage. Ms. Diep called for divestment from Blackrock and Blackstone, as well as reinvestment of those funds in students and workers.

F. Michelle Andrews, UC Davis student and Government Relations Committee Chair of the UC Student Association (UCSA), urged the Committee to play a larger role in developing affordable on-campus housing for students. She stated that affordable student housing was one of best investments UC could make, and that UC must not invest in third parties that would contribute to housing unaffordability. She asked that UC explore new ways to lower the cost of construction.

G. Diana Ortiz, UC Berkeley student, spoke in support of the Opportunity for All campaign. Ms. Ortiz stated that she was unable to qualify for the Deferred Action for Childhood Arrivals (DACA) program, and that undocumented students were barred from employment and other paid opportunities, which widened the equity gap and prevented many undocumented students from pursuing higher education. Ms. Ortiz expressed her wish to apply the degree she was pursuing to research and internships and for undocumented students to be able to support themselves.

H. Daniel Gold, Executive Director of Hillel at UCLA, called attention to the rise in antisemitism in the U.S. and on California college campuses. For instance, a former UCLA dental student shot Jewish individuals in the Pico-Robertson neighborhood of Los Angeles. At UCLA, there was signage directing passers-by to antisemitic messaging online. These events have evoked fear and worry among many Jewish students. Mr. Gold looked forward to working with UC to build upon shared values of inclusivity and to combat antisemitism at UCLA and other campuses in the state.

I. Sabrina Ellis, UCLA student and representative of the UC Divest coalition, stated that De Neve dining hall at UCLA discarded food during student protests for free dining. Through its investment in Blackrock, Ms. Ellis stated that UC was investing in the military-industrial complex and environmental destruction. The UC Divest coalition called on UC to fully divest from the weapons industry, end its relationship with Blackrock as an asset manager, and reinvest funds in UC students and workers, who she believed should help decide how those funds are invested.

J. Ash Emmert, UCLA student and representative of the UC Divest coalition, stated that the University was continuing to fund war for the sake of capital and allowing the exploitation of people.

K. Marvia Cunanan, UC Santa Barbara student and External Vice President for Statewide Affairs at the Associated Students of UCSB, spoke in opposition to the Thirty Meter Telescope (TMT) project on Mauna Kea. She objected to the University's lack of support for indigenous people and the continued investment in the project, which disrupted Mauna Kea's unique ecosystem and desecrated sacred land. She added that the project violated the United Nations Declaration of the Rights of Indigenous Peoples. Ms. Cunanan expressed support for the Opportunity for All campaign.

L. Rebecca Jean Emigh, UCLA professor, called on UC to electrify campuses and stop burning fossil fuels, citing the latest United Nations Intergovernmental Panel on Climate Change (IPCC) report to emphasize the urgency of the issue. She called attention to the University's large carbon footprint and noted that UCLA had the largest carbon footprint of all the UC campuses. She cautioned that targets set by UC's draft climate protection policy were insufficient and called on the Regents to adopt the Academic Senate memorial to reduce carbon emissions.

M. Alexander Harris, UCLA student, spoke in opposition to UC's investment in Blackrock and the TMT project. He stated that the Regents held unelected positions of power and controlled the fate of UC students and humanity, and that UC was violating indigenous sovereignty and contributing to colonial violence through its investments. Mr. Harris emphasized that UC was investing in organizations and projects that would make the earth inhospitable for the Regents' descendants.

N. Michelle Marinello, UCLA graduate student, stated that UC was not doing enough to address climate issues and urged the Regents to adopt the Academic Senate memorial to reduce carbon emissions by 60 percent by 2030 and by 95 percent by 2035. She stated that the 2045 target set in UC's draft climate protection policy would not reduce carbon emissions quickly enough.

O. Maria Martin, assistant professor at UC Merced, stated that understaffing has hurt faculty performance. She noted the struggle to access funding, receive timely reimbursement, book travel, and make purchases for affinity groups. Some vendors refused to work with UCM due to late payment or nonpayment, which hurt faculty, the UC mission, and the reputation of the system. Ms. Martin shared that harmful working environments for Black staff have not been addressed.

P. Luis Chavez, UCLA student, spoke in opposition to the Inclusive Access textbook initiative. He stated that the initiative forced students to participate in a textbook rental program, which studies have shown would cost students $200 to $300 more than purchasing the textbooks on their own. He called for equitable, open access to course materials and asked UC not to require Inclusive Access systemwide.

Q. Jasmine Beroukhim, UCLA student and President of Bruins for Israel, expressed deep concern for the Jewish community at the University, and she feared that prospective Jewish students would choose not to attend UC without adequate protection and support. Ms. Beroukhim implored the Regents to listen to the concerns of Jewish students and to prioritize their well-being and safety.

R. Carrie Bearden, UCLA professor, expressed concern about the disastrous effects of climate change. In her view, UC's draft climate protection policy, which included a plan to achieve net-zero carbon emissions by 2045, would not address the climate crisis with enough urgency and would put the University far behind State and local goals. Ms. Bearden urged the Regents to discuss and adopt a resolution to reduce carbon emissions by 60 percent by 2030 and by 95 percent by 2035 per the Academic Senate memorial to reduce fossil fuel combustion.

S. Valeria Cantor Mendez, UC Davis student and Vice Chair of the UCSA Students Enacting Environmental Defense campaign, spoke in opposition to the University's investment in the TMT project on Mauna Kea. She stated that the project violated Articles 11, 12, 19, 25, 26, 29, and 32 of the United Nations Declaration on the Rights of Indigenous Peoples. Ms. Mendez stated that the project did not have the consent of Native Hawaiians and would not be built. She called on UC to divest from the TMT project and to reinvest the funds in indigenous students, adequately pay student workers, provide students with basic needs, and implement the proposed strategy of the Opportunity for All campaign.

T. Asiya Junisbai, UCLA student and representative of the UC Divest coalition, stated that the University invested in companies that profit from war, the exploitation of natural resources, and destruction of communities. She stated that students and workers generated most of the funds that UC invested and that they did not consent to funding war. Ms. Junisbai condemned UC's partnerships with corporations like

Blackrock and Blackstone and shared that students from UCLA, UC Santa Barbara, UC Santa Cruz, and UC Irvine demanded that UC divest from war and invest in student well-being and pay UC workers $25 per hour. She also called for employment opportunities for all regardless of immigration status.

U. Sam Rusk, UCLA student and representative of the UC Divest coalition, demanded that UC divest from war, end its relationship with Blackrock as asset manager, and invest in students. Ms. Rusk contrasted her wages with the millions of dollars in grant funding given to deans and researchers. She believed that an institution with a $161 billion investment portfolio should not lay off career workers during a global pandemic and recession. She stated that, with the UC President being paid nearly $1 million and basketball coaches about $4 million annually, UC should provide free housing to homeless students. Ms. Rusk added that student workers were unprotected, devalued, and exploited on a daily basis.

V. Tyesha Tate, UCSB disabled student, asked UC to increase funding for disability services. She stated that the COVID-19 pandemic was a mass-disabling event, and many UC students qualified as disabled. Ms. Tate shared that she did not apply for services due to how long it would take to receive them. She stated that many campuses were not accessible, citing the number of stairs at UCLA as an example.

3. **AMENDMENT OF REGENTS POLICY 6109: UNIVERSITY OF CALIFORNIA SHORT TERM INVESTMENT POOL INVESTMENT POLICY STATEMENT**

The Chief Investment Officer recommended that the Regents amend Regents Policy 6109 – University of California Short Term Investment Pool, as shown in Attachment 1, effective retroactively to June 30, 2022.

[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.]

Chief Investment Officer (CIO) Bachher explained that the Short Term Investment Pool (STIP) was a liquidity pool meant for the University's daily and short-term cash needs. In light of the COVID-19 pandemic, the Office of the CIO wished to keep the duration of STIP investments short so that systemwide and campus cash demands could be met. For instance, the Office of the CIO was trading significantly in commercial paper on a regular basis and in short duration in order to meet payroll. The proposed action would increase flexibility to trade in a manner consistent with the demands on STIP.

Senior Managing Director Satish Ananthaswamy stated that, with an inverted yield curve in the fixed income market, there was an opportunity to slightly increase duration for high-quality, U.S. government securities that the Office of the CIO intended to purchase.

Committee Chair Sherman moved to amend the recommendation such that, under "Risk Management" in Regents Policy 6109, the provision in "Liquidity Risk," is subject to the provisions in "Credit Risk."

Upon motion duly made and seconded, the Committee approved the motion to amend the recommendation, Regents Anguiano, Cohen, Leib, Pouchot, Robinson, and Sherman voting "aye."

Upon motion duly made and seconded, the Committee approved the Chief Investment Officer's recommendation as amended and voted to present it to the Board, Regents Anguiano, Cohen, Leib, Pouchot, Robinson, and Sherman voting "aye."

4. **DIVERSE PERSPECTIVES: CHANGING THE FACE AND THE IMPACT OF THE INVESTMENTS INDUSTRY**

[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.]

Chief Investment Officer (CIO) Bachher introduced the item, a panel discussion featuring speakers who were advancing diversity in the investments industry.

Oscar Munoz, General Partner at L'Attitude Ventures and former Chairman and Chief Executive Officer (CEO) of United Airlines, shared that his approach to diversity, equity, and inclusion (DEI) went beyond hiring, retention, and c-suite executives. He stated that the Latino(a) population, the largest minority group in the U.S., was affluent, brand-loyal, and made up a large component of voters as well as the millennial and Generation Z demographic. In his view, there was a business imperative to regard this population as future customers and not just as an underrepresented minority (URM) group. Mr. Munoz remarked that helping URM was not giving them a handout but rather a "hand up." In light of URM receiving less than one percent of venture capital (VC) and private equity funding, Mr. Munoz started his own venture fund. He thanked the Office of CIO for its guidance, patience, and understanding. Mr. Munoz believed that corporations and businesses should prove their intentions instead of making promises. For instance, the United Aviate Academy, a pilot training program, recruited students from inner city high schools and created opportunities that were not previously available to underrepresented students. Fifty percent of the participants were women and or URM.

Mr. Bachher asked Mr. Munoz about the challenges of raising money for a first-time fund despite being the former CEO of United Airlines and his advice to investors. Mr. Munoz replied that it was challenging to assuage investors' doubt about a first-time fund, since first-time funds were not typically successful, and in a fund that did not look typical. He relied on his personal relationship with Mr. Bachher and the heads of several large banks. With the $100 million that it has raised, L'Attitude aimed to prove that the Latino(a) community had founders, products, and capabilities like any other community. Mr. Munoz believed that this would help advance DEI.

Katie Rae, CEO and Managing Partner of The Engine Fund, noted that the fund originated from the Massachusetts Institute of Technology (MIT) six years ago. Because of Mr. Bachher's and Ms. Rae's shared views about the potential of university innovation, the Office of the CIO became an anchor limited partner for The Engine's first fund. Ms. Rae explained that The Engine Fund invests in “tough tech,” which describes areas of innovation in science and engineering that could reform energy production or the treatment of diseases. Ms. Rae noted that female founders and founders of color struggled to raise capital in later rounds of funding due to discrimination. Inspired by the gender diversity of science and engineering undergraduate applicants at MIT, the fund has held itself accountable to similar metrics and goals for investment and recruitment. Ms. Rae underscored that more must be done; success must be demonstrated in outcomes as well. To that end, The Engine Fund made sure its teams had a sufficient number of operating partners and help with fundraising and networking. When deal flows, the rate at which business proposals and investment offers are received, lacked diversity, the Fund helped analyze why. The Engine Fund worked with over 25 schools and formed many relationships with laboratories, postdoctoral researchers, and graduate students to strengthen the pipeline.

Brian Hollins introduced himself as the founder and Managing Director of Collide Capital, an early-stage venture firm. While at Goldman Sachs, he built the Emerging Entrepreneurs Coverage Group, which connected Series A start-up companies with resources. Mr. Hollins and others launched Black VC, now the largest Black investor ecosystem in the world. His partner, Aaron Samuels, was co-founder and Chief Operating Officer of Blavity, a Black media company that reached about 100 million people per month. Mr. Collins shared that Blavity’s AFROTECH was the largest Black technology conference in the world. Seeing little change in the investment ecosystem in the last six or seven years, he and Mr. Samuels raised $1.5 million and made 34 investments, which led to successfully raising Fund I, or the first round of funding. Mr. Hollins recalled the institutions that turned Collide Capital away and thanked the Office of the CIO for its partnership and guidance at the early stages of fundraising. Collide Capital was working to add allocators of color who could return four to five times net funds and had 80 to 85 percent diverse founders. To date, 83 percent of the companies backed by Collide Capital were Black-, Latino(a)-, or female-led teams.

Committee Chair Sherman asked how a young founder seeking seed capital could contact The Engine Fund or Collide Capital. Ms. Rae replied that her contact information was published widely and that The Engine Fund met about 20,000 people per year through events and meetings. She stated that it took effort to be widely available. Mr. Hollins added that some 25,000 people attended AFROTECH last October. He advised founders to identify these types of opportunities and to demonstrate passion for and intent to build a business. Before funds like The Engine Fund or Collide Capital existed, investors might not have seen the performance opportunities in these founders.

Regent Anguiano asked how UC differed from a structural standpoint. Mr. Hollins stated that the Office of the CIO was willing to meet with Collide Capital, and that he serendipitously sent an unsolicited email to Mr. Bachher when the Office of the CIO was working toward its goal of meeting 100 diverse managers. In Mr. Hollins’ view, it took effort from both firms and institutions for more capital allocators of color to receive funding, but he did not believe that this was a top priority at other universities. Ms. Rae credited Mr. Bachher and the Office of the CIO with having the leadership and accountability needed to effect structural change. She believed that this set the Office of the CIO apart from other limited partnerships.

Regent Robinson asked what lessons the speakers learned from their experience with the University and what more UC could do to help investors like them. Ms. Rae recalled that, when The Engine Fund was raising Fund II, the Office of the CIO conducted due diligence early and helped identify problems and strengths. She emphasized the importance of honesty in these partnerships. Mr. Hollins stated his belief that Collide Capital owed a fiduciary responsibility to UC as its anchor investor and needed to prove to the University that it was a firm worth investing in. This was demonstrated through Collide Capital's reporting, communication, hiring, and portfolios. He praised the Office of the CIO for the attention it paid to small firms. Many have expressed interest in Collide Capital due to its partnership with the University.

Regent Hernandez asked Ms. Rae about Equity Summit, an annual event for female and underrepresented partners, and whether it has helped institutions like UC identify future partners. Ms. Rae stated that many institutional investors benefited from the Equity Summit, which was focused on establishing long-term relationships. Many funds were formed and billions of dollars were raised because of Equity Summit. The event had originally been women-focused but was later expanded to include underrepresented groups.

Regent Park asked why female founders experienced discrimination. Ms. Rae responded that annual data demonstrated that female founders could raise seed funding but not Series A capital; this was also broadly true for underrepresented founders. She believed that gender-based doubt was affecting investment teams in the second round of funding and called for more diverse general partners and programs to address unconscious bias.

Regent Park asked what DEI meant in the investment industry. Mr. Hollins shared that some institutions have invested in Collide Capital because of DEI mandates while others researched and saw Collide Capital's ability to outperform the market potential. He observed that institutions were becoming more intentional in their diversity efforts. For instance, Bank of America has invested over $250 million in diverse funds because of the opportunities among populations without much access to banking. Firms now had the chance to identify limited partners like the Office of the CIO, which saw Collide Capital's competitive edge. Mr. Bachher added that, despite the divisiveness in the country, there were still people creating great companies.

5. REVIEW OF PERFORMANCE FOR THE THIRD QUARTER OF FISCAL YEAR 2022–2023 OF UC PENSION, ENDOWMENT, BLUE AND GOLD POOL, WORKING CAPITAL, AND RETIREMENT SAVINGS

[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.]

Chief Investment Officer (CIO) Bachher shared that, as of April 30, the Office of the CIO managed a total of $162 billion in assets, with $117.1 billion in the pension and the UC Retirement Savings Program, $21.4 billion in working capital, and $23 billion in the endowment. He wished to have a systemwide discussion about an income opportunity in the Blue and Gold Pool before the end of the fiscal year. The geographic distribution of assets was the same.

David Schroeder, Managing Director of Fixed Income, stated that the year-on-year Consumer Price Index (CPI) fell from its peak in 2022 due to lower energy prices and a slower pace of goods inflation. However, underlying trends have not changed much, and CPI remained at around five percent. Forecasters and markets predicted Core CPI at 3.6 percent by the end of the calendar year, and the two-year break-even inflation rate was expected to drop to two percent. In Mr. Schroeder's view, inflation, buoyed by shelter costs, would be sticky, or no longer transitory. The Federal Funds Rate peaked in early March, and the Ten Year Treasury and Two Year Treasury yields fell after the collapse of Silicon Valley Bank. The Federal Reserve (Fed) increased the interest rate by 25 basis points earlier this month but planned to pause rate increases to determine the impact of this cumulative monetary tightening. Markets expected the Federal Funds Rate to be over two percent by the end of the next calendar year. The protracted debt ceiling debate has led to higher demand for interest in Treasury securities.

Ronnie Swinkels, Managing Director of Public Equity Investments, indicated a fairly positive view of the public equities market. Inflation rates were declining, the Fed might pause interest rate increases, and the regional banking crisis seemed contained for now. The Office of the CIO predicted that equities would outperform fixed income. For the last ten years, U.S. equities have outperformed global equities. Stocks like Microsoft and those related to artificial intelligence have driven performance in the Standard and Poor's (S&P) 500. Small cap stocks have stayed flat or declined. Consumer spending was fairly strong, and companies were outperforming earnings expectations. India underperformed the global index this fiscal year, and China performed well in January but struggled more recently. Mr. Swinkels noted the effect of geopolitical risks on equities. Disinflation, a soft landing or slowdown in economic growth, and improved productivity with artificial intelligence could benefit the equities market, but the debt ceiling debate or banking crisis could create volatility. The Office of the CIO was nearing its passive investment target.

Matt Webster, Director of Private Equity, stated that private equity has been relatively flat for the last two years and would continue to have zero percent returns this year. The Office of the CIO has grown its private equity portfolio from $4 billion in 2018 to $13 billion. For the next 12 months, the Office of the CIO planned to focus on several factors. The first was valuations. Mr. Bachher had stated that private equity markets were overvalued by some 20 percent. The second was earnings, which were slowing down due to cost pressure, inflation, rising wages, and supply chain issues. Third was the higher cost of debt affecting businesses in UC's private equity portfolio.

Mr. Bachher stated that, as of April 30, the fiscal year net return was 3.9 percent for the endowment, 6.4 percent for the pension, 9.1 percent for the Blue and Gold Pool, 6.3 percent for the Total Return Investment Pool (TRIP), and 3.1 percent for the Short Term Investment Pool (STIP). He predicted that the endowment and the pension would underperform the benchmark and real estate would perform well, while public equities, fixed income, and real assets would remain relatively flat to the benchmark. Mr. Bachher presented a chart of 30-year net returns and a chart of UC's asset allocation. The Office of the CIO kept 50 percent of assets in public equities, 24 percent in fixed income, and 22.3 percent in private assets. In the last year, the Office of the CIO has kept the equity portfolio underweight by four to five percent due to market volatility and has maintained liquidity with cash and fixed income.

Mr. Schroeder stated that the Office of the CIO moved the bond portfolio to a new benchmark several years ago and tended to keep duration short at about three to five years across the different asset classes. Mr. Bachher stated that the Office of the CIO would monitor the duration and positioning of the bond portfolio. Mr. Schroeder noted that the Bloomberg U.S. Aggregate Bond Index had three times the risk and yielded 20 basis points more than the Office of the CIO's current core fixed income benchmark. In his view, the benchmark did not generate much more yield for its rate risk. Mr. Bachher added that student and multi-family housing was in demand, and that the Office of the CIO sold an office building despite struggles in the commercial real estate market. Cash was earning five percent returns.

Committee Chair Sherman asked how long campuses' funds would be locked when they are migrated from TRIP or STIP to the Blue and Gold Pool. Mr. Bachher replied that it would take one to three days. The Blue and Gold Pool was a completely liquid product.

Committee Chair Sherman asked if investing more in passively managed public equities has proven successful. Mr. Swinkels responded this was true in the long term, but there was more variation in performance in the short term. The Office of the CIO was determining areas where stock selection would lead to outperformance.

Committee Chair Sherman asked how involved the Office of the CIO was in evaluating its private equity managers. Mr. Webster replied that the Office of the CIO received quarterly evaluations and monitored managers' transactions.

Regent Robinson asked if the private equity portfolio's marks were up to date. Mr. Webster replied that numbers as of December 31, 2022 were still being updated. Regent Robinson asked if the Office of the CIO noted any behavioral difference in the 2022 funds. Mr. Webster estimated that the portfolio would be up three to five percent in the first quarter.

Regent Robinson asked Mr. Bachher if campuses would migrate capital to the Blue and Gold Pool over a period of time. Mr. Bachher clarified that the migration did take time. Balances were divided among the campuses, and the Office of the CIO would devise a glide path for the migration. He encouraged campuses to start considering this option.

Regent-designate Raznick asked if there has been discussion about the University investing in its own capital needs. Mr. Bachher noted profitable investment opportunities around UC campuses and encouraged campuses to contact the Office of the CIO to discuss potential opportunities early. Regent Raznick asked if this process needed to be formalized. Mr. Bachher stated that the communications were part of public record.

6. UC IRVINE HEALTH AND UC INVESTMENTS: INVESTING TOGETHER IN THE FUTURE OF HEALTHCARE

[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.]

Chad Lefteris, Chief Executive Officer (CEO) of UC Irvine Health, shared that he had prior experience managing a health system investment fund. There were entrepreneurs who needed a strategic investor like UCI Health, where a product could be brought and improved. UCI Health has been exploring investment opportunities for about one year and has made one investment so far. Mr. Lefteris expressed hope that UCI Health could improve the work life of physicians and colleagues through these investments.

Scott Joslyn, Chief Information Officer (CIO) of UCI Health, stated that valuations might fluctuate but good ideas persist and were often funded by private equity. UCI Health distinguished itself by offering a venue to test and shape products for use at UCI Health and elsewhere. Through its network, UCI Health could discover innovations early, and entrepreneurs were attracted by the University's research environment. Mr. Joslyn stated that UCI Health's first investment could change the standard of care. In another instance, he noted staff burnout in health care and the amount of time spent on documentation. Physicians spent days making notes, and UCI Health spent about $500,000 per year on medical transcription, which was also delayed. Artificial intelligence (AI) could reduce time spent on documentation by capturing in real-time conversations between physicians and patients, as well as notes for billing and filing. UCI Health was working with a company with that technology, which could also help make after-visit summaries more accurate. AI could use audiovisual equipment to document care provided by nurses while keeping identities private, saving more staff time spent documenting.

Mr. Bachher asked how UCI Health was collaborating with the rest of the Irvine campus. Mr. Lefteris stated that UCI Health had an investment advisory committee that included Mr. Bachher, physician leaders, the dean of the Paul Merage School of Business, and a fund manager from the community. Mr. Joslyn added that UCI Health was collaborating with students from the School of Business to define its integrative health model and was finalizing a certificate program that would enable clinicians to lend their experience to the investment team. This would help UCI Health negotiate a better valuation. UCI Health could use its networks to qualify potential investments.

Regent Anguiano asked if this opportunity could be expanded across the UC Health enterprise. Mr. Joslyn replied that campus CIOs meet monthly and often work together. For instance, UCI Health was learning about technology that UC Davis Health used to address bias in AI platforms. Other campus health enterprises were exploring investment opportunities, which Mr. Joslyn viewed as a systemwide endeavor. Mr. Lefteris envisioned that what started at UCI would spread, and UCI Health was engaging other campuses.

7. THE FUTURE WITH ARTIFICIAL INTELLIGENCE

[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.]

Jeremy Fiance, founder of The House Fund, recalled that, when he saw the lack of resources for entrepreneurs at UC Berkeley when he was a student, he had launched student clubs and helped raise over $50 million in funding by the time he graduated. In 2016, Mr. Fiance partnered with the Office of the Chief Investment Officer (CIO) to launch The House Fund, the first venture capital fund focused solely on opportunities at UC Berkeley. It has invested in over 100 UCB start-up companies, and venture capitalists have invested $5 billion in these companies. The Berkeley campus was currently the top producer of venture capitalist–backed companies among universities globally. The House Fund currently had over $300 million under management and focused on investments in artificial intelligence (AI), had six top UCB AI faculty in its team, and produced the highest-valued AI companies to date, OpenAI and Databricks, collectively valued at $50 billion. With the help of The House Fund, UC invested $100 million in Databricks, whose founders recently donated $75 million back to UC Berkeley. Last month, The House Fund partnered with Databricks, OpenAI, Google, and Microsoft to launch the House AI Accelerator, which invests in UCB AI start-up companies. Mr. Fiance regarded AI as a century-defining technology and stated that UCB and its faculty were committed to ensuring that AI is used to benefit humanity.

Michael Irwin Jordan, Professor of Electrical Engineering and Computer Science and Statistics at UC Berkeley, presented a history of machine learning, as AI had been known. In the early 1980s, UC San Diego Professor David Rumelhart (1942–2011), Mr. Jordan's academic advisor, developed the algorithm used in AI known as backpropagation. AI was part of a new field that built artifacts with applications in commerce, transportation, health care, and entertainment. In the past, scientists had a fundamental understanding of chemistry and electromagnetism prior to the development of chemical and electrical engineering, respectively, but scientists did not have a fundamental understanding of intelligence prior to the development of AI. In its first generation, machine learning was used in the back end for functions like fraud detection, search, and supply chain management. In the second generation, it was used to interact with humans, and in the third generation, it was used to recognize patterns in human data such as speech. In the fourth generation, machine learning has resulted in the emergence of new markets. In the 1950s, Stanford University Professor John McCarthy (1927–2011) aspired to imitating humans with a computer. Later, engineer and inventor Douglas Engelbart (1925–2013) coined the term "intelligence augmentation" for the collection of data for ease of use. Novel mechanisms were emerging from what Mr. Jordan called the "intelligent infrastructure."

Mr. Jordan disagreed with the notion that intelligence would soon be understood, since computers were not currently capable of planning or reasoning with counterfactuals. Rather than building artificial agents that are intelligent and autonomous, he believed that these agents should be federated and linked to a larger system, and that AI could promote the democratization of ideas. He cautioned that autonomy was dangerous and led to centralization. For instance, Google sought to collect more data from mobile phones to build its centralized, “federated learning” model. Mr. Jordan was concerned about privacy implications and whether people obtained value from participating in such a collective. Currently, he served on the board of United Masters, which used AI to analyze streaming data, which helped musicians generate revenue and enter into brand partnerships. This paradigm, which created a market based on data flows, could create jobs around the world and be applied to various forms of art, entertainment, and information services.

Mr. Jordan presented a diagram demonstrating the different fields resulting from different combinations of economics, statistics, and computer science. Machine learning combined computer science and statistics, econometrics combined statistics and economics, and algorithmic game theory combined economics and computer science, but each combination did not account for the third field in the diagram. At UC Berkeley, Mr. Jordan led a diverse team of students studying issues with real-world impact, such as using statistical contract theory to improve clinical trials. Several years ago, he and other colleagues developed courses based on the vision that students should be trained to make data-based decisions in a variety of fields. These courses became the foundation of the data science major, which led to the formation of the Division of Computing, Data Science, and Society. Later, the Regents would be voting whether to approve the establishment of a college. Similar entities have formed at other UC campuses and universities.

Regent Hernandez noted the concerns of Geoffrey Hinton, a cognitive psychologist and computer scientist who recently left his job at Google, about AI’s ability to surpass human intelligence and sway public opinion. He asked whether this was possible. Mr. Jordan replied that he has known Mr. Hinton for 50 years and profoundly disagreed with him, and that Mr. Hinton’s concerns were not based on an understanding of neuroscience. In Mr. Jordan’s view, human thinking ability would continue to surpass AI-powered language models for decades to come. He believed that AI should be accessible globally and that humans would maintain control over it, and he underscored the importance of education. Current views on AI created a confusing situation for government leaders, which could be addressed with clarity, transparency, and thoughtfulness.

Committee Chair Sherman asked about investment opportunities in AI. Mr. Fiance responded that The House Fund considered technology-first companies that drew from UC Berkeley research, and it partnered with faculty to determine what could be commercialized. Serial entrepreneurs behind AI-enabled companies sought access to UC Berkeley research, technology, and talent in areas like medical diagnostics.

Mr. Bachher asked Mr. Fiance to speak about Ambi Robotics, in which the Office of the CIO invested $10 million. Mr. Fiance stated that Ambi Robotics, the result of over six years of multidisciplinary research, was founded by UC Berkeley Professor Kenneth

Goldberg and was funded by The House Fund and Bow Capital. Ambi Robotics built systems to automate fulfillment for commerce.

Regent Robinson, noting how long it took to develop the data science discipline at UC Berkeley, asked about the "next big thing" that the Regents should anticipate. Mr. Jordan replied that the UCB College of Engineering was established nearly 100 years ago, and much has happened in the information science fields since then. He wished to see other campuses do the same, and he believed that academics could help convene entrepreneurs, funders, and philanthropists. Mr. Jordan predicted that AI would have a future in vertical markets like health care and transportation, and he emphasized the importance of having an entrepreneurial presence on campus. The proposed new college could liaise the campus with donors and start-up companies. He believed that the combination of information and social sciences was what the country needed right now.

Chancellor Hawgood shared that UCSF developed the first joint Ph.D. program combining these fields, Computational Precision Health, in nine months. Faculty have been recruited, and graduate students would begin this fall. He asked whether advances in neuroscience might progress computer science. Mr. Jordan replied that this would occur very slowly. This has been the subject of research for some 40 years, and, in that time, the brain was now better understood as a medical object. He believed that Alzheimer's disease and cancer would soon be cured because one was able to screen molecules and antibodies for treatment using large-scale data science. He estimated that a cure for cancer would be discovered in ten years.

Regent Leib asked how UC could spur more innovation and entrepreneurship and derive value from it. Mr. Jordan compared the open-source beginnings at UC Berkeley of Apache Spark, a unified analytics engine for large-scale data processing, to its current use worldwide. In his view, intellectual property should not be derived when software is being developed at the university level; rather, one should monetize it after its impact has been felt. Stanford University, for instance, has created many entities that give back to it. Mr. Fiance added that, in the past, Stanford alumni started companies sooner after graduation than UC Berkeley alumni, but UCB was becoming more of an enabling force for entrepreneurship. The founders of Databricks gave $75 million to build a data science building on the Berkeley campus. He called on UC to better facilitate entrepreneurship and support grassroots initiatives on campus such as student-run clubs.

Regent Leib asked if the University ought to derive value through eventual philanthropy by companies that resulted from UC innovation and entrepreneurship. Mr. Fiance replied that UC should invest in and support its entrepreneurs, who would acknowledge it by giving back. Mr. Jordan noted the technology companies that have given to Stanford.

Mr. Bachher stated that enthusiasm for AI has likely added $1 trillion to the stock market in the last six months, but the debt ceiling could deflate that value.

The meeting adjourned at 5:00 p.m.

Attest:

Secretary and Chief of Staff

UNIVERSITY OF CALIFORNIA
SHORT TERM INVESTMENT POOL
[UC LIQUIDITY]

INVESTMENT POLICY STATEMENT

Effective: ~~July 1, 2020~~ June 30, 2022
Replaces the STIP Investment Policy Statement and STIP Asset and Risk Allocation Policy effective ~~March 15, 2018~~ July 1, 2020

UNIVERSITY OF CALIFORNIA SHORT TERM INVESTMENT POOL
INVESTMENT POLICY STATEMENT

PURPOSE

The purpose of this Investment Policy Statement ("Policy" or "IPS") is to define the objectives, policies and guidelines for management and oversight of the University of California ("UC") Short Term Investment Pool ("STIP"). The management of STIP is subject to state and federal regulations and laws, and all other University investment policies, which may not be listed in this document.

The Policy consists of the following sections:

1. Roles and Responsibilities
2. Objectives
3. Investment Guidelines
4. Strategic Allocation
5. Risk Management
6. Benchmarks
7. Monitoring and Reporting
8. Policy Maintenance
9. No Right of Action
10. Disclosures
11. Other Policies

1. ROLES AND RESPONSIBILITIES

Board of Regents

The Board defines the goals and objectives of STIP and is responsible for establishing and approving changes to this Policy. The Board of Regents may delegate the implementation of this policy to sub-committees, the Chief Investment Officer and investment advisors.

Chief Investment Officer

The Chief Investment Officer ("CIO", "Office of the Chief Investment Officer", "OCIO" or "UC Investments") is responsible for implementing the approved investment policies and developing investment processes and procedures for asset allocation, risk management, investment manager selection and termination, monitoring and evaluation, and the identification of management strategies that will improve the investment efficiency of STIP assets.

Investment Managers

The OCIO may delegate to external Investment Managers responsibility for managing all or a portion of the assets. Any external Investment Managers will assume the roles and responsibilities of "investment manager" under Section 3(38) of ERISA, including but not limited to acknowledging in writing that such Investment Manager is a fiduciary with respect to the assets it manages on behalf of STIP. The Investment Manager will accept assets and comply with all relevant laws, the Investment Manager's individual investment management agreement(s), and as applicable, the stated investment guidelines in this Policy.

Trustee/Custodian

The role of the Trustee/Custodian is to provide safekeeping, accounting and valuation of Trust assets.

2. OBJECTIVES

Overall Objective
STIP is a cash investment pool established by the Board of Regents with the objective of providing a high quality liquid investment vehicle for short-term liquidity needs. STIP's primary objective is to preserve capital and to earn investment income consistent with interest available on low-risk investments. The STIP is available to all University groups and affiliates.

Return Objective
STIP seeks to maximize returns consistent with its primary objective of safety of principal and liquidity, and cash flow requirements.

Risk Objective
STIP seeks to preserve capital and avoid negative returns over any one-year time horizon.

Sustainability Objective
STIP will be managed in a manner that balances meeting the needs of current investors without compromising the needs of future investors. STIP will consider sustainability in both risk assessment and investment due diligence.

3. INVESTMENT GUIDELINES

Permitted Investments
STIP will primarily invest in high quality, liquid, short duration US dollar-denominated bills, notes and cash equivalents. The following is a list of the investment classes allowed in STIP:

1. Short term fixed income instruments (having remaining maturity of less than or equal to ~~12 months~~ three years)

   a. Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal Agencies or U.S. government-sponsored corporations and agencies such as US Treasury and Agency bills and notes.
   b. Certificates of deposit (CD)
   c. Time deposit (TD)
   d. Bankers acceptances
   e. Commercial paper
   f. Obligations issued or guaranteed by U.S. local, city and State governments and agencies which are pre-funded by US Treasury Securities in escrow.
   g. Money market funds managed by the custodian

Investment Restrictions
The Regents have established that the purchase of securities issued by tobacco companies and companies with business operations in Sudan are prohibited in separately managed accounts. The Chief Investment Officer will determine what constitutes a tobacco or Sudan company based on standard industry classification of the major index providers and must communicate this list to

investment managers annually and whenever changes occur.

Employing economic leverage in the portfolio through borrowing, derivatives, or forward-settled transactions (beyond regular settlement) is prohibited.

4. STRATEGIC ALLOCATION

The portfolio will be invested in marketable, publicly traded, high quality short term fixed income instruments, notes and debentures denominated in U.S. dollars and cash (or cash equivalent) instruments.

5. RISK MANAGEMENT

The following limitations will apply in order to maintain investment and liquidity risk within acceptable ranges:

1. Credit risk

   a) No more than ~~40~~ 80% of the portfolio's investments should be invested in securities other than U.S. Treasury and Agency bills and notes, and U.S. Government money market funds managed by the custodian.

   b) No more than 20% of the portfolio's investments should be invested in US Government money market funds managed by the custodian. Money market funds should have a rating of AAAm/AAAmf or equivalent by the NRSO's.

   c) Commercial Paper must have a rating of at least A-1, P-1, or F-1

   d) Investments should exhibit a credit quality of A (or equivalent) or better, as determined by one of the NRSRO's Split-rated credits are considered to have the lower credit rating. US Treasury and Agency bills and notes are exempt from this requirement.

   e) No more than 5% of the portfolio's allocation to commercial paper may be invested in any single issuer. This guideline may be exceeded on a temporary basis due to unusual cash flows, up to a limit of 10%, for a period not to exceed 30 days.

   f) Except for securities issued by the US Treasury or Agencies of the US Government, no more than 3% of the portfolio's market value may be invested in any single issuer.

2. Liquidity risk

   a) The portfolio's investments in aggregate of any security may not exceed ~~15~~ 20% of that security's outstanding par value at time of purchase, without a written exception approved by the Chief Investment Officer.

   b) This paragraph is subject to all of the provision in paragraph (5)(1) Credit Risk, above.

3. **BENCHMARK**

The STIP Benchmark will be a 50/50 weighted average of the yield on a constant maturity

One Year US Treasury Note and US 30 day Treasury Bills.

7. MONITORING AND REPORTING

The OCIO is responsible for monitoring the portfolio and investment managers on an ongoing basis. The OCIO should monitor and report to the Board of Regents and designated sub-committees on the following items.

1. Asset Allocation and Risk Measures and Exposures
2. Investment Performance and Attribution (against the STIP Benchmark)
3. Material Changes to Investment Strategy
4. Potential Material Issues and Risks
5. Compliance of STIP with this Policy

On at least an annual basis the CIO will report on the implementation of the UC's Sustainability Framework which will include a discussion on the portfolio's environmental, social, and governance risks considered during the year.

8. POLICY MAINTENANCE

The Policy should be reviewed at least annually and updated as necessary. Revisions may be recommended by the OCIO, Investments Subcommittee, Finance and Capital Strategies Committee, and approved by the Board of Regents.

9. NO RIGHT OF ACTION

This policy is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the University of California or its Board of Regents, individual Regents, officers, employees, or agents.

10. DISCLOSURES

The Chief Investment Officer provides investment-related information on STIP to the Regents' Investments Subcommittee in a manner consistent with the requirements outlined in this policy. Current and historical materials are publicly available on the Regents' website within the section on Meeting Agendas and Schedule. The Chief Investment Officer's Annual Report for the most recent fiscal year is also available on the Chief Investment Officer's website.

11. OTHER POLICIES

STIP will follow the proxy voting and investment valuation policies developed and approved by the Office of the Chief Investment Officer.