



Committee on Naming and Recognition Final Report

DECEMBER 17, 2020

California Institute of Technology

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Executive Summary

On July 22, 2020, President Thomas Rosenbaum convened the Committee on Naming and Recognition (CNR) to explore how Caltech honors and memorializes significant historical figures. Of concern were demands from two petitions submitted to the President asking for the removal of the names of Robert A. Millikan, Harry Chandler, Ezra S. Gosney, William B. Munro, Henry M. Robinson, and Albert B. Ruddock from campus memorializations because of their affiliation with eugenics and the Human Betterment Foundation (HBF). Petitioners also demanded the removal of the name of Thomas J. Watson Sr. because of his role at IBM and IBM's connections to Nazi Germany. The Committee was charged to delineate general principles for current and future naming and to recommend specific actions, with a mandate to support Caltech's desire to be a destination of choice for a diverse community of exceptional scholars.

The CNR considered Caltech's existing Naming Policy, consulted with the authors of the petitions, met with experts on the history of eugenics and the HBF, consulted extensive documentation on these topics and on the individuals of concern, incorporated extensive input from the community, and surveyed similar efforts by peer institutions. In formulating its recommendations, the CNR delineated principles for naming and name removal and conducted its deliberations in full alignment with Caltech's core commitments (its mission, its values, its Honor Code, its aspirations for the future) and with its ongoing efforts to forge a diverse and inclusive community of excellence.

The CNR proceeded on the principles that removing names should be undertaken (1) only in exceptional circumstances, (2) when there is significant breach of Caltech's core commitments, (3) when there is a threat to Caltech's future, and (4) in a manner that recognizes the full complexity of Caltech's past.

All of these principles apply to the present challenge. As a result, the CNR unanimously recommends that Caltech remove the names of the individuals of concern from all assets and honors, except for Watson. This is a critical step toward realizing the brilliant, diverse, and inclusive future to which Caltech aspires.

By removing these names from campus assets and honors, the CNR does not propose that Caltech break its ties with Millikan or other problematic figures in its history. It urges that Caltech must not erase any of its history. It holds, instead, that Caltech should delve more deeply into its history, using it to launch initiatives constructed to inform and educate its community and the public.

I. Report Brief

Recommendation We, the members of the Committee on Naming and Recognition (CNR) appointed by President Thomas Rosenbaum on July 22, 2020, unanimously recommend that the California Institute of Technology rename the Robert A. Millikan Memorial Library and all other assets and honors that memorialize Robert A. Millikan. We also unanimously recommend renaming all assets and honors memorializing Harry Chandler, Ezra S. Gosney, William B. Munro, Henry M. Robinson, and Albert B. Ruddock. The CNR withholds judgment on renaming assets and honors memorializing Thomas J. Watson Sr. until additional evidence is available.

Basis for recommendation This recommendation follows extensive consideration of Millikan's participation in the eugenics movement as a late trustee of the Human Betterment Foundation (HBF); of Gosney as HBF founder and president; and of Chandler, Munro, Robinson, and Ruddock as either HBF founding trustees or members. The CNR also considered evidence of Millikan's stances on gender, race, and ethnicity.

Precedents and provisions for name removal Precedent exists in Caltech's Naming Policy of 2015 for renaming where reputational issues arise. The Institute reserves the right to revoke naming if "the donor's character or reputation for honesty, personal integrity, and personal and professional ethics is no longer consistent with the mission of the Institute" or "if the name will bring discredit to the Institute and/or is not consistent with the mission of the Institute."

Principles followed by the CNR While this provision exists in our policy, the CNR has proceeded on the principles that removing names from assets and honors on campus should be enacted (1) only in exceptional circumstances, (2) when there is significant breach of Caltech's core commitments, (3) when there is a threat to Caltech's future, and (4) in a manner that recognizes the full complexity of Caltech's past. In formulating its recommendations, the CNR developed principles for naming and name removal and conducted its deliberations in full alignment with Caltech's core commitments (its mission, its values, its Honor Code, its aspirations for the future) and mindful of Caltech's ongoing efforts to forge a diverse and inclusive community of excellence.

Extraordinary circumstances that led to the CNR's investigation The circumstances that led to the appointment of the CNR by President Rosenbaum are certainly without precedent in Caltech's history. Following the murder of George Floyd on May 25, 2020, multiple voices have risen across our nation, and within our own community, demanding social justice. These voices are demanding that we repudiate overt, systemic racism. They are demanding that we listen to the pain and suffering endured by members of our communities, and that we take action to construct a better future. In July 2020, President Rosenbaum received two petitions, one of them by the Black Scientists and Engineers of Caltech (BSEC), containing more than 1,000 signatures. BSEC's petition demanded, among other considerations, the renaming of Millikan Library and other memorials at our Institute that honor Caltech founders and supporters affiliated with eugenics and the HBF. A second petition led by a Caltech alumnus and endorsed by more than 1,000 signatories, also demanded the removal of names

affiliated with eugenics and the HBF. Also in July, President Rosenbaum appointed the CNR “to consider and make recommendations for general policies related to space naming and other forms of recognition, as well as consideration of specific building names on campus.”

Protocols followed by the CNR In the course of investigating the question of removing the names of Millikan and his colleagues, the CNR invited experts and guest speakers, reviewed a broad range of documents and scholarship on eugenics and the HBF, sought input from all members of the Institute (receiving more than 1,500 responses) and surveyed similar initiatives at peer institutions.

Findings about the HBF The CNR found Millikan’s and his colleagues’ involvement in eugenics and the HBF to be a significant breach of Caltech’s core commitments and efforts to forge a diverse and inclusive community. Originally incorporated in 1928 to promote what it called “race betterment by eugenic sterilization,” the HBF served as an educational and broadcasting relay for the eugenics movement. The HBF supported public policies that, in the United States, ultimately resulted in the eugenic sterilization of more than 60,000 Americans whom eugenicists labeled as “feeble-minded” or “unfit.” *Who* was “feeble-minded” or unfit was determined variously, sometimes through IQ tests, other times by alleging propensities to criminality, prostitution, illegitimacy, alcoholism, and other socially deviant behaviors, or merely by reason of what was believed to be a hereditary propensity to remain in poverty. From the early 1900s to the early 1970s, in various forms and parts of the country, the predominant victims of these policies were people of Mexican origin; people of Asian origin; Eastern and Southern European immigrants, including so-called Hebraics (Jews); and Blacks, but also significant numbers of the poor labeled “white trash.” What made members of all these groups the object of eugenic attention was that they were likely un- or ill-educated and at the lower end of income distribution.

Millikan and the HBF Millikan joined the HBF as a trustee in 1937, at a time when eugenics and its claims for the hereditary nature of human behavior and character had fallen into disrepute within various quarters of the scientific and broader academic community. On the face of it, Millikan failed to exercise the scientific due diligence of determining whether the HBF had its science right, which it did not, concerning “feeble-mindedness” and “unfitness,” and their alleged hereditary nature. In this final phase of its formal history, the HBF was concentrating its efforts on educating the public about what it called the “humanitarian” benefits of sterilizing the “feeble-minded.” It warned against the burden on taxation posed by lower-income populations, whom the HBF feared to be reproducing at higher rates than the general population and taking a larger share of the dispensations of charities and public agencies. By the HBF’s calculations in 1938, the population of the “mentally deficient” potentially targeted for sterilization in the United States—defined as “anyone with less than 70 percent of average intelligence for his age”—was on the order of 6.5 million people.

Millikan’s stances on gender, race, and ethnicity Documents and scholarship considered by the CNR also paint a disquieting picture of Millikan’s views on gender, race, and ethnicity. During his tenure, Caltech did not hire a single woman to its faculty, nor did Millikan seem to believe the United States had produced a single woman physicist worth hiring in academia. He held negative stereotypes about Jews, although he did not for the most part allow his anti-Semitism to prevent him from hiring stellar Jewish male faculty during his tenure. He

believed that Nordics (white Northern Europeans) were naturally and morally superior to other peoples, and that Southern California was “the westernmost outpost of Nordic civilization.” He privately wrote with contempt about people of color, referred to Blacks in Mississippi in disparaging language, and thought that granting Blacks the right to vote was “an unthinkable disaster in view of the sort of people they now are.” Millikan’s stances on gender, race, and ethnicity may have been more common in his time, and even the norm for his socioeconomic status. But it would fly in the face of historical truth to excuse sexism, racism, and xenophobia as inevitable and universal in Millikan’s time.

Millikan’s achievements The CNR recognizes Millikan as a major figure in the development of physics and science whose work on the electron earned him Caltech’s first Nobel Prize, who conducted pioneering work on cosmic rays, who defended the teaching of evolution, and who, in collaboration with Arthur Noyes and George Ellery Hale, built Caltech as a premier science and technology research and learning institution. It was undoubtedly this aspect of Millikan, his stature as a great scientist and institute builder, that an earlier generation of Caltech wished to honor. Millikan had helped to create the world-class research and learning institution that we know today.

Millikan’s breaches of Caltech’s core commitments Caltech’s priorities have also evolved over time. And Caltech, as a pioneer in science and technology, now also aspires to become a truly diverse community of exceptional individuals. As we take stock of our history and look back at the figures who made Caltech what it is today, different aspects of Millikan’s life and work come to the fore. His personal and professional connection with the HBF, as well as his stances on gender, race, and ethnicity, have come to stand in direct opposition to Caltech’s purpose.

Caltech’s obligation A critical step in forging Caltech as a truly diverse and inclusive community at the forefront of science and technology is to reckon fully with its history and the figures who have helped build the Institute. Caltech has this obligation for the sake of every member of its community, in the best interest of the Institute, and for the sake of truth itself. Reckoning with a complex history requires accounting for all that is good and bad, beneficial and detrimental. The Institute must engage fully the complexities of the past so that it can understand the aspects that are beneficial to its present and future and address those that continue to be detrimental. The Institute must also engage fully the complexities of the past so that it can make informed decisions about what it values in the present and what it wishes to memorialize. Reckoning with the past is an exercise in historical investigation and Institute introspection. But choosing whom to honor and memorialize is all about what the Institute is today and aspires to be tomorrow.

Reckoning with Caltech’s past Part of reckoning with the Institute’s past is acknowledging that figures who were shaping what would become one of the world’s most eminent universities simultaneously were, in their civic engagements, prominent actors and fiduciaries of the Human Betterment Foundation. Part of reckoning with the Institute’s past is dealing with the complex legacy of towering figures who forged Caltech as a pioneer in science and technology. Part of reckoning with this past is remembering those figures with all their good qualities and their flaws. All these aspects of the past can exist together in collective memory

and should be preserved and leveraged to inform and educate the campus community and the public.

Reconciling the past with the present and the future Part of moving into the future is to renounce any part of the past that is inconsistent with what Caltech is today and what it values. Eugenics, and the biases that fueled it as a movement, are morally deplorable and inconsistent with what Caltech is and aspires to be. The Institute cannot continue to carry these liabilities forward. Caltech must publicly and unambiguously repudiate any shade of affiliation with eugenics. The CNR recognizes that this is only one step on the road to building a truly diverse and inclusive community. But a crucial step it is to heal some of the pain and suffering in its own community, and a crucial step it is in realizing the bright, diverse, and inclusive future that we all want for Caltech.

II. Background

Calendar year 2020 has been unlike any other in the history of Caltech. In March, the COVID-19 pandemic compelled students, faculty, and staff to work from home. The Institute was forced to reconfigure all teaching and most other functions, including research, to remote operations. People around the world had to adapt to tragic loss, to threatened well-being, and to new challenges and restrictions on every aspect of daily life.

Amidst the pandemic, on May 25, police officers in Minneapolis, Minnesota, killed George Floyd, a 46-year-old Black man. The tragedy was recorded on video and triggered international outrage and protests. In the weeks that followed, Institute leadership received calls for action to improve diversity and inclusion within the Caltech community. Two significant petitions, each with more than 1,000 signatures, demanded the removal from all campus assets and honors the names of past Institute leaders who had been associated with eugenics and the Human Betterment Foundation (HBF). One petition, dated June 25, 2020, was submitted by the Black Scientists and Engineers of Caltech (BSEC). The second petition, dated July 22, 2020, was headed by Michael Chwe, a Caltech alumnus who is now Professor of Political Science at UCLA. (See Appendix A)

Challenges in recent years to university memorialization of significant figures in American and academic history have engendered intense conversations across campuses about the impact that unexamined celebrations of complex historical figures have on today's universities. Many of these challenges have already resulted in the renaming of assets and honors at other institutions in 2020.

In response to these two petitions and a number of campus conversations, Caltech President Thomas Rosenbaum established two committees to examine the specific issues raised in the petitions (see Appendix B). The Committee on Naming and Recognition (CNR) was established on July 22, 2020. The CNR members are representative of, and representatives for, the Institute community, with pertinent expertise across history, biology, genetics, biological ethics, psychology, physics, law, alumni relations, diversity and inclusion, and corporate governance (see Appendix C). They were entrusted to act in good faith and according to their best judgment in the best interest of Caltech and its future.

The CNR was asked to explore how the Institute honors and memorializes significant historical figures. Of specific concern were the Institute's memorializations of Robert A. Millikan, Harry Chandler, Ezra S. Gosney, William B. Munro, Henry M. Robinson, and Albert B. Ruddock, all because of their connections to the HBF. The memorialization of Thomas J. Watson Sr. was of concern because of his role at IBM, and IBM's ties to Nazi Germany (see Appendix D).

The CNR was charged to conduct an historical evaluation of these individuals, taking into consideration how ethical standards may have changed over time. Its mandate involved (1) a delineation of general principles for current and future naming, and (2) recommendations for specific actions, with special consideration of Caltech's ability to be a destination of choice, today and into the future, for a diverse community of exceptional scholars.

As its first order of business, the CNR spoke at length with the creators of the two petitions, UCLA Professor Michael Chwe and Charles Xu, a Caltech graduate student in physics. The CNR sought expert advice from Daniel Kevles, an historian of science and an expert on the eugenics movement, Professor Emeritus at both Caltech and Yale; Peter Collopy, University Archivist and Head of Special Collections at Caltech; Evelyn Hammonds, Chair of the Department of the History of Science and Barbara Gutmann Rosenkrantz Professor of the History of Science, and Professor of African and African American Studies, all at Harvard University; and Diana Kormos-Buchwald, Caltech's Robert M. Abbey Professor of History.

In an effort to understand the broad sentiments of the Caltech community, the CNR invited all alumni, students, postdoctoral scholars, faculty, staff, parents, and trustees to submit, confidentially and anonymously, their thoughts on the naming and recognition matter (see Appendix E). Likewise, the Committee incorporated what conversations across campus produced regarding the impact of current memorializations on our community. Finally, to put this effort into a national context, the CNR also surveyed recent developments across a subset of universities (see Appendix F).

The CNR met weekly between July 29 and December 17, 2020, to study the petitions presented, determine the historical facts involved, and decide the best course of action for Caltech regarding naming and recognition.

Throughout its discussions, the CNR insistently returned to these core commitments: Caltech's mission, its values, its Honor Code, and its aspirations for the future¹. Caltech is committed to truth, to the pursuit of new knowledge, and to the application of this knowledge to solve society's most pressing problems. The Institute is also a community committed to welcoming exceptional scholars, students, and staff from all backgrounds. It is only when Caltech truly becomes the destination of choice for the best and brightest individuals from all walks of life, and when Caltech encourages each of them to bring the full force of their talents and lived experiences into working together on the scientific and technological challenges of their day, that the Institute will be able to fully realize its great potential to tackle and solve the significant problems of the world.

The remainder of this report provides: (1) principles to address current concerns and future naming and recognition practices, (2) a summary of the applicable historical facts, and (3) recommendations regarding not only the memorializations of concern, but also the measures to preserve the histories of these individuals in a manner consistent with Caltech's mission, values, Honor Code, and aspirations for the future.

¹ The mission of the California Institute of Technology is to expand human knowledge and benefit society through research integrated with education. We investigate the most challenging, fundamental problems in science and technology in a singularly collegial, interdisciplinary atmosphere, while educating outstanding students to become creative members of society. The Caltech Honor Code is: "No member of the Caltech community shall take unfair advantage of any other member of the Caltech community."

III. Considerations

A. PRINCIPLES FOR NAMING AND NAME REMOVAL

Names attached to buildings and intangibles at universities are a form of asset. Unlike more familiar assets, names have zero cost and durable lifetimes. The value of names is not tangible, measurable in dollars and cents, but it is nonetheless real. As a form of honoring individuals or principles, names reflect those values we hold today. As reflections of our present values, names convey those values to our own community and to society at large, and they enhance our sense of pride and accomplishment, as well as our reputation.

Because names are significant assets, the Institute needs to understand as fully as possible the character of those whose names grace campus buildings. It is not enough to be an outstanding scientist or engineer, or a successful entrepreneur or professional. Individuals to be memorialized must also possess personal attributes and behavior that align fully with Caltech's mission, its values, its Honor Code, and its aspirations.

To this end, in 2015, the Caltech Board of Trustees approved the [Institute's Naming Policy](#) created by what is now the Office of Advancement and Alumni Relations as part of a suite of donor gift policies. Under this policy, "...the Institute reserves the right to revoke a naming if any of the following conditions occurs." Primarily, if "the donor's character or reputation for honesty, personal integrity, and personal and professional ethics is no longer consistent with the mission of the Institute," or "if the name will bring discredit to the Institute and/or is not consistent with the mission of the Institute."

The CNR here unanimously recommends a set of principles for naming and name removal that it considers to be consistent with the Institute's 2015 Naming Policy. Such principles—attentive to this policy and to the Institute's mission statement, values, Honor Code, and aspirations—inform the judgments and recommendations in this report.

Naming principles

1. **Relevance.** The Institute should honor exemplary individuals and concepts, relevant to its history, to its present mission, values, and Honor Code, and to its future aspirations.
2. **Inclusivity.** Naming should strive to reflect the Institute's aim to forge a diverse and inclusive community of excellence.
3. **Revisability.** While names are meant to be durable, the Institute should always reserve the right to review their appropriateness in the future.

Name removal principles

1. **Exceptionality of circumstance.** A presumption against the removal of a name exists, especially if the individual is central to Institute history. To consider a name removal, the circumstances must be exceptional.

2. *Evidence of significant breach of Caltech's core commitments.* A name should be considered for removal when, even alongside great contributions, evidence comes forth of attributes and behavior within or outside the Institute contrary to Caltech's mission, values, Honor Code, and aspirations. The totality of the person matters: outstanding success in a part of one's life does not outweigh significant ethical breaches.
3. *Consideration of Caltech's future.* If removing a name is deemed to help Caltech's future substantially, and not removing a name is deemed to endanger Caltech's future substantially, the name should be removed. Aspects of the past encoded in a name that threaten the Institute's present and future should be recognized, cited, and addressed to avert damage to Caltech's community and to its reputation.
4. *Historical transparency.* The removal of a name is not intended to erase history. It should simultaneously create opportunities for education and advancement for the Caltech community and the public. The Institute should document and communicate both the reasons an individual warranted memorialization and the reasons the memorial was revoked. Respect for an individual's work, disappointment with their beliefs or actions, and recognition of the harm imparted can all exist simultaneously in collective memory.

Furthermore, the Committee notes that name removal is not recommended as an option when the honoree is found only to be earnestly incorrect about their science. Caltech must continue to be a place where hypotheses and ideas are fully explored, and where even theories that ultimately are proved wrong have passionate, tireless advocates determined to question dominant paradigms.

B. CALTECH HISTORICAL FIGURES ASSOCIATED WITH EUGENICS AND THE HUMAN BETTERMENT FOUNDATION

Eugenics The CNR's consideration of eugenics and the role of Caltech figures in the HBF has followed the naming principles just mentioned, always with a view to Caltech's core commitments and to its efforts to forge a diverse, inclusive community of excellence. It is important to note that Caltech itself was never involved in eugenics. Rather, the CNR investigated the individual involvements of Caltech figures in eugenics and the HBF.²

Eugenics was a movement generally concerned with controlling human heredity, not least of all, by encouraging the reproduction of members of society deemed to contribute desirable traits to the human species and, in its most pernicious form, by actively preventing the reproduction of members of society deemed to contribute undesirable traits to the species. Fueled by social biases against various populations, eugenics drew justification from scientifically flawed theories regarding the biological inheritance of human capacities and behavioral traits. In its early years, it was embraced by prominent biologists, anthropologists, psychologists, mental health professionals, and physicians. Eugenics even formed part of the curriculum in a number of colleges and universities.

The modality of eugenics of particular concern to the CNR was aimed at preventing, by means of sterilization, the reproduction of members of society deemed to contribute undesirable traits to the species. While eugenic sterilization would enjoy legal protection in the United States for several decades, a number of American organizations and individuals were already denouncing it as immoral in the early the 1930s.

The HBF was founded in 1928 by Ezra S. Gosney, a wealthy businessman whose success in the citrus industry had bolstered his interest in "better breeding," and by Paul Popenoe, a former student of David Starr Jordan at Stanford University. The HBF was an education and public policy organization for "the control of human heredity for individual and social benefit; the encouragement of society's better sort to reproduce more and of the worse sort to reproduce less; the protection of 'racial' integrity; the disciplining of sexual behavior, especially of women; the management of maternal health, the sound nurturing of children, and the discouragement of unhealthy habits of consumption, particularly alcohol."³ The HBF was primarily concerned with the component of eugenics that aimed, through sterilization, to prevent the reproduction of individuals whom proponents deemed to be "feeble-minded." In the United States, "feeble-minded" or unfit meant individuals who were identified as "mentally deficient" through IQ tests and simply through behavioral profiling. "Feeble-mindedness" was believed to manifest itself in an individual's propensity to criminality, prostitution, illegitimacy, alcoholism, and other socially deviant behaviors, and even in their alleged predisposition to remain in poverty. Eugenicians held all of these traits, including poverty, to be the products of biological heredity.

² In addition to the sources cited in the Bibliography, the CNR has compiled a list of sources consulted throughout its investigation. [Excel sheet is available online \(CNR Sources\)](#).

³ HBF pamphlet "Sterilization Today."

In various parts of the country, and over multiple decades, eugenicists targeted for sterilization populations that were believed to generate the greatest numbers of unfit individuals. The predominant victims of eugenic sterilization policies were people of Mexican origin; people of Asian origin; Eastern and Southern European immigrants, including so-called Hebraics (Jews); and Blacks, but also significant numbers of the poor labeled “white trash.” What made members of all these groups the object of eugenicists’ attention was that they were likely un- or ill-educated and at the lower end of income distribution.

Eugenicists wanted to stop the reproduction of the unfit in these populations for economic reasons. These racially and ethnically diverse populations were believed to be responsible for increased costs to taxpayers in the support of public healthcare, imprisonment, and state incarceration of those unable to otherwise care for themselves. Eugenicists were concerned with the “differential birth rate” posed by these populations, which meant the tendency of lower-income groups to reproduce at higher rates than middle- and upper-middle-class groups. Eugenic sterilization was, in effect, one of the instruments wielded against America’s disadvantaged.

American eugenicists also sought to limit the number of unfit people in American society by restricting immigration from racially suspect regions of the world. The United States Congress, with aid from eugenicists, began restricting immigration in 1916 and, in the Immigration Restriction Act of 1924, severely limited entry from Eastern and Southern Europe.

In the 1920s and 1930s, the tide in the scientific community began to turn against eugenics. Many geneticists publicly declared their disapproval of what they saw as scientific racism, including such former supporters of the eugenics movement as William E. Castle, Edward M. East, Herbert S. Jennings, Vernon Kellogg, Clarence McClung, T. H. Morgan (Nobel laureate and Caltech professor), William H. Welch, and E. G. Conklin.⁴ In 1925, in his book *Evolution and Genetics*, Morgan criticized eugenics for its interpretation of “feeble-mindedness” and its insistence on the genetic basis for such characterological traits.⁵ In 1931, geneticist Lancelot Hogben declared that “all the verifiable data eugenicists had accumulated on the inheritance of mental traits could ‘be written on the back of a postage stamp.’”⁶

One year later, geneticists demonstrated a much-reduced interest and confidence in eugenics as a scientific endeavor: only 73 people attended the Third International Congress of Eugenics (1932), a quarter of the attendance at the previous congress held in 1921. Also in 1932, future Nobel laureate H.J. Muller denounced eugenics as an “unrealistic, ineffective, and anachronistic pseudoscience” in his paper “The Dominance of Economics Over Eugenics.”⁷ By 1935, two years before Millikan joined the HBF Board of Trustees, many geneticists were alarmed by the course of events in Germany and the admiration that prominent American

⁴ Jonathan Peter Spiro and William Wynn Westcott. (2015). *Defending the Master Race: Conservation, Eugenics, and the Legacy of Madison Grant*.

⁵ T. H. Morgan. (1925). *Evolution and Genetics* (2nd ed.). Princeton University Press.

⁶ Spiro and Westcott, *Defending the Master Race*.

⁷ Spiro and Westcott, *Defending the Master Race*.

eugenicists like the HBF's Paul Popenoe held for the Third Reich's sterilization policies. These scientists publicly denounced the eugenics movement.⁸

The Human Betterment Foundation As described in its founding documents, the HBF was incorporated "... with twenty-five charter members eminent in a wide range of professional and business activities." The members then elected "a Board of Trustees who control and direct the work." The list of HBF charter members and trustees, excerpted below from HBF founding documents, includes banker Henry M. Robinson, Pasadena philanthropist Albert B. Ruddock, and Caltech Professor William B. Munro:

"The incorporators of this foundation, of which Mr. Gosney is president, are as follows (members of the Board of Trustees being marked with an asterisk):"

- *E. S. Gosney, Pasadena
- ***Henry M. Robinson, Banker, LA**
- *George Dock, M.D., Pasadena
- Herbert M. Evans, Dir. Exper. Bio, UC Berkeley
- Samuel J. Holmes, Prof. of Zoology, UC Berkeley
- Rabbi Rudolph I. Coffee, Oakland, Calif.
- Lewis M. Terman, Prof. of Psychology, Stanford
- David Starr Jordan, Chancellor Emeritus, Stanford
- *C. M. Goethe, Philanthropist, Sacramento
- Justin Miller, Dean, College of Law, Duke Univ.
- Charles H. Prisk, Publisher, Pasadena Star-News,
- Rev. Robert Freeman, Pastor, 1st Presby, Pasadena
- Rev. Merle N. Smith, Pastor, 1st Methodist, Pasadena
- ***A. B. Ruddock, Philanthropist, Pasadena**
- ***William B. Munro, Prof., Calif. Inst. of Technology**
- John Vruwink, M.D., LA
- Mrs. E. S. Gosney, Pasadena
- *Otis H. Castle, Attorney, LA
- Mrs. Otis H. Castle
- *Joe G. Crick, Horticulturist, Pasadena
- Mrs. Joe G. Crick
- A. D. Shamel, Physiologist, U.S. Dep. of Ag.
- Oscar Ford, former Mayor of Riverside, Calif.
- Paul McBride Perigard, Prof. French Civ, UCLA
- *Paul Popenoe, Dir. Inst. of Family Relations, LA
- H. B. von KleinSmid, President, USC

⁸ Kenneth M. Ludmerer. (Autumn, 1969). American Geneticists and the Eugenics Movement: 1905-1935. *Journal of the History of Biology*, Vol. 2, No. 2, 337-362.

The HBF incorporating documents also stated as the organization's main goal the investigation and promotion of "race betterment by eugenic sterilization:"

- "This organization is not designed to take up original scientific research work, but rather to investigate the results and possibilities for human betterment by a safe, conservative application of the discoveries made by science, and to give this information to the public."
- "Its first major problem is to take over the investigation of the possibilities of race betterment by eugenic sterilization, heretofore personally directed by E. S. Gosney of Pasadena, California, and to publish the results. In a few years the public will be familiar with the facts and that subject may be dropped."
- "The officers and trustees will be glad to confer with anyone who would like to aid in the work above outlined or to make use of the opportunities offered by this organization to realize his own ideals in the promotion of race betterment."

Caltech past leaders connected to the HBF Three of the nine founding HBF Trustees—William B. Munro, Henry M. Robinson, and Albert B. Ruddock—also had prominent roles in the founding and shaping of the modern Caltech. What follows highlights the roles that these individuals—and Harry Chandler, who joined the HBF after its founding—had in the shaping of Southern California and Caltech. Embedded in Institute history is Harry Chandler's role in recruiting Millikan to lead and establish Caltech as an eminent university devoted to science and technology, and Robinson's dual role in persuading Munro to join Caltech full-time and in moving the Board to appoint him. The individuals shaping what would become one of the most eminent universities in the nation simultaneously established and directed the HBF for the express purpose of promoting what it called "race betterment by eugenic sterilization."

Millikan replaced Robinson on the HBF Board following Robinson's death in 1937. It has been alleged that Millikan led the HBF. He did not. Nor did he shape its policies.⁹ Rather, Millikan, who had long been famous in the United States and abroad for his scientific endeavors, lent his prestige—and, by extension, Caltech's—to the HBF, when he joined the HBF's Board of Trustees while Chair of Caltech's Executive Council. It is important to note that a person of Millikan's stature can never truly separate their professional identity from their civic engagements.

With a trustee of Millikan's scientific stature on its Board, the HBF likely gleaned renewed legitimacy for its educational program. The HBF was at this time focused on educating the public about the "humanitarian" benefits of sterilizing the "feeble-minded." It warned against the burden on taxation posed by the higher birth rate of low-income populations who were seen to be committing the bulk of society's unfit to the care of the public health, social service, and legal systems. By 1938, the HBF calculated that the number of "mentally deficient" who qualified for sterilization in the United States—a category defined as "anyone with less than 70 percent of average intelligence for his age"—was on the order of 6.5 million people.¹⁰

⁹ HBF pamphlet "Sterilization Today."

¹⁰ HBF pamphlet "Sterilization Today."

It should be emphasized that Millikan joined the HBF at a time when the tide had long been turning against eugenics within the scientific establishment. He failed to perform the due diligence one might have expected him to exercise as a responsible scientist to ensure the HBF had its science right. He was derelict in this duty, lending his name and reputation, along with Caltech's, to an educational program that promulgated false scientific claims with the morally reprehensible consequence of levying high and irreversible human cost intentionally and disproportionately against society's most vulnerable individuals and against minority groups already marginalized. Moreover, Millikan was fully aware and explicitly supportive of the HBF's educational goals in this last phase of its history. In a letter he wrote to HBF founder and president Gosney in 1940, Millikan stated: "Dear Mr. Gosney, I thank you very much for your letter of December 8th, and am quite in accord with your estimates as to the relative values of the work of the Human Betterment Foundation and many other of our philanthropic enterprises. I think you are doing a magnificent job, and I am very glad to have any little part in it that I can."¹¹

Millikan's name and likeness have been honored at Caltech because of his accomplishments in physics, because his determination helped to build the modern Caltech, because of his relations with industry, and because of his service to our country in both world wars. However, the question before the Committee is whether it would be appropriate and beneficial for Caltech now and in the future to continue to memorialize Millikan as a prominent, perhaps the most prominent, presence on its campus, and as its public face. In the past, foregrounding Millikan was an asset; it conveyed the fact that the Institute embodied the pursuit of high distinction in scientific and engineering research and education. But now and in the future, Caltech also has to foreground the fact that the Institute stands for values of decency and tolerance, and that it aims in that vein to attract faculty, students, and staff from all backgrounds, many of whom represent the very groups that were disproportionately sterilized by the California eugenics program that the HBF and Millikan supported. Seen from this perspective, Millikan's life and works come to stand in a different light. No longer only the great scientist and institution builder, Millikan is also a public figure whose stances on gender, race, and ethnicity run contrary to Caltech's core commitments today.

Robert Andrews Millikan Millikan was born in 1868, the second son of a Congregationalist minister and a former dean of women at Olivet College, Michigan. By 1893, he had earned a bachelor's and a master's degree from Oberlin College, Ohio. In 1895 Millikan earned a Ph.D. from Columbia University and immediately left for Germany to spend one year at the Universities of Berlin and Göttingen.

In 1896, Millikan took a position as an assistant at the newly established Ryerson Laboratory at the University of Chicago. Almost a decade into his career at the University of Chicago, Millikan began work on his oil drop experiment, which would provide the "first direct and compelling measurement of the electric charge of a single electron." In 1910, Millikan was appointed Professor and turned some of his attention to preparing textbooks and simplifying

¹¹ [Miscellaneous Correspondence]. *Section IV: Correspondence, Human Betterment Foundation Records*, Box 8, Folder 13, Caltech Archives, Pasadena, CA, United States.

the teaching of physics. Millikan remained on the faculty at the University of Chicago until 1921 when he moved to Caltech. In 1923, Millikan received the Nobel Prize in Physics for his work “on the elementary charge of electricity and on the photoelectric effect.”

Throughout his career, and often alongside his academic work, Millikan contributed significantly to the development of a national research infrastructure. At the time of World War I, Millikan, already a renowned physicist, was eager to contribute to the war effort and mobilize the nation’s scientific resources. He accepted the role of Vice Chair of the National Research Council (NRC) and made significant contributions to the development of anti-submarine and meteorological devices. Later, George Ellery Hale, as permanent NRC Chair, asked Millikan to serve as Executive Officer and Director of Research for the NRC.

In February 1917, Millikan transferred his base of operations from Chicago to Washington, D.C., and spent the remainder of the war mobilizing civilian scientists to collaborate with military agencies. Millikan was also among the first academic physicists to seek partnerships with industry, and he advised many of his students to pursue careers in industry. Millikan himself became a consultant to Western Electric’s research department to advise on vacuum-tube problems.

Against significant odds and structural barriers, Millikan created significant national scientific infrastructure that survives to present times. The NRC, a private organization like its parent the **National Academy of Sciences** (NAS), had no federal appropriation; it had limited private resources and no authority in governmental affairs. It was during the Great War that Millikan learned how to engage a wide variety of people, military and civilian, in the financial and political support of science. This skill would prove to be very useful during his tenure at Caltech.

With the end of World War I, Millikan stayed in Washington until October 1919 to help permanently establish the NRC. Millikan also planned a new building for the NRC and the NAS. This was made possible by a \$5 million gift from the Carnegie Corporation in 1918. Millikan personally raised a substantial share of the matching gift required by Carnegie to purchase the land for the building.¹²

At the same time, and in response to a request from George E. Vincent, president of The Rockefeller Foundation, Millikan proposed the establishment of what would become the National Research Council Fellowships as a step to strengthen science in the United States. Millikan said later that this program was “the most effective agency in the scientific development of American life and civilization that has appeared . . . in my life-time.” Even today, few would disagree.

Millikan’s objective with the NRC Fellowships, however, was to decentralize science. This was contrary to a strongly supported effort to create one national institute of science. Millikan believed that only universities could become centers of research and that the NRC Fellows Program would provide seed funding for such a development. (By 1940, many of the

¹² <http://www.nasonline.org/publications/biographical-memoirs/memoir-pdfs/millikan-robert.pdf>

leading American academics in physics and chemistry would be former NRC Fellows, realizing Millikan's dream.) This evolution aligns with a personal shift Millikan had experienced during his time in Washington. Millikan witnessed two cultures, scientific and civil, merge in an attempt to form a unified scientific and social effort to establish a public consensus for national science. A decade later, in the 1930s, Millikan was clear in his beliefs that the general public was not educable, could not comprehend the scientific method, and could not inform national scientific policy.

It was Millikan's wartime efforts in the NRC that impressed astrophysicist George E. Hale and chemist Arthur A. Noyes, who were setting up a new education and research institution in Pasadena. In 1921, at their urging, Millikan relocated to lead the new and extremely well-financed California Institute of Technology and to direct its physics laboratory. Millikan's fundraising prowess and capital construction experience, cultivated in Washington during and after World War I, complemented the skills his founding partners Hale and Noyes brought to the new school. He also brought great prestige to Caltech by winning the Institute's first Nobel Prize.

Assessing Millikan today It is difficult to balance the failings against the contributions of historical figures such as Millikan and the other individuals of concern in this report. This is the difficulty of reckoning with history in all of its complexity. Reckoning with a complex history means, in part, accounting for all that is good and bad, beneficial and detrimental, in our past. It is this complexity that allows us to make informed decisions about what we value in the present and what we wish to memorialize from our past. Reckoning with the past is an exercise in historical investigation and institutional introspection. But choosing whom we wish to honor and memorialize is all about who we are today and what we aspire to be tomorrow as an institution and as a community.

The CNR provides below a timeline that delineates numerous aspects of Millikan's life and times. This timeline displays critical world and national events, scientific developments, and significant aspects of Millikan's whole life: his contributions as a scientist, his role as Institute builder, his connections to eugenics and the HBF, and evidence of his stances on gender, race, and ethnicity.

Much of the evidence here presents attributes and behavior that the CNR, as it reckoned with the complex history offered by Millikan, found to be contrary to Caltech's mission, values, Honor Code, and aspirations today.

- **1909:** California passed and enacted the state's first sterilization law, which specifically targeted people institutionalized for "criminal behavior" or "mental disabilities."
- **1913:** Edwin G. Conklin explained the "scientific inadequacy of eugenics." His position on the subject was widely known.¹³
- **ca.1915:** Thomas H. Morgan had "resigned from the Committee on Animal Breeding of the American Breeders' Association (on the grounds that it was claiming more than it

¹³ Kathy J. Cooke. (Summer, 2002). Duty or Dream? Edwin G. Conklin's Critique of Eugenics and Support for American Individualism. *Journal of the History of Biology*, Vol. 35, No. 2, 365-384.
https://www.jstor.org/stable/4331737?seq=14#metadata_info_tab_contents.

could scientifically justify) but he did so privately in a letter to Davenport.”¹⁴ Morgan had previously helped found the Eugenics Record Office (ERO) in 1910 at Cold Spring Harbor, New York.

- **1921:** The University of Chicago awarded a Ph.D. to Georgiana Simpson (U. Chicago, AB 1911), the first Black woman to receive a Ph.D. in the United States.
- **1921:** Millikan, after 25 years at the University of Chicago—a university that from its inception was open to all individuals, regardless of gender, race, or creed—left to take his new role as Director of the Norman Bridge Laboratory of Physics at Caltech; he was also made Chairman of the Executive Council of Caltech.
- **1922:** Once in Pasadena, Millikan joined the Westside Congregational Church and was elected to its Board. He also served as the minister of the Neighborhood Church.¹⁵ [The church, now known as the Neighborhood Unitarian Universalist Church, decided in 2019 to remove Millikan’s name from a room named after him, citing in part his affiliation with eugenics and the HBF.¹⁶]
- **1923:** Millikan received the Nobel Prize in Physics, providing Caltech with its first Nobel laureate.
- **1924:** During his tenure as Caltech’s chairman, Millikan wrote an article regarding how Caltech might help address the need to transmit energy to population centers, touting California’s racial composition: “California is today, as was England two hundred years ago, the westernmost outpost of Nordic civilization. The problem of the relations of our race to the Asiatic races is the big race problem of the future. California must inevitably contribute largely to the solution of that problem.” He concludes: “The present rapid growth of Southern California, the influx into it of a population which is twice as largely Anglo-Saxon as that existing in New York, Chicago, or any other great centers of this country... all combine to make this a time and this a place of exceptional opportunity.”¹⁷
- **1925:** In his book *Evolution and Genetics*, Morgan criticized eugenics for its interpretation of “feeble-mindedness” and its insistence on the genetic basis for such characterological traits.
- **1925:** Millikan spoke of Black people in disparaging language, writing to his family from a Chicago railroad station that he was “surrounded with Coons and many other kinds of colored elegance.”¹⁸

¹⁴ Garland E. Allen. (2011). Eugenics and Modern Biology: Critiques of Eugenics, 1910-1945. *Biology Faculty Publications & Presentations*. 5. https://openscholarship.wustl.edu/bio_facpubs/5

¹⁵ Jerry Frazee. (First posted June 2007; corrections: strike out and two paragraphs added May 2011). Robert Millikan. *Dictionary of Unitarian and Universalist Biography*. Retrieved from <https://uudb.org/articles/robertmillikan.html>

¹⁶ Social Justice and Inclusion Ministry. (October 2019). *Neighborhood Nourished*, Vol. 3. <https://static1.squarespace.com/static/5d7aa21653c24f244e40adc7/t/5db9cf567f3b0d1afde301f2/1572458345499/OCTOBER+NOURISHED+FINAL.pdf#page=11>

¹⁷ Robert A. Millikan. (April 11, 1924). Some Exceptional Opportunities in Southern California. Caltech Archives (Institute Official Papers file, box 27, folder 9, Robert A. Millikan Papers, 1 and 5), Pasadena, CA, United States.

¹⁸ Daniel J. Kevles. (September 10, 2020; Edited and Corrected, 9/16/20; 9/22/20). Robert A. Millikan: Final Report for the [Caltech] Naming and Recognition Committee.

- **1926:** While traveling through the Panama Canal and in Arequipa, Peru, Millikan wrote a letter to his wife Greta in which he “credited the Americans there for shouldering ‘the whiteman’s burden’ by cleaning up ‘a hell hole of disease and filth’.... He found himself disgusted by the sight of ‘the filthiest Indians you ever dreamed of,’ their degeneracy evident in the unwillingness of the women ‘to make themselves attractive.’”¹⁹
- **ca.1930:** After Caltech admitted Grant Venerable (BS 1932), the Institute’s first Black student, Millikan, who in a number of documents spoke of Blacks in derogatory terms, “took to the Board of Trustees the issue of whether a ‘colored’ student should be permitted to live in one of the student residences.”²⁰ In the end, Millikan offered Venerable admission to the houses.
- **1931:** Geneticist Lancelot Hogben declared that “all the verifiable data eugenicists had accumulated on the inheritance of mental traits could ‘be written on the back of a postage stamp.’”²¹
- **1932:** Geneticists showed a much-reduced interest and confidence in eugenics as a scientific endeavor. Only 73 people attended the Third International Congress of Eugenics that year, a quarter of the attendance at the previous congress held in 1921.
- **1932:** The geneticist and future Nobel laureate H. J. Muller denounced eugenics as “unrealistic, ineffective, and anachronistic pseudoscience” in his paper, “The Dominance of Economics Over Eugenics.”
- **ca.1935:** Many geneticists were alarmed by the course of events in Germany and the admiration that prominent American eugenicists like the HBF’s Paul Popenoe held for the Third Reich’s sterilization policies. These scientists publicly denounced the eugenics movement.²²
- **1935:** The HBF advanced its first draft bill (1607) in California that would expand sterilization and establish a state eugenics board.²³

¹⁹ Robert A. Millikan. (August 30, 1926). [Robert A to Greta B Millikan, 1925-1927]. Caltech Archives (The Robert Andrews Millikan Collection, Series VI: Millikan Family Correspondence, Folder 50.7), Pasadena, CA, United States.

²⁰ Book Fund Honors First Black Student. (April 1989). *Caltech News*, Vol. 23, No. 2. https://caltechcampuspubs.library.caltech.edu/2438/1/1989_04_23_02.pdf#page=6. In his report, “Robert A. Millikan: Final Report for the Naming and Recognition Committee,” Daniel J. Kevles, writes that “Chwe’s petition seems to charge Millikan with prejudice against people of color simply because he asked the trustees at one point whether it would be alright to allow a colored student to live in the student houses. This says nothing one way or the other about racial prejudice on Millikan’s part. The records in the Caltech Archives may cast further light on this request, but for one thing, his asking does not mean ipso facto that he opposed the allowance. For another, he may have wanted to say yes to the proposal but had been cautioned against doing so on grounds that at least some of the students or trustees would object. Whatever the case, he did offer the student admission to the houses.”

²¹ Spiro and Westcott, *Defending the Master Race*.

²² Kenneth M. Ludmerer. (Autumn, 1969). American Geneticists and the Eugenics Movement: 1905-1935. *Journal of the History of Biology*, Vol. 2, No. 2, 337-362.

²³ Jill Briggs. (2013-07-10). Human Betterment Foundation (1928-1942). *Embryo Project Encyclopedia*. Arizona State University. <https://embryo.asu.edu/pages/human-betterment-foundation-1928-1942>

- **1936:** In a letter, Millikan advised Duke University President W.P. Few not to hire a female physics professor (Hertha Sponer): “Women have done altogether outstanding work and are now in the front rank of scientists in the fields of biology and somewhat in the fields of chemistry and even astronomy, but we have developed in this country as yet no outstanding women physicists. In Europe Fraülein [sic] Meitner of Berlin and Madam Curie of Paris are in the front rank of the world’s recognized physicists. I should, therefore, expect to go farther in influence and get more for my expenditure if in introducing young blood into a department of physics I picked one or two of the most outstanding younger men, rather than if I filled one of my openings with a woman. I might change this opinion if I knew of other women who had the accomplishments and attained to the eminence of Fraülein [sic] Meitner.” Millikan said that he knew of no such promising women physicists in the American pipeline going back a decade, and he warned Few that his physics department’s reputation would suffer if it hired a woman simply because she was a woman rather than “solely because of their merit as physicists.” He did not comment on Sponer’s merits as a physicist, leaving the impression that he did not hold her in high regard, scientifically.
- **1937:** The HBF advanced its second draft bill (2589) in California that would expand sterilization and establish a state eugenics board.²⁴
- **1937:** Millikan joined the HBF, replacing Henry M. Robinson on the Board of Trustees. By this time, many geneticists—including Nobel laureate and Caltech professor Thomas H. Morgan²⁵—had already denounced eugenics for its lack of scientific merit.
- **1938:** The HBF published a eugenics pamphlet entitled “Human Sterilization Today,” touting the benefits of “compulsory sterilization” of “12,000 insane and feeble-minded patients” in California. In addition to Millikan, the pamphlet lists these Caltech affiliates and members and/or trustees: Harry Chandler, William B. Munro, Henry M. Robinson, and Albert B. Ruddock.²⁶
- **1939:** By this year, geneticists had for two decades “publicly declared their disapproval of scientific racism, [including] such former stalwarts of the eugenics movement as William E. Castle, Edward M. East, Herbert S. Jennings, Vernon Kellogg, Clarence McClung, T.H. Morgan, William H. Welch, and E. G. Conklin.”²⁷
- **1939 (Sept):** Adolf Hitler invaded Poland, beginning World War II.
- **1940 (Dec):** Millikan wrote to Ezra S. Gosney in support of the HBF’s mission: “Dear Mr. Gosney, I thank you very much for your letter of December 8th, and am quite in accord with your estimates as to the relative values of the work of the Human Betterment Foundation and many other of our philanthropic enterprises. I think you are doing a magnificent job, and I am very glad to have any little part in it that I can.”²⁸

²⁴ Jill Briggs, Human Betterment Foundation (1928-1942).

²⁵ Thomas H. Morgan was appointed professor of biology and director for the G. Kerckhoff Laboratories at Caltech in 1928. He remained in these positions until 1945.

²⁶ “Human Sterilization Today.” (1938). Human Betterment Foundation. Pasadena.

²⁷ Spiro and Westcott, *Defending the Master Race*.

²⁸ [Miscellaneous Correspondence]. Section IV: *Correspondence, Human Betterment Foundation Records*, Box 8, Folder 13, Caltech Archives, Pasadena, CA, United States.

- **1943:** Millikan told counsel for an Assembly committee investigating the dangers of treason that he favored dispersal throughout the country of California’s Japanese at the end of the war.²⁹
- **ca.1945:** Millikan turned over to military intelligence the names and known addresses of all students of Japanese background who had studied at Caltech between 1929 and 1944.³⁰
- **1951:** Millikan wrote to his wife: “More than half of the population in this state [Mississippi] is made up of negroes—a very serious situation. For it means that under universal suffrage they could control the state now—an unthinkable disaster in view of the sort of people they now are. This is one vital reason why the race problem should be left to the states and their local communities and kept out of national politics.”³¹ Around this time, he also “considered allowing Blacks to vote in the South as dangerous as the ending of British rule in India.”³²
- **1953:** Millikan died in San Marino, California.

The next section provides details on some of the HBF trustees and members who also shaped the early history of Caltech.

Harry Chandler Chandler was the longtime publisher of the *Los Angeles Times*. From 1935 to 1941, under Chandler’s management, the *Los Angeles Times* published the HBF-sponsored column “Social Eugenics.” In early October 2020, the *Los Angeles Times* editorial board issued an apology describing the paper as “deeply rooted in white supremacy” for at least its first 80 years.

Chandler was also an active developer of Los Angeles whose projects were often plagued by controversy. He eventually became the largest real estate owner in the United States. Chandler helped establish Caltech, the Hollywood Bowl, and Douglas Aircraft. He was a member of the Caltech Board from 1920 until 1944, and a member of the HBF. Chandler was one of the individuals instrumental in recruiting Millikan to Caltech, and he also helped organize The Associates of the California Institute of Technology.

William B. Munro Munro was a professor of history, government, and political science at Williams College, Harvard University, and Caltech. He wrote widely used textbooks on United States government and politics, and he served as President of the American Political Science Association and as President of the American Association of University Professors.

A founding member and original Trustee of the HBF, Munro was devoting only half of his time (in the late 1920s) to his work at Caltech. Munro helped to develop Caltech’s program in the

²⁹ Peter Sachs Collopy. (2020). *Caltech and Eugenic Sterilization: Science and Power Entwined*. Report to Caltech’s Naming and Recognition.

³⁰ Peter Sachs Collopy. *Caltech and Eugenic Sterilization: Science and Power Entwined*.

³¹ “Sitting Down with Uncomfortable Things in the Caltech Archives.” (October 2020 event presentation). Caltech Archives. <https://www.youtube.com/watch?v=iHF6JEOLFVU&feature=youtu.be>

³² Daniel Kevles. (2020). *Robert A. Millikan: Final Report for the Naming and Recognition Committee*.

humanities and social sciences and, in 1928, he helped secure endowment for, and establish the construction of, Dabney Hall, a building devoted exclusively to the study of the humanities. It was at this time, in 1928, that Munro became a founding member and original Trustee of the HBF.

Impressed by Munro's dedication and significant contributions to the Institute, Caltech Trustee Henry M. Robinson initiated negotiations for Munro to become a regular, fulltime member of the Caltech faculty. In 1928, Munro joined the faculty and became a member of the Institute Executive Council (the Institute governing body chaired by Millikan). On occasion of the dedication of Munro's formal portrait in Dabney Hall, Millikan said: "... as a teacher, scholar, writer, financier, businessman, promoter, wise counselor, able administrator, and great humanitarian, William B. Munro rates as one of the most important builders of the California Institute of Technology...."

Henry M. Robinson Robinson was a banker and financier responsible for convincing the Huntington family to establish the Huntington Library and Gardens in Pasadena, and was one of the 100 men who established The Associates of the California Institute of Technology. Robinson was also one of the original HBF Trustees. In 1907, Robinson joined the Board of Trustees of Throop Polytechnic Institute (an earlier incarnation of the Institute) and remained a Trustee until 1937. He was a member of Millikan's Executive Council, helped to endow the Palomar Observatory operations and negotiated with Southern California Edison to build the High Voltage Laboratory at Caltech.

In a 1921 address delivered before the California Bankers Association, Robinson stated his views about the threat he believed Asians posed to whites in the Western hemisphere:

"There is, however, a fairly general agreement among students of ethnology that in the not too distant future the Asiatic races of color other than ours will in some degree of combinations assume an attitude of defense, and possibly, of offense, against combinations of the white race. While this not even a part of our immediate problem, it does emphasize the need for uniformity of thought and action among Occidental nations, since any internecine difficulties between subdivisions of the white race tend not only to weaken its powers of resistance but ultimately to threaten its control." ("Our Foreign Trade Problems: An address delivered before the California Bankers Association," Coast Banker, Vol. 27, July 1921)

Albert B. Ruddock Ruddock was a businessman and diplomat who served as a trustee for many prominent organizations in the region, including the Board of Occidental College, the LA County Museum, and the Southern California Symphony Association. Ruddock began his long affiliation with Caltech in 1926 as one of the 100 men who founded The Associates of the California Institute of Technology. He joined the Caltech Board of Trustees in 1938, ten years after joining the HBF Board. Ruddock remained a Caltech Trustee until 1970, having served as Chair of the Caltech Board of Trustees from 1954 to 1961. In 1969 Ruddock was elected Chairman Emeritus of the Caltech Board of Trustees, the first person to hold that position at the Institute.

Thomas J. Watson Sr.

Although Thomas J. Watson Sr. was not a member of the HBF, his memorialization on campus was brought to the Institute's attention because of IBM's ties to Nazi Germany. Peter Sachs Collopy, Caltech Archivist, provided the committee with its best information on the controversy surrounding Watson, who was an IBM manager, director, and principal from 1914 to 1956. During this period, IBM rose to become the modern computing colossus it is today. Collopy's report on Thomas J. Watson Sr. is presented in full in Appendix G.

C. COMMUNITY INPUT

The committee solicited feedback from members of the Caltech community via an online community input form and garnered 1,517 comments from community members (staff, faculty, undergraduate and graduate students, postdoctoral scholars, trustees, parents, and alumni). The form was designed for anonymous input allowing 300 words, although some individuals chose to include their name and/or their affiliation with Caltech.

While no summary can do justice to the thoughtful, reasoned, and sometimes deeply personal and impassioned perspectives provided to the CNR, recurring themes emerged from our community's input, which we describe below.

In aggregate, the community's feedback falls into three categories:

- approximately 45 percent support name removal,
- approximately 37 percent oppose name removal, and
- approximately 18 percent report no definitive opinion on name removal.

In many instances, the arguments that distinguish whether an individual supports or opposes name removal center on (1) how the respondent identifies with the individual or locations in question; and (2) the fact that, for the respondent, memorialization represents not only Caltech's past, but also its present and future.

Perspective of those who support name removal Overwhelmingly, the arguments offered by those in support of name removal are based on a belief that memorializations should represent the overall community and the Institute's values today. It is argued that the views and beliefs held by the individuals in question are not representative of current Institute values and what it aspires to be, and thus should not be memorialized as prominently as they are.

The members of the community who strongly support name removal also strongly support the notion that one cannot separate the scientist from the person, and that, in trying to do so, one communicates that any action or behavior, regardless of how reprehensible it might be, can be overlooked for the sake of exceptional science, or in exchange for a fee. Respondents in support of name removal argue that by memorializing individuals who knowingly advanced eugenics, a science that Caltech has denounced in the past, the Institute continues to endorse and validate its tenets and biases.

Individuals in favor of name removal expressed feelings of oppression, discrimination, and a general sense of not being able to belong to the Caltech community, or actively recruit others to join this community, if racist views (even those of the past) are celebrated.

For those in support of name removal, there is no call to erase the past, but rather a call to stop honoring historic wrongdoings. Many individuals emphasize that name removal is not an attempt to forget about Millikan, Chandler, Gosney, Munro, Robinson, Ruddock, or Watson. Instead those in support of name removal call for an examination and accounting of Caltech's past via Institute archives, books, courses, exhibits, and its website so that our

community and the public have an opportunity to learn and understand fully the complexity of the individuals in question and their contributions, good and bad, to Caltech and to society.

Within these comments, there is also a strong undertone of urgency and a belief that the Institute has already waited too long to take corrective action. The decision to remove names, many individuals express, would be an act of good faith and a positive step toward building a more diverse and inclusive community, but they emphasize that this action alone is not enough.

“I believe the path with greatest integrity and wisdom is to change the names of buildings honoring individuals whose mores are now generally regarded to be orthogonal to Caltech’s values, regardless of whether they were more common/accepted in their day. There is no virtue in retaining a name that engenders deep bitterness and embarrassment to many Caltech community members just for the sake of historical continuity. Instead, to acknowledge the history accurately, an exhibit should be made within the building telling the story of the building’s original name and why it was changed. This would achieve the more nuanced goal of not erasing history, but rather giving a full account so both the good and the bad were known. Moreover, renaming select buildings would allow for overlooked Caltech heroes to finally be given the attention they deserve, serving as a mechanism for institutional renewal and instilling a sense of hope and progress in our next generation of scholars. I see no downside here that is not outweighed by the upside.”

“The lionization of historical eugenicists by Caltech is damaging to both the institution itself and the students it purports to serve. Removing memorials to men who openly touted racist ideologies should not be in question. This is not about erasing history, it is about reexamining it and understanding that these men’s bigoted legacies are not more deserving of empathy than the living men and women at Caltech.”

“The POC faculty and students of Caltech, who are forced to hear the names of people who took an active part of their oppression every day, deserve to work and live in a community whose actions match the values they preach. If Caltech is as committed to the people under its care as it claims, if it is as committed to the diversity of its campus as it claims, and if it is as committed to academic rigor as it claims, then removing these memorials is the least it can do.”

“Caltech is driving away brilliant and talented men and women who see these names and see the lack of diversity on campus and decide to take their skills elsewhere.”

A perspective reinforced throughout the comments that support name removal is that the Institute’s continued honoring of its founders is a choice, intentional or not, to ignore the feelings and perspective of its current community and future scientific leaders. In many instances, individuals who support name removal note that there are other great, exceptional scientists whose beliefs and values have continued to represent Caltech’s values today and who could be identified and celebrated instead. Some respondents also suggest that rather than naming buildings after individuals, the Institute should consider scientific principles or theories instead.

"If Caltech is truly committed to creating an inclusive, equitable and diverse environment, we must rename all Caltech buildings currently honoring eugenicists or other Caltech affiliates with documented racist views and actions. Replacing their names does not diminish their scientific achievements. Caltech is brimming with highly accomplished and decorated scientists who are also morally aligned with our core values and could serve as beacons of our commitment to a new, more just Caltech rather than a symbol of repression and dehumanization. Honoring eugenicists is fundamentally against the Caltech code of conduct. I quote the words from President Rosenbaum in 2019: 'Caltech's scientific and technological achievements emerge out of dynamic interactions among scientists and engineers working together to expand knowledge and advance human wellbeing. As a community, we are committed to fostering interactions that are guided by sound ethical principles and a commitment to the highest level of integrity.' The facts of Millikan's involvement in the Human Betterment Foundation—a foundation lacking sound ethical principles and integrity—are clear. The harm and ill will triggered by not immediately taking action and replacing names will likely take years to undo. This inaction will not only impact POC students, postdocs, faculty, and staff, but also many allies on campus who believe deeply that in order for Caltech to remain a premiere research institution, we must invest in diversifying our campus and creating a supportive and inclusive environment."

Perspective of those who oppose name removal The arguments by those who oppose name removal are grounded in the belief that Millikan deserves to be honored because of his scientific contribution and his role as one of the Institute's founders. Many individuals stated that removing Millikan's name would be akin to disavowing one of the Institute's founders, its first Nobel laureate, and an exceptional scientist whose contributions to STEM, both through the oil drop experiment and the formation of the modern-day Caltech, deserve recognition. In many instances, individuals equate name removal on campus to the removal of the names of the country's founders.

Those who oppose removing the names emphasize that the individuals are recognized because of their contributions to science, not for their social activities or wrongdoings.

"I feel that these monuments exist to memorialize the contributions made by these people, and not to glorify the people themselves. It is a subtle difference to be sure, but I think it is clear and distinct. When I hear these names, I think of their scientific contributions, and not who they were behind closed doors. Monuments to Washington are there because of what he did for our country, and not because he owned slaves or was a great businessman. So, let the monuments memorialize the good, while we also recognize that those who did the good may have had their faults. ... "

A majority of individuals who oppose removing existing names express worry that removal of individuals' names amounts to an erasure of history and would further the falsehood that individuals can be perfect and without flaws. In most instances, individuals who oppose name removal argue that in keeping the names, the Institute has an obligation to bring additional context to its history and to clearly identify in a plaque at each building or memorial location, on the website, and in other media facts about who these individuals were, what contributions they made to Caltech and to science, and what harmful beliefs, activities, and movements, such as eugenics, they supported.

In line with this argument, many express concerns that the Institute is being asked to participate in ‘cancel culture’ and to judge individuals’ actions outside the context of their time. It is noted repeatedly that moral standards change over time and that one holds individuals to unfair ethical and moral standards if one expects them to stand the test of time. Some take this further and speculate that any new name would eventually fail to survive the standards and expectations of future generations.

“Naming of institutions is a way we remember people for their positive contributions. As time goes on, standards change – virtually every historical figure is a bad individual in some category by modern times; Likely virtually every modern influential figure will be inexcusable by some future standard. Let he without sin throw the first stone.”

“I think the institute should stand strong against the current wave of cancel culture that is sweeping the country. Caltech has always been a bastion of scientific enlightenment. This should come with the responsibility of acknowledging history as it is, recognizing and separating a person’s contributions from his/her flaws, and being ethically aware citizens of the world when we conduct science. If we were to ‘cancel’ Millikan for his views on eugenics, we should most certainly ‘cancel’ every scientist involved in the Manhattan Project, for their deleterious effects on life.”

“I think we can all do better going forward to acknowledge the contributions of a wider range of people in history, especially women and minorities, but I don’t think canceling the ones who currently enjoy widespread acknowledgement is the right way to go about it.”

A final, common theme in responses opposed to renaming relates to the significance of building names overall in Caltech’s community and in its pursuit of science. Many pondered what effects, if any, the names and their honorees’ complicated pasts have on the Institute’s ability to create a more diverse or welcoming community and, more important to many, to the Institute’s ability to advance breakthroughs. It is postulated that the whole exercise to consider name removal is a misguided allocation of resources away from measures that could have more meaningful impact on recruitment, retention and community building.

Perspective of those with no definitive opinion on name removal Those respondents who do not express a clear perspective on the issue of naming primarily comment on the process. Many acknowledge that they have a strong interest in better understanding the history of the individuals in question, in understanding what information and materials are being used to assess their beliefs, and in having an opportunity to help define the principles that would shape naming practices and recognition. Several point to peer institution processes and reports as models for consideration. Others speculate on society more broadly and on general efforts to account for the past, acknowledging that they are uncertain about the value of such actions, at Caltech or elsewhere.

There is recognition among many that Millikan has a distinct relationship with the Institute as one of its founders but, in general, there is desire for more information about each of the individuals and how their beliefs and involvement with eugenics could be contextualized relative to their time and to their contributions to Caltech. Overwhelmingly, there is a sense

that members of the community do not know enough about these individuals, the Human Betterment Foundation, or the Institute's connection with the organization, and that more could be done by the Institute to curate, in full, its history.

Should the Institute decide to remove Millikan's name and the names of the others, many of the respondents who did not have a clear view on name removal did express a strong desire for the community to be involved in the process. In the case of Ruddock, several individuals recommend that decisions related to the student house should be put to the members of that community to decide.

D. IMPACT OF CURRENT MEMORIALIZATIONS ON THE CALTECH COMMUNITY

Research consistently demonstrates that women, individuals who come from historically minoritized communities (Black, LatinX, and Native American, Pacific Islander, or Alaska native), and persons with disabilities are underrepresented in science and engineering educational and occupational programs.³³ Students, postdoctoral scholars, and faculty from these communities are disproportionately underrepresented in fields across STEM, with modest exception in fields that work hard to create more inclusive and representative communities.

Looking at the Caltech community, one sees similar disparities. In the wake of George Floyd's killing, during a series of virtual campus gatherings sponsored by the Caltech Center for Inclusion and Diversity and by the Black Scientists and Engineers of Caltech (BSEC), Institute students, faculty, and staff who come from historically minoritized communities and chose to join the Caltech community reported doing so knowing that they would be unlikely to be joined by many others who are like them. Their sense of belonging—the confidence of knowing that they not only deserve to be at Caltech but are welcome in the Institute's laboratories and classrooms—is simultaneously understood and doubted. Likewise, their vision for what is personally and professionally possible is strained by the fact that there are few senior mentors from underrepresented backgrounds who exemplify paths to success in STEM.

It is with this background and lived experience, that members of Caltech's Black, LatinX, Native American, Pacific Islander, Alaska native, female, LGBTQI, and differently abled communities confront the difficult truth of Caltech's scientific heroes and founders. To maintain the names and images of the men in question celebrated without qualification on buildings and in titles, fellowships, and honors is to purport that the totality of their behaviors, beliefs, and contributions is honorable. At the very least, it is to purport that their acts to dehumanize and devalue others, simply because of different abilities or different skin tone, can be overlooked. This is not consistent with Caltech's core commitments. This is not the message the Institute wishes to send to those among us who identify and associate with individuals who were harmed. The Institute cannot honor individuals who represent the denigration of so many who are in, or aspire to belong to, our community.

The Institute asks students, scientists, and engineers to bring the full power of their intellect and creativity to the pursuit of discovery and innovation. The Institute asks them to believe in themselves, to trust in their community's support for them, to be fearless in their pursuit of new fields, and to contribute to humanity's understanding of the cosmos. In return, it is the responsibility of the Institute, its leaders, and every other member of our community to create an environment where all of us have the confidence and the comfort to bring our whole selves into our work, and to know that we will be met with dignity and respect in so doing. Caltech scholars, students, and staff must understand unequivocally that they are valued for who they are, that they are free to speak from the full gamut of their lived experience and their expertise, and that they should feel free to share rather than override and hide aspects of who they are.

³³ *Women, Minorities, and Persons with Disabilities in Science and Engineering. (NSF 2019 report).*
<https://nces.nsf.gov/pubs/nsf19304/digest>

IV. Recommendations

Throughout its deliberations, the CNR has considered a number of factors to reach its recommendations.

Most significant among these are: principles for naming and name removal from assets and honors, available historical facts related to the individuals of concern, expert advice on eugenics and the HBF, and input from a vast number of community members. This work has been conducted in alignment with Caltech's core commitments (its mission, its values, its Honor Code, its aspirations for the future) and its ongoing efforts to forge a diverse and inclusive community of excellence.

The CNR proceeded on the principles that removing names should be undertaken (1) in exceptional circumstances, (2) when there is significant breach of Caltech's core commitments, (3) when there is a threat to Caltech's future, and (4) in a manner that preserves the totality of Caltech's past. All these principles apply to the Committee's recommendations.

The Committee has proceeded under the presumption that removing names should be undertaken only in extraordinary circumstances. The circumstances that led us to our recommendation are extraordinary. Since the murder of George Floyd, multiple voices have risen everywhere demanding social justice; the repudiation of overt, systemic racism; and attention to the pain and suffering of historically minoritized individuals in our own communities.

The CNR's investigation of the life and work of Robert A. Millikan and of the other individuals of concern has been conducted by engaging with the historical record in as much complexity as has been available. This investigation yields a multi-faceted perspective on Millikan, a man who justifiably warrants accolades for his contributions as a great scientist and institution builder. These are undoubtedly the aspects of Millikan that our predecessors at the Institute wished to memorialize when they named its main library and numerous campus honors after him. Since that time, however, the Institute's priorities have evolved. It has become a world-class institution at the forefront of science and technology. The institution that Caltech is today also stands committed to forging a diverse and inclusive community of excellence. In this light, other aspects of Millikan's life and work come to the fore: Millikan's affiliation with eugenics and the HBF as well as his stances on gender, race, and ethnicity constitute a significant breach of Caltech's core commitments and its efforts toward diversity and inclusion. Although the CNR had significantly less information at its disposal about Chandler, Gosney, Munro, Robinson, and Ruddock, their sustained roles as HBF founders, fiduciaries, or promoters also runs contrary to Caltech's core commitments and its efforts toward diversity and inclusion.

Caltech should always strive to remember the past, namely the figures and forces that have shaped the Institute. Caltech must, however, also vie for its present and its future. The CNR believes that continuing to honor a figure that, no matter how accomplished, tied his reputation and Caltech's name to eugenics and the HBF profoundly hurts its community and its reputation.

The CNR therefore unanimously recommends that Caltech remove the names Millikan, Chandler, Gosney, Munro, Robinson, and Ruddock from all Institute assets and honors. This is a critical step toward realizing the brilliant, diverse, and inclusive future to which Caltech aspires.

By removing Millikan and the other names from campus assets and honors, Caltech is not breaking ties with Millikan or other figures in its history. Caltech must not erase history. Caltech, instead, has an opportunity to launch initiatives constructed to inform and educate its community and the public.

A. NAME REMOVAL AND RENAMING RECOMMENDATIONS

With the above considerations in mind, the CNR unanimously recommends that Caltech:

- (1) remove the name of Robert A. Millikan from all assets and honors. (Appendix D catalogs all assets and honors from which Millikan's name should be removed.) The CNR understands that some awards named for Millikan are made to individuals (e.g., the Millikan Medal, the Millikan Professorship). Therefore,
 - (1a) the CNR further recommends that, while the Institute should rename these awards going forward, the individuals holding previously conferred honors named after Millikan should be allowed to decide whether to retain the original name of the award or to accept the new name given that award by Caltech.
- (2) remove the names of Harry Chandler, Ezra S. Gosney, William B. Munro, Henry M. Robinson, and Albert B. Ruddock from all assets and honors, including Chandler Dining Hall, [Linde +] Robinson Laboratory for Global Environmental Science, and Ruddock House. (Appendix D catalogs all assets and honors from which these names should be removed.)
- (3) retain the name of Thomas J. Watson Sr. The CNR did not find sufficient cause, with the evidence available to it, to make a recommendation about Watson. Therefore, the name should be retained until determinative evidence is available to Caltech.
- (4) rename Millikan Library as Caltech Hall. Caltech has been home to generations of faculty, researchers, alumni, and staff who have done so much for the Institute and for society. Designating the most prominent building on campus to represent the entire community, rather than one individual, is a manner of signaling Caltech's aspiration to be an inclusive community.
- (5) rename the Linde + Robinson Laboratory for Global Environmental Science as the Ronald and Maxine Linde Laboratory for Global Environmental Science.
- (6) rename Chandler Dining Hall as the Lee Franke Browne Café. Lee F. Browne³⁴ was a Black chemist who dedicated his career at Caltech in the 1970s and 1980s to recruiting talented underrepresented minority students for the Institute. His success recruiting

³⁴ <https://oralhistories.library.caltech.edu/171/>

students of color speaks unimpeachably to Caltech's aspiration to forge a diverse and inclusive community of excellence.

- (7) remove the name Albert B. Ruddock from all assets and honors. The CNR recommends that the Institute:

- (7a) rename Ruddock House as Rudd House. The CNR believes this name would break the association with Albert B. Ruddock for whom the house is named and yet would retain the name Rudd that students and alumni use for themselves to signify the identity, culture, and personality of Ruddock House's present and past residents.

This recommendation is provisional: Before selecting a new name, the Institute should solicit potential name suggestions from current Ruddock House members and alumni, ideally within a timeframe that aligns with Ruddock House governance and event cycles.

- (7b) rename the Albert B. Ruddock professorship. The CNR further recommends that, while the Institute should rename this award going forward, the individuals holding previously conferred honors named after Albert B. Ruddock should be allowed to decide whether they want to change the name of their award.

- (8) rename the William Bennett Munro Seminar Series in the Humanities. In this case, the CNR recommends that the Institute allow the Division of the Humanities and Social Sciences to decide how to rename this seminar.

- (9) rename the Gosney Research Fund and the Gosney Postdoctoral Fellowship (see Appendices D and H).

The CNR has solicited a full list of all assets and honors named for Millikan and the other individuals of concern in this report (see Appendix D). The CNR leaves it to the Institute to rename all remaining assets and honors on that list.

B. RECONCILIATION OF CALTECH'S HISTORICAL FIGURES WITH THE INSTITUTE'S PRESENT AND FUTURE

A critical component of this endeavor should be to create opportunities for acceptance, education, and advancement for the Caltech community and the public. The recommendation to remove the names of these figures is not a recommendation to erase history. The act of removing names must leave something more than new names. It is the responsibility of the Caltech of today to tell the full history of these figures—their contributions alongside their failings—as part of reconciling the realities of the Institute's past with its aspirations for the future. The Institute must repudiate the morally reprehensible stances of these founding figures. Eugenics and the prejudices that fueled it run contrary to Caltech's core commitments. The moral failings of these figures should coexist alongside their achievements in the Institute's collective memory. In the end, we engage the past in its full complexity so that we can understand the aspects that are beneficial to our present and future and address those that continue to be detrimental.

The Institute should provide easily accessible opportunities for its community to learn about the previously unacknowledged connections between the Human Betterment Foundation and the figures who helped build the modern Caltech.

Millikan's achievements as a scientist and institution builder should be acknowledged along with his failings as part of that history.

As part of its work, the CNR reviewed the educational programs peers across the nation, and in England, recommended for their campus communities. The CNR also consulted two advisors (Professor Daniel Kevles and Caltech Archivist Peter Collopy) on the best ways to create opportunities for acceptance, education, and advancement for the Caltech community and the public.

The Institute might consider a phased approach as it tells the full story of Caltech's past.

Phase I, Website: The CNR recommends that the Institute establish a website to convey the exceptional circumstances that led to the examination of a subset of Institute historical figures memorialized on campus. This website should clearly explain the connections between those who are memorialized on campus and the Human Betterment Foundation. It should also clearly explain the steps taken to address the memorializations of concern and the underlying rationale. Further considerations regarding this website would include but are not limited to: questions about the content of the website, who curates it, how the website might evolve over time, and how it might best reach the broadest audience.

Phase I, Plaques and Markers: The CNR recommends that the Institute acknowledge at each building, with one exception, the fact that the original names were removed and the conditions that warranted name removal. The exception is that care be taken with the notice of the name change at Ruddock House. This is the primary campus residence for the Rudds and their privacy and ability to go about their day-to-day lives should be maintained unperturbed by visitors who wish to learn about this history.

Phase II (a), Consultation: The Institute should consult experts in the communication of history to design a robust recounting of the Institute's past so that all newly understood facts are appropriately assimilated across the Institute going forward.

Phase II (b), Focus on the Future: The Institute might consult the campus and academic community for input on the most valuable ways to assimilate the new information about Caltech's past with a strong focus on the future. These endeavors should encourage an understanding of the role of ethics in science and technology, especially in emerging fields where the impact of technology is not fully understood.

A robust suite of potential education materials, programs, and events, across multiple media, is presented below for consideration by the Institute. Caltech might:

- incorporate eugenics-related research projects into current courses,
- commission a new history book about Caltech,
- publish essay series on new website,
- curate educational exhibits,
- host special events,
- fund multi-year fellowships for visiting scholars,

- fund multi-year research programs,
- create new courses (short or full term) that teach the history of eugenics,
- program an orientation lecture for incoming students, faculty and staff,
- produce a pamphlet on relevant history,
- establish a museum/dedicated physical space, with endowment,
- publish historical documents online,
- support research and research publications, or
- produce videos, short- and long-form, to document the relevant history.

As it undertakes to tell the fuller story of its past, the Institute should consider the tradeoff between the time and resources required to tell that story and the efforts and resources required to enhance the diversity, equity, and inclusion initiatives that will shape the future of the Institute.

Appendices

Appendix A

Petitions to the Institute

BSEC PETITION

June 25, 2020

Dear Members of the Caltech Community,

By now we are all well-aware of the global protests calling for police reform following the graphic murders of Ahmaud Arbery, Breonna Taylor, George Floyd, and countless others at the hands of the officers whose supposed duty is to protect and serve. Protestors in all 50 U.S. states and at least 12 nations have called for long-overdue corrections to the issue of police brutality, which disproportionately affects Black people. While many members of the Caltech community have been shocked at the police departments' failure to arrest and charge these perpetrators for violent crimes committed on camera, the Black community is all-too familiar with this type of overt and deep-seated racial prejudice. In the wake of this overwhelming support for reformation of racially prejudiced systems, members and allies of the Black Scientists and Engineers of Caltech (BSEC) are calling for the California Institute of Technology (CIT) to use this time to listen to, acknowledge, and reform the long-standing causes of racial bias which have disproportionately hurt racially minoritized members of the Caltech community. We urge you to stand with BSEC and help us in our push to make a more diverse Caltech.

- The Black Scientists and Engineers of Caltech (BSEC) and Allied Organizations

From the Caltech Statement of Community:

"Caltech fosters an environment where various perspectives are valued by seeking out exceptional individuals from a broad range of backgrounds and experiences."

INTRODUCTION

Of 1299 graduate students at Caltech, eleven are Black. These students make up 0.8% of the graduate student body. This percentage is less than half of that seen in a long list of other universities of similar academic stature.¹ The number may come as a surprise because published

¹ [MIT](#), [Stanford](#), [Princeton](#), [UPenn](#), [Brown](#), [UC Berkeley](#), [UCLA](#), [USC](#), [UCSB](#), [Carnegie Mellon University](#), [University of Michigan](#), [UCI](#), [Vanderbilt](#), [Purdue](#), [Georgia Tech](#), [UCSD](#), [University of Illinois Urbana Champaign](#), [Rice](#), and [Duke](#).

demographic data is left opaque: the [Registrar publishes disaggregated percentages](#) of domestic White and Asian students and international students but not of students from [racially minoritized](#) backgrounds. Domestic Black, Latinx, and Indigenous students are jumbled in a reductive “Underrepresented Minority” category. The lack of both racial diversity on campus and availability of data to show the severity of the matter run contrary to the claim in our [Statement of Community](#) that we are dedicated to creating and sustaining an environment in which diversity will flourish. It is now our individual and collective responsibilities to correct the discrepancies between our words and our actions.

There is no shortage of Black students qualified for CIT programs. Our lack of racial diversity is a direct consequence of deprioritizing diversity efforts, including those that are demonstrably effective. An obvious example is WAVE, a Student-Faculty Programs (SFP) research fellowship which fosters diversity by increasing participation of underrepresented students in STEM-based Ph.D. programs. Though WAVE is Caltech’s most successful tool for recruiting talented Black students—half (4/8) of Caltech’s domestic Black graduate population are [WAVE](#) alumni—the 112 WAVE Fellows have been supported almost entirely by external grants since the program’s 2015 debut. By contrast, over a third of SURF’s \$2M+ annual cost is supported by the program’s endowment.

Our investment in other forms of diversity-related programming lags behind those of our competitors: Caltech does not offer pre-entry programs at the graduate level like those offered by [Stanford](#), [Duke](#), [UChicago](#), or [UC Irvine](#). We do not offer fly-out programs, exemplified by [Stanford](#), [UChicago](#), [Georgia Tech](#), nor do we award fellowships like those awarded by [Stanford](#), [MIT](#), or [UCI](#) to students dedicated to improving representation of racially minoritized students.

This apparent apathy toward inclusion deters qualified Black students from applying and matriculating to CIT graduate programs. Andrew J. Dorfeuille, a 2019 Caltech Amgen Scholar and graduate of Morehouse’s Class of 2020, wrote an open [letter](#) to Caltech administration suggesting some solutions for our apparent diversity issues. He concluded:

“I feel very strongly about the need for institute-wide efforts to increase racial diversity across graduate options and have put in significant effort this summer towards understanding the current culture, dynamics, and programing because I have a sincere desire to attend Caltech for graduate school, but the lack of diversity, support, and initiatives to address these problems is dissuading me from continuing my professional development at Caltech.”

Andrew declined his offer to study Biochemistry and Molecular Biophysics at Caltech and is now enrolled in MIT’s Chemical Biology doctoral program.

ANTI-RACISM: WHAT CAN CALTECH DO?

- 1.1 Disaggregate Underrepresented Minority enrollment statistics
- 1.2 Utilize demographic data to inform institutional diversity efforts.
- 2.1 Guarantee funding for successful diversity programs.
- 2.2 Establish cohort-building programs for incoming racially minoritized students.
- 2.3 Award fellowships to students committee to increasing diversity.
- 2.4 Reduce racial bias in graduate admissions.
- 3.1 Pilot a fly-out program for applicants committed to diversity.
- 3.2 Engage in diversity recruitment through conferences and visits to minority-serving institutions.
- 3.3 Prioritize community service.
- 4.1 Advertise campus-wide CCID events in Ion Caltech.
- 4.2 Rename buildings currently honoring Nazis and eugenicists.
- 4.3 Clarify procedure for reporting racial bias.
- 4.4 Provide adequate support for students applying to diversity-related fellowships.

MICHAEL CHWE'S PETITION

Remove Millikan's Name from Caltech

As members and friends of the Caltech community, we believe that Caltech cannot honor individuals who actively supported and encouraged crimes against humanity. Therefore, we call for Caltech to rename all buildings, spaces, and programs named after Robert A. Millikan, including the Robert A. Millikan Memorial Building, Millikan Library, Millikan Pond, and the Athenaeum's Millikan Suite. We call for the removal of the bust of Millikan on the Caltech campus.

Millikan, together with individuals including E. S. Gosney, A. B. Ruddock, Harry Chandler, and William B. Munro, led an organization that widely advocated for forced sterilization of people with disabilities and actively supported and encouraged, and even took pride in, Nazi Germany's 1933 forced sterilization law. Accordingly, we also call for the renaming of the Gosney Research Fund, Ruddock House, Harry Chandler Dining Hall, and the William Bennett Munro Memorial Seminar.

Millikan, Ruddock, Chandler, and Munro were members of the Board of Trustees of the Human Betterment Foundation in Pasadena, whose president was E. S. Gosney (<https://bit.ly/2ZwpJ8f>). In 1938, the Human Betterment Foundation published a pamphlet, "Human Sterilization Today," (<https://bit.ly/386pkND>) advocating for the forced sterilization of "defectives," saying that "modern sterilization is not a mutilation in any sense of the word," that "eugenic sterilization in this form represents one of the greatest advances in modern civilization," and that the foundation aims to "investigate the possibilities of race betterment by eugenic sterilization, and publish the results." The Human Betterment Foundation distributed 140,000 copies throughout the United States (<https://bit.ly/2CINLEZ>).

R. B. Von KleinSmid, the fifth president of the University of Southern California, was also a member of the Human Betterment Foundation. On June 11, 2020, USC President Carol L. Folt announced that Von KleinSmid was "an active supporter of eugenics and his writings on the subject are at direct odds with USC's multicultural community and our mission of diversity and inclusion," and Von KleinSmid's name and bust were removed from university buildings (<https://bit.ly/2NA4b4R>, <https://lat.ms/2NDrLxv>).

In the 1920s, Millikan wrote, "California marks now, as England did three centuries ago, the farthest western outpost of Arian civilization" (<https://bit.ly/3dGValc>). Millikan also wrote that Southern California "is today, as was England two hundred years ago, the westernmost outpost of Nordic civilization," with the "exceptional opportunity" of having "a population which is twice as Anglo-Saxon as that existing in New York, Chicago or any of the great cities of this country" (<https://bit.ly/2YlxmCu>, <https://wapo.st/2AfsZMA>).

In his 1924 book *Science and Life*, Millikan wrote, "[L]ook at the difference between our own civilization and the static civilizations of Asia, where Nirvana is the goal of human life and a large fraction of the population reaches it quickly through starvation. Why is it that 'fifty years of Europe is better than a cycle of Cathay'? Is it not simply because in certain sections of the world, primarily those inhabited by the Nordic race, a certain set of ideas have got a start in men's minds, the ideas of progress and of responsibility?" (<https://bit.ly/3iaUE2k>)

Grant Venerable was the first African American to graduate from Caltech, in 1932. After he had applied to live in one of the student residences on campus, Millikan took the issue of whether a “colored” student would be allowed in student residences to the Caltech Board of Trustees (<https://bit.ly/3eNuOzq>).

When E. S. Gosney died in 1942, the trustees of the Human Betterment Foundation, including Millikan and other Caltech trustees, decided to dissolve it and grant its assets to Caltech, establishing the Gosney Research Fund (<https://bit.ly/3icncZ6>). The announcement of this fund (<https://bit.ly/2CGmLpE>) in 1947 stated, “In collaboration with Dr. Paul Popenoe and other scientists Mr. Gosney carried on an extensive study in the field of eugenic sterilization, including particularly its medical, legal and social aspects. In 1929 and 1930 an exhaustive survey was made of 6000 cases of sterilization of eugenically unfit.” This refers to the book *_Sterilization for Human Development: A Summary of Results of 6,000 Operations in California_* by Gosney and Popenoe, published by the Human Betterment Foundation, which contains the sentence, “This, again, is no reason for not doing whatever is possible to purify the race” (<https://bit.ly/3891AIL>).

In 1993, historian Lily E. Kay wrote: “The Gosney/Human Betterment Foundation Papers are deposited at the California Institute of Technology Archives. Because these papers are closed to researchers, it is impossible to establish the precise nature of the relationship between Gosney’s organization and the biology division. It is clear from the administrative record, however, that some connection did exist” (<https://bit.ly/3eHVD7R>). Peter Sachs Collopy, University Archivist and Head of Archives and Special Collections at Caltech, has informed us that the Human Betterment Foundation records have been available in the Caltech archives since 1995 (<https://bit.ly/3eRHWmN>). According to Caltech’s Biology and Biological Engineering Division’s 2019 Annual Report (<https://bit.ly/386Kefu>), Gosney postdoctoral fellowships are still being awarded today.

Microbiologist Werner Maas wrote in 2013 that he received the Gosney Fellowship along with Ray Owen in the late 1940s. Lois Gosney, the daughter of E. S. Gosney, invited Maas to the opening of the Palomar Observatory in 1948. Maas writes, “On the way back to Pasadena, we passed a large resort hotel in the desert. Lois turned to me and said, ‘This is a great place, and the best part is, they don’t take Jews’” (<https://bit.ly/2Vpvbba>).

Caltech physicist David Goodstein notes (<https://bit.ly/2AczoYT>) that when writing to his wife Greta, Millikan described physicist Paul Ehrenfest as “a Polish or Hungarian Jew [Ehrenfest was, in fact, Austrian] with a very short, stocky figure, broad shoulders and absolutely no neck. His suavity and ingratiating manner are a bit Hebraic (unfortunately) and to be fair, perhaps I ought to say too that his genial openmindedness, extraordinarily quick perception and air of universal interest are also characteristic of his race.” Goodstein writes that “Millikan’s biases were typical at the time of a man of his upbringing and background.” Being a trustee of an organization that passionately advocated for forced sterilization was not.

In 1933, Nazi Germany passed the “Law for the Prevention of Offspring with Hereditary Diseases,” mandating forced sterilization of people with certain disabilities. Section 12 of this law stated, “Once the Court has decided on sterilization, the operation must be carried out even against the will of the person to be sterilized, unless that person applied for it himself.

The state physician has to attend to the necessary measures with the police authorities. Where other measures are insufficient, direct force may be used” (<https://bit.ly/3g4vekW>). In 1933–1934, the Human Betterment Foundation mailed its pamphlet “Human Sterilization” to Nazi administrators responsible for enforcing the law (<https://bit.ly/2BJc0T6>). In 1934, Popenoe wrote: “The law that has been adopted is not a half-baked and hasty improvisation of the Hitler regime, but is the product of many years of consideration by the best specialists in Germany. . . . I must say that my impression is, from a close following of the situation in the German scientific press, rather favorable” (<https://bit.ly/2BhgT62>). This law caused the sterilization of roughly 400,000 people (<https://bit.ly/2VuOYX8>).

In the American Sociological Review in 1936, Marie E. Kopp wrote: “The leaders in the German sterilization movement state repeatedly that their legislation was formulated only after careful study of the California experiment as reported by Mr. Gosney and Dr. Popenoe. It would have been impossible, they say, to undertake such a venture involving some one million people without drawing heavily upon previous experience elsewhere” (<https://bit.ly/2NCAuQQ>). C. M. Goethe, also a trustee of the Human Betterment Foundation along with Millikan, Ruddock, Chandler, and Munro, often traveled to Germany, and wrote to Gosney: “You will be interested to know that your work has played a powerful part in shaping the opinions of the group of intellectuals who are behind Hitler in this epoch-making program. Everywhere I sensed that their opinions have been tremendously stimulated by American thought, and particularly by the work of the Human Betterment Foundation. I want you, my dear friend, to carry this thought with you for the rest of your life, that you have really jolted into action a great government of 60,000,000 people” (<https://bit.ly/3ibd8zy>).

In summary, Millikan was a trustee of an organization that keenly advocated for forced sterilization, published books and pamphlets that provided inspiration and scientific legitimacy for Nazi Germany’s forced sterilization law, took sustained efforts to communicate with Nazi administrators of the law, and indeed delighted in having “jolted into action” the Nazi regime. Millikan himself also made racist statements, inexcusable in themselves, which must be understood in the light of his public advocacy for forced sterilization.

Given this information, it is not possible for Caltech to retain the names of Millikan, Ruddock, Chandler, Munro, and Gosney on its campus and claim moral decency. If Caltech does not act, it admits to being comfortable with lower moral standards than the following institutions.

- USC removed Von KleinSmid’s name on exactly comparable grounds (weaker, actually, as Von KleinSmid was only a member of the Human Betterment Foundation, while Millikan was a trustee) (<https://bit.ly/2NA4b4R>).
- Neighborhood Unitarian Universalist Church in Pasadena, where Millikan was a long-time member and co-founder, removed Millikan’s name in 2019 from a room named after him (<https://bit.ly/2BJ25gH>).
- Polytechnic School removed Gosney’s name in 2013 from a hall named after him, stating that “Gosney was also a prominent supporter of the eugenics movement, a racist doctrine under the guise of science that was embraced by those seeking to justify white supremacy” (<https://bit.ly/31OoaVE>).
- Sacramento State University removed C. M. Goethe’s name in the mid-2000s from a mansion and arboretum on its campus which had been named after him (<https://bit.ly/3guZnds>).

- The Burbank Unified School District removed the name of David Starr Jordan, a member of the Human Betterment Foundation, from a middle school in 2019 (<https://lat.ms/2W3x5iq>).
- The Palo Alto Unified School District removed the names of Jordan and Lewis M. Terman, members of the Human Betterment Foundation, from two middle schools in 2017 (<https://bit.ly/3gMoskq>).
- Princeton University recently removed Woodrow Wilson's name from its campus because of Wilson's racist statements and actions, which are horrific but less appalling than Millikan's (<https://bit.ly/2CQwxWr>).
- Planned Parenthood of Greater New York removed Margaret Sanger's name from their Manhattan Health Center in July 2020 (<https://cnn.it/3eRzLX3>).
- Pomona College removed Millikan's name from their math, physics, and astronomy building on October 6, 2020 (<https://bit.ly/3lrwNY>).

Please act immediately.

To see the list of 1113 signatories, please go to <http://chwe.net/millikan/>.

Postscript: The following petition was received on December 22, 2020, after this report was finalized but before it went to production. The petition has been included for historical accuracy and completeness.

CALTECH FOR BLACK LIVES PETITION

Eugenics, or human race “betterment” through selective breeding, is a crackpot science that should have been relegated to the dustbin of history. Instead, Caltech continues to memorialize white supremacists and advocates of compulsory sterilization including Millikan, Watson, Ruddock, and Chandler. On June 25th, the Black Scientists and Engineers of Caltech (BSEC) introduced a [petition](#) with the specific request that the Institute rename these buildings to foster an inclusive campus climate. This petition was signed by 1,021 Caltech affiliates. Concurrently, a Caltech alum, Michael Chwe, submitted a [separate petition](#) that also garnered more than 1,000 signatures, specifically demanding that Caltech rename Millikan Library.

[In direct response to the BSEC petition](#), President Rosenbaum announced on July 22nd the creation of the “Naming and Recognition Task Force” (NTF), charged to “consider and make recommendations for general policies related to space naming and other forms of recognition”. On September 28th, BSEC President Sarah Sam [announced her resignation](#) from the NTF, citing the committee’s “unwillingness to condemn irrefutable evidence of overt racism.” In her resignation letter, Sarah described how some committee members did not even read the BSEC petition, equated their oppression as white individuals to the suffering of Black people, questioned Sarah’s commitment to Caltech, and rationalized eugenic sterilization practices. There is no BSEC representation on the NTF since Sarah was the only Black student delegated to the committee. The NTF is therefore unfit to carry out its charge in the absence of Black student representation.

We demand that Caltech rectify these offenses by calling on the Institute to:

1. Rename all buildings, spaces, and programs named for eugenicists and white supremacists including: Millikan, Gosney, Chandler, Ruddock, Robinson, Munro and Watson.
2. Move all statues, paintings and other commemorations of these individuals to a room on campus dedicated as a permanent educational exhibit on the Human Betterment Foundation and Caltech’s history with eugenics.
3. Publicly denounce Caltech’s legacy of eugenics ideology and racism, and issue a formal apology to those it has harmed, including Sarah Sam and all Black and disabled members of our community.

We view these as extremely basic and largely symbolic steps that Caltech must take. Once this low hanging fruit has been plucked, we must then move onto the harder work of dismantling white supremacy and ableism in our culture and practices. But Caltech’s reluctance to take even this low-effort step sends a very clear message: many high-ranking members of this institution care more for the legacy of deceased racists than for the present and future environment of young Black, brown, and disabled scientists on our campus.

Appendix B

Emails Regarding Committee Formation

To: The Caltech Community

From: Stephen L. Mayo, Division Chair, Biology and Biological Engineering
Richard M. Murray, Incoming Division Chair, Biology and Biological Engineering
Dennis A. Dougherty, Division Chair, Chemistry and Chemical Engineering
Guruswami Ravichandran, Division Chair, Engineering and Applied Science
John P. Grotzinger, Division Chair, Geological and Planetary Sciences
Jean-Laurent Rosenthal, Division Chair, Humanities and Social Sciences
Fiona A. Harrison, Division Chair, Physics, Mathematics and Astronomy
David A. Tirrell, Provost
Thomas F. Rosenbaum, President

Date: July 6, 2020

Re: A More Inclusive Caltech

There are times of tragedy and tumult which demand change. We are at such a time now. Over the last few weeks, we have gathered as a community in conversation and joined in town halls that have provided valuable opportunities to learn from Black students, staff, and faculty about their personal and professional experiences. We have sought and received suggestions for interventions from faculty, from students, from staff, from alumni, from the President's Diversity Council, including Caltech's Chief Diversity Officer, and notably from the Black Scientists and Engineers of Caltech.

History has taught us that consistent and focused attention manifests change. History also demonstrates that when attention falters, so does progress. New generations of students, postdocs, faculty, and staff find themselves confronting the same obstacles faced by earlier generations. The lesson is clear: For there to be real change, the Institute as a whole must move forward with intention, and create a future that builds on the solid foundation of our collective efforts.

Today, as the academic leadership of Caltech, we provide an update on new steps the Institute will take to ensure that we continuously create and reaffirm a campus in which it is evident, in all that we do, that Black lives matter, that Black minds matter. We strive to become an example of how a diverse and inclusive community, committed to equity, permits individuals to thrive in fulfilling the Institute's mission of forefront research and education.

We describe below investments and actions that we can undertake immediately, as well as those that will require more intensive examination and consensus building among the many constituencies that make up Caltech. We intend to expand the scope of interventions as success is demonstrated.

The first set of immediate actions involves building the pipeline of students, postdocs, and faculty of color.

- We will double the number of WAVE undergraduate diversity research fellowships. WAVE works in concert with the Summer Undergraduate Research Fellowships (SURF) program to provide both a high-level introduction to research and as an overture to students from other colleges and universities to consider Caltech for their graduate studies. The Resnick Sustainability Institute, which cuts across all six divisions, has committed to providing 15 new WAVE fellowships in sustainability alone, and centers and institutes across campus will be creating new or additional undergraduate diversity research fellowships in bioengineering, microbiology, nanoscience, neuroscience, and quantum information and matter, among others.
- We will create initially ten centrally-held Presidential Graduate Fellowships for the purposes of increasing diversity across the Institute. They will be supplemented by graduate fellowships in the divisions keyed to increasing diversity.
- We will establish a Graduate Summer Research Institute, in conjunction with the Center for Inclusion & Diversity and modeled on the successful undergraduate Freshman Summer Research Institute, to help newly admitted graduate students acclimate to Caltech and build community prior to the start of their graduate programs.
- We will underwrite the funding for the Freshman Summer Research Institute to avoid year-to-year fluctuations and uncertainty, while seeking to raise long-term endowment funds.
- We will provide recruitment funds for participation in minority-serving conferences such as the Annual Biomedical Research Conference for Minority Students (ABRCMS) and the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS).
- We will build upon the success of the Alliances for Graduate Education and the Professoriate (AGEP) program to ensure additional postdoctoral scholars of color across the divisions. Through the Presidential Postdoctoral Fellows Program, Caltech provides stipends and mentoring, and helps develop community among the post-doctoral cohorts. These individuals will add to the ranks of faculty of color in colleges and universities across the United States, including Caltech.
- We will establish a fund to experiment with new minority-serving initiatives in local outreach. The fund will be managed by the President's Diversity Council, in coordination with the Center for Teaching, Learning, and Outreach.
- We will redouble our efforts to make the case for philanthropic support for these and other diversity and inclusion initiatives.

The second set of actions involve procedures and transparency.

- We will examine and publish disaggregated data regarding diversity across faculty, staff, postdoctoral scholars, graduate students, and undergraduate students, consistent with the condition that the statistics are sufficient so that individuals cannot be identified.
- We will conduct a campus climate survey to understand personal experiences of Caltech. The President's Diversity Council has already begun working on the survey.

- We will provide unconscious bias training for search committees across campus.
- We will revamp the website of the Institute's Title IX and Equity Office to make clear the procedures for reporting to that office any instances of racist behavior.
- We will create a dedicated Institute webpage to articulate Caltech's commitment to diversity, equity, and inclusion, and record progress toward the goals for which we hold ourselves accountable.
- We will improve news coverage of diversity, equity, and inclusion topics on campus, including the activities and accomplishments of Caltech's Black community, now and over the Institute's history.
- We will emphasize the need for diverse speakers and diverse perspectives to inform the Caltech community, aiming to have Caltech invited events more truly reflect the diversity of the STEM population.

In addition to these actions, we will constitute by 1 September an advisory committee of faculty, students, and staff to explore best practices and make recommendations about admissions at the undergraduate and graduate student levels. This will include protocols for identifying applicants, reviewing cases, and the use of standardized tests (SAT, ACT, GRE), to make sure that we are identifying and attracting the best and brightest candidates from every background. Lessons will be applied to faculty recruitment where applicable. Finally, we will constitute a task force of trustees, alumni, faculty, students, postdoctoral scholars, and staff to advise on Caltech policy for naming buildings on campus: past, present, and future.

These steps range from immediate responses to programs and plans that will unfold over time. They all will move the Institute forward. There are possibilities in this moment that we must seize as individuals, as a campus, and as a community. We are committed to a Caltech that offers the access and support to ensure that every member of our community achieves their full academic and professional potential.

To: The Caltech Community
 From: Thomas F. Rosenbaum
 Sonja and William Davidow Presidential Chair and Professor of Physics
 Date: July 22, 2020
 Re: Committee on Naming and Recognition

I am delighted to announce that the following members of the Caltech community have agreed to serve on the task force to explore naming and recognition policies at Caltech: Benjamin Rosen (Chair), trustee; France Córdoba, trustee; Shirley Malcom, trustee; Deborah McWhinney, trustee; Ron Olson, trustee; Prof. David Baltimore, BBE, president emeritus; Prof. Azita Emami, EAS, deputy division chair; Prof. Nicolás Wey Gómez, HSS; Prof. Mark

Wise, PMA; Chris Bryant, former president, Caltech Alumni Association; Ralph Amos, assistant vice president of alumni relations and executive director, Caltech Alumni Association; Diana Jergovic (co-Chair), vice president, strategy implementation; Stewart Mallory, CCE, AGEF California Alliance postdoctoral scholar; Sarah Sam, BBE graduate student, president, Black Scientists & Engineers of Caltech; and Paulina Ridland, undergraduate student, president, Ruddock House. Hillary Downs, administrative affairs manager in the strategy implementation group, will staff the committee.

The question of naming buildings on university campuses has engendered debate across the country. The most intense concerns at Caltech center on Robert A. Millikan, given his involvement with eugenics through the Human Betterment Foundation, although Watson, Chandler, and Ruddock also have garnered attention. This task force is charged to consider and make recommendations for general policies related to space naming and other forms of recognition, as well as consideration of specific building names on campus.

The task force members have pertinent expertise across history, biological ethics, psychology, physics, law, alumni relations, diversity and inclusion, and corporate governance, among other subjects. Its considerations will run the gamut from historical evaluation and the role, if any, of changing ethical standards over time to reputational risk, Caltech's ability to be a destination of choice for a diverse community of exceptional scholars, and contractual obligations. Its charge involves both a delineation of general principles and recommendations for specific actions. Prof. Daniel Kevles, an historian of science and an expert on the eugenics movement, formerly of Caltech and now at Yale, has agreed to serve as a resource to this group.

The task force will provide a report with recommendations to me by the end of calendar year 2020, which will then be brought to the Caltech Board of Trustees. The deliberations of the task force, and the input they will seek from the many constituencies that make up the Caltech community, are an important step in reconciling the Institute's past with our vision for the future. I will keep you informed of developments as they unfold.

To: The Campus Community
From: Thomas F. Rosenbaum
Sonja and William Davidow Presidential Chair and Professor of Physics
Date: September 8, 2020
Re: Advisory Committee on Student Admissions and Recruitment

As a community, we have a timely opportunity to examine how we can amplify Caltech's efforts to identify and then attract the best and brightest candidates from every background and perspective. To that end, I have constituted an Advisory Committee on Student Admissions and Recruitment.

The focus of the committee will be on graduate admissions with its special challenges of decentralized processes across the options. We anticipate that lessons learned both can be drawn from and applied to undergraduate admissions and faculty recruitment. The committee is charged to identify best practices in student admissions both at Caltech and at other institutions, including technological innovations, and to examine approaches to leveraging Institute strengths to be more successful in recruitment, especially among racially minoritized populations.

The members of the Committee include faculty members representing each division: Profs. Michael Alvarez (HSS), William Clemons (CCE), Tim Colonius (EAS, Committee Chair), Bethany Ehlmann (GPS), Katalin Fejes Toth (BBE), Matilde Marcolli (PMA), and one at-large member, David Chan (BBE); Institute staff deeply involved in admissions and recruitment: Jennifer Blankenship (Options Manager, Applied Physics & Materials Science), Natalie Gilmore (Asst. Dean of Graduate Studies), and Jarrid Whitney (Asst. VP for Student Affairs, Enrollment & Career Services); graduate students Daniel Mukasa and Newton Nguyen; and undergraduate student Diego Olaya. Jennifer Torres (Office of Strategy Implementation) will be staffing the Committee.

I am grateful to the members of the Committee for agreeing to serve and look forward to working with the Division Chairs, the Deans of Graduate Studies and Undergraduate Students, and the Provost to implement the Committee's recommendations.

Appendix C

Committee on Naming and Recognition Member Bios

RALPH AMOS

Ralph joined Caltech in January 2020 as the new assistant vice president for alumni relations and executive director of the Caltech Alumni Association (CAA).

As head of the CAA, which is part of the Institute's Advancement and Alumni Relations group, Ralph leads a staff charged to foster deep relationships with Caltech's 24,000-plus alumni worldwide. His recruitment to Caltech brings added emphasis and focus to this effort.

Most recently, Ralph was president and CEO of Purdue University's Alumni Relations group, which serves a seven-campus system with more than 600,000 alumni and 68,000 alumni association members. Before working at Purdue, Ralph was vice president for the University System of Maryland Foundation; assistant vice chancellor of the division of external affairs at UCLA and chief executive officer of the UCLA Alumni Association; assistant vice president of alumni relations at Ohio University; and assistant vice president of membership marketing and constituent societies at The Ohio State University.

Ralph has a B.A. in international studies from The Ohio State University and a Master of Public Administration degree from Ohio University, where he is currently pursuing a Ph.D. in higher education administration.

Ralph is a career-long member of the Council for Advancement and Support of Education (CASE) and has served on CASE's Committee on Opportunity and Equity and Commission on Alumni Relations. He was awarded CASE's Crystal Apple Award for Teaching Excellence, a recognition of his outstanding performance as part of CASE's international education programs, and is a recipient of the CASE District V Distinguished Service Award.

In addition, Ralph has been a member of the CASE International Board of Trustees and the Bill and Melinda Gates Millennium Scholarship Advisory Board.

DAVID BALTIMORE

After serving as Caltech President for nine years, David was appointed President Emeritus and the Robert Andrews Millikan Professor of Biology in 2006. Awarded the Nobel Prize at the age of 37 for research in virology, David has profoundly influenced national science policy on such issues as recombinant DNA research and the AIDS epidemic.

Born in New York City, David became interested in biology during high school when he spent a summer at the Jackson Memorial Laboratory and worked with research biologists on mammalian genetics. He received a B.A. in chemistry from Swarthmore College and a Ph.D. from Rockefeller University, where he returned to serve as President from 1990-91 and faculty member until 1994.

His present research focuses on control of inflammatory and immune responses, on the roles of microRNAs in the immune system, and on the use of gene therapy methods to treat HIV and cancer in a program called “Engineering Immunity.” He is Director of the Joint Center for Translational Medicine, an activity that joins Caltech and UCLA in a program to translate basic science discoveries into clinical realities and where an active clinical program is under way.

David has several outstanding administrative and public policy achievements to his credit. In the mid-1970s, he played an important role in creating a consensus on national science policy regarding recombinant DNA research. He served as founding director of the Whitehead Institute for Biomedical Research at MIT from 1982 until 1990. An early advocate of federal AIDS research, Baltimore co-chaired the 1986 National Academy of Sciences committee on a National Strategy for AIDS and was appointed in 1996 to head the National Institutes of Health AIDS Vaccine Research Committee.

David’s numerous honors include the Gustave Stern Award in Virology, the Eli Lilly and Co. Award in Microbiology and Immunology, the National Medal of Science, and the Warren Alpert Foundation Prize. He was elected to the National Academy of Sciences, and he is also a fellow of the American Academy of Arts and Sciences and a foreign member of both the Royal Society of London and the French Academy of Sciences. David is past-President and Chair of the American Association for the Advancement of Science and was mostly recently named a Fellow of the American Association for Cancer Research (AACR). He has published almost 700 peer-reviewed articles.

CHRIS BRYANT

Chris is a senior software engineer at Walt Disney Studios. Previously, Chris was vice president of engineering at IKASI, a computer software company, and vice president of technology for the Seattle Sounders, a Major League Soccer team.

Prior to joining the Sounders, Chris was CTO of Industrial Generosity, a Seattle startup that runs the Sworl photo framing service for the iPhone. He was previously an employee of Microsoft for 17 years in various roles from development to product marketing, product management, planning, and strategy. He then worked at Amazon in a technical role for automotive retail before joining Industrial Generosity in 2013.

Chris holds a B.S. in computer science from the Caltech (a member of Ruddock house) and an M.B.A from the University of Washington. Chris was president of the Caltech Alumni Association (CAA) board of directors from 2018 to 2020. He has been a member of the CAA board since 2012.

AZITA EMAMI

Azita joined Caltech in 2007 and is now the Andrew and Peggy Cherng Professor of Electrical Engineering and Medical Engineering, and a Heritage Medical Research Institute Investigator. Azita also serves as the Executive Officer (Dept. Head) of EE.

Her current research interests include mixed-signal integrated circuits and systems, high-speed optical interconnects, silicon photonics, wearable and implantable devices for neural recording, neural stimulation, sensing, and drug delivery. She is currently the associated editor for the IEEE *Journal of Solid State Circuits* (JSSC). She is also a Solid-State Circuit Society (SSCS) distinguished lecturer. Azita serves on the technical program committee (TPC) of the International Solid-State Circuit Conference (ISSCC), and in the past has served on the TPC of VLSI Symposium and Custom Integrated Circuits Conference (CICC). She was the General Chair and Program Chair of the Institute of Electrical and Electronics Engineers (IEEE) Optical Interconnect Conference in 2015 and 2014 respectively.

Azita received her M.S. and Ph.D. degrees in electrical engineering from Stanford. She received her B.S. degree from Sharif University of Technology in Tehran, Iran. She has also held positions at IBM's T. J. Watson Research Center and served as an Assistant Professor of Electrical Engineering at Columbia.

DIANA JERGOVIC

Diana is the vice president for strategy implementation at Caltech. She oversees the Strategy Implementation group, the Office of Strategic Communications, the External Relations group, and the Institutional Research Office at the Institute. She and her group collaborate closely with the President and Provost, and with the division chairs, faculty, and senior leadership on campus and at the Jet Propulsion Laboratory (JPL) to execute and integrate Caltech's strategic initiatives and projects and ensure that they complement and support the overall education and research missions on campus and JPL. Diana also served as acting vice president for Development and Institute Relations (now Advancement and Alumni Relations) for the 2018-2019 academic year, a year in which Caltech raised, for the first time in its history, more than \$1 billion dollars in campaign commitments.

In her previous role as Associate Provost for Academic and Budgetary Initiatives at the University of Chicago, Diana served as a liaison between the Office of the Provost and the other academic and administrative offices on campus, and advanced campus-wide strategic initiatives. She engaged in efforts spanning every university function, including development, major construction, and budgeting, as well as with faculty governance and stewardship matters.

Prior to her position as associate provost, Diana was the University of Chicago's Assistant Vice President for Research and Education, responsible for the financial management and oversight of all administrative aspects of the Office of the Vice President for Research and Argonne National Laboratory. She engaged in research-related programmatic planning with a special emphasis on the interface between the university and Argonne National Laboratory.

From 1994 to 2001, Diana was a research scientist with the university-affiliated National Opinion Research Center (NORC) and, in 2001, served as Director for NORC's Florida Ballot Project, an initiative that examined, classified, and archived the markings on Florida's 175,000 uncertified ballots from its contested 2000 presidential election.

Diana earned a B.S. in psychology and a Ph.D. in developmental psychology from Loyola University Chicago, and an M.B.A from the Booth School of Business at the University of Chicago.

SHIRLEY MALCOM

Shirley is Senior Advisor and Director of SEA Change at the American Association for the Advancement of Science (AAAS). She comes to this position after serving almost 30 years as Head of Education and Human Resources Programs of AAAS. The directorate included AAAS programs in education, activities for underrepresented groups, and public understanding of science and technology. Shirley was previously head of the AAAS Office of Opportunities in Science and program officer in the Science Education Directorate of the National Science Foundation (NSF). Prior to this, she was an assistant professor of biology at the University of North Carolina, Wilmington, and a high school science teacher.

Shirley, a native of Birmingham, Alabama, received her doctorate in ecology from The Pennsylvania State University; master's degree in zoology from the University of California, Los Angeles; and bachelor's degree with distinction in zoology from the University of Washington. Shirley also holds seventeen honorary degrees.

Shirley serves on several boards, including The Heinz Endowments and Public Agenda. She chairs the board of the National Math Science Initiative and is an honorary trustee of the American Museum of Natural History, a Regent of Morgan State University, and a trustee of Caltech. She has chaired a number of national committees addressing education reform and access to scientific and technical education, careers, and literacy. Shirley is a former trustee of the Carnegie Corporation of New York and a fellow of the AAAS, the American Academy of Arts and Sciences, and AWIS. She received the Public Welfare Medal of the National Academy of Sciences, its highest award.

Shirley was a member of the National Park System Advisory Board, served on the National Science Board, the policymaking body of the NSF (she was instrumental in proposing the "broader impacts" criterion for NSF funding awards), and served on the President's Committee of Advisors on Science and Technology.

STEWART MALLORY

Stewart is currently an Arnold O. Beckman postdoctoral fellow in the Division of Chemistry and Chemical Engineering (CCE), working with Professor John Brady. He arrived at Caltech as an AGEP California Alliance postdoctoral scholar. As a theoretical chemist, his research focuses on the development of nonequilibrium theories for the behavior of soft complex materials, with a particular interest in novel techniques to manipulate and self-assemble matter at the microscale.

He received his B.S. and B.A. in chemistry and mathematics (Magna Cum Laude) from the University of Hawai'i and completed his Ph.D. in chemical physics at Columbia University as an NSF Graduate Research Fellow. During his time as a graduate student, he was the recipient of the George Pegram Award for Meritorious Achievement in Chemical Research and the Jack Miller Teaching Award for his work as a graduate teaching assistant.

Throughout his short academic career, Stewart has been involved in a number of diversity and inclusion initiatives and scientific outreach programs. For several years, he served as an

instructor for the Columbia University Science Honors Program, a Saturday morning program specifically designed for high school students. At Caltech, Stewart is a founding member of the Caltech Postdoc Association (CPA) diversity committee, which is a team of postdocs across different divisions who work on various diversity initiatives on campus. He currently serves as the Communications Chair and the CCE Division Representative for the CPA. Recently, in response to the COVID-19 crisis, he has led a team of postdocs in the development of a virtual online platform to facilitate communication within the postdoctoral community at Caltech.

DEBORAH MCWHINNEY

Debby currently serves on the boards of Focus Financial Partners Inc., BorgWarner Inc., and Fluor Corporation and as a trustee of certain Franklin Templeton funds. Debby serves as a member of the audit committees and governance committees of Focus Financial Partners and Fluor and as a member of the compensation committee and audit committee of BorgWarner. In February 2020, Debby announced that she would not stand for re-election as a director of Fluor at its 2020 annual meeting of shareholders.

Debby previously served on the board of Lloyds Banking Group plc and Fresenius Medical Care AG & Co. She worked at Citigroup, Inc. ("Citi"), as the Chief Executive Officer of Citi's global enterprise payments business, as the Chief Operating Officer of Citi's global enterprise payments business, and as President of Personal Banking and Wealth Management. Debby was also co-chair of the Citi Women initiative until her retirement. Prior to joining Citi, Debby worked at Charles Schwab, Inc., where she was President of Schwab Institutional and was chair of the global risk committee. Debby previously held executive roles at Visa International and Engage Media (a division of CMGI).

Earlier in her career, she worked at Bank of America in corporate and retail banking. Debby was appointed by former President George W. Bush to the board of directors of the Securities Investor Protection Corporation. Debby is a trustee of Caltech and for the Institute for Defense Analyses. Debby holds a B.S. degree from University of Montana.

RONALD L. OLSON

Ron is a partner in the law firm of Munger, Tolles & Olson whose practice involves a combination of litigation and corporate counseling. Ron counsels individual executives and boards of directors in a wide range of matters, including transactions, corporate governance, and executive compensation. He has also served as lead partner in numerous high-profile litigation matters. Ron is ranked among Chambers USA's Senior Statesmen in California litigation.

Ron is a director of Berkshire Hathaway, Western Asset Trusts, and Provivi. He was a director of Edison International, a director of City National Bank, and a director of The Washington Post Company. He serves as a trustee of several nonprofits, including Caltech and ProPublica. He was chair of the American Bar Association's Litigation Section, the American Bar Association's Standing Committee on Federal Judiciary, and the American Bar Association's Alternative Dispute Resolution Committee, and as Vice President of the Board

of Governors of the State Bar of California. He was also Chair of the Board of Trustees of Claremont University Center and Graduate School, founding Chair of the Board of Trustees of Southern California Public Radio, a trustee of the Mayo Clinic, a trustee of the RAND Corporation (formerly chair) and a director of the Council on Foreign Relations.

Ron earned degrees from The University of Michigan, Oxford University, and Drake University.

PAULINA RIDLAND

Paulina is a rising senior in mechanical engineering and the current president of Ruddock house. Previously, she served as vice president of Ruddock house. Paulina is a teaching assistant for machine prototyping and the machine shop assistant in the Jim Hall Design and Prototyping Lab. In the summer of 2019, she completed a SURF in the Advanced Mechanical Bipedal Experimental Robotics (AMBER) Lab under the direction of Professor Aaron Ames.

Paulina, who is a native of Southern California, was a founding member of the Caltech women's soccer team and enjoys tennis. She was the valedictorian of her high school class, a National Merit Scholar, and member of the National Honor Society.

BENJAMIN ROSEN

As co-founder and general partner of Sevin Rosen Funds, Ben spent decades investing in startup companies at the cutting edge of innovative technology. The more than 100 companies that received backing from the Rosen Funds include Electronic Arts, Lotus Development Corporation, Silicon Graphics, and Compaq Computer Corporation; he also served as chair of Compaq for 18 years. Previously, Ben was an electronics engineer at Raytheon and at Sperry Gyroscope. He later became a vice president and senior electronics analyst at Morgan Stanley.

Ben joined the Caltech Board of Trustees in 1986 and served as its chair from 2001 to 2005. He is an emeritus member of the overseeing boards of the New York Philharmonic and Memorial Sloan Kettering Cancer Center. Formerly, he served as a managing director of the Metropolitan Opera and Chair of the Board of Overseers for the Columbia Business School. Together with his wife, Donna, Ben founded the annual not-for-profit KentPresents ideas festival in Kent, Connecticut.

Ben received his B.S. from Caltech, an M.S. from Stanford, and his M.B.A. from Columbia University. He was awarded Caltech's highest honor, the Millikan Medal, and was also presented with the Caltech Distinguished Alumni Award. Ben currently serves as a member of the Institute's Campaign Executive Committee.

HILLARY TRIBBS

Hillary is the administrative affairs manager in the Strategy Implementation group at Caltech. She manages the operations and budget and staffs the vice president on priority Institute projects. Additionally, she volunteers as an assistant coach for Caltech's women's soccer team. In her previous roles within Caltech, she worked in Advancement and Alumni Relations

in talent management and in engagement and annual programs. Prior to joining Caltech in 2014, Hillary worked in administration in the medical field and at YouthBuild, a non-profit that helped students who had dropped out of high school earn their full high school diploma.

Hillary received her B.A. in philosophy, politics, and economics from Claremont McKenna College and is currently pursuing a doctoral degree via UCLA's Educational Leadership Program. Both her undergraduate thesis and dissertation focus on equity in access to healthcare and education for women.

NICOLAS WEY-GOMEZ

Nico studies the history of exploration, empire, and globalization. He specializes in the early modern Atlantic world, combining analysis of literature with the history of science and technology and intellectual history. His research and teaching expand present understanding of work across disciplines and the knowledge systems that inform a broad range of texts from antiquity to the early modern period.

Nico's work on the Atlantic examines the assumptions underlying the letters, chronicles, histories, and cosmographies that document Europe's encounter with the Americas in the wake of Columbus's discoveries. He focuses on early European portrayals of native peoples, particularly on the role of scientific and technical knowledge in the production of New World anthropology and in early legal justifications for European expansionism around the globe.

His research elucidates the questions, constraints, and methodologies governing a broad range of disciplines today, such as classics, cultural anthropology, critical geography, history of science and technology, intellectual history, literature, and philosophy. In this line of study, Nico has ultimately sought to outline the complex epistemic system that underwrote imperialism as theory and practice in early modernity.

Nico's book, *The Tropics of Empire: Why Columbus Sailed South to Reach the Indies* is described by the MIT Press as: "A radical revision of the geographical history of the discovery of the Americas that links Columbus's southbound route with colonialism, slavery, and today's divide between the industrialized North and the developing South."

Before joining Caltech in 2010, he was on the faculty at Brown University and the Massachusetts Institute of Technology. In the spring of 2010, he was a visiting associate professor of the history of science at Harvard.

MARK WISE

Mark's research interests include particle physics, nuclear physics, and cosmology. He has written numerous scientific publications and coauthored a book entitled *Heavy Quark Physics*. Much of his research has focused on the nature and implications of the symmetries of the strong and weak interactions.

Mark received his B.Sc. from The University of Toronto and his Ph.D. from Stanford University. He was a Junior Fellow in the Harvard Society of Fellows, after which he joined

the Caltech faculty. He was named the John A. McCone Professor of High Energy Physics. He has held a Sloan Fellowship and is a member of the American Physical Society and the National Academy of Sciences. He was also the science consultant for *Iron Man 2*.

Appendix D

Table of Campus Memorializations and Building Photos

NAME	MEMORIAL TYPE	MEMORIAL NAME
Harry Chandler	Building	Harry Chandler Dining Hall
Ezra S. Gosney	Fellowship	Gosney Research Fund
	Archives records (~60 boxes)	E. S. Gosney Papers and Records of the Human Betterment Foundation
Robert A. Millikan	Building	Millikan Library
	Room	Millikan Board Room
	Room	Millikan Suite, Athenaeum
	Professorship	Robert Andrews Millikan Professor of Biology
	Fellowship / Funds	Various
	Award	Millikan Medal
	Landscape feature	Millikan Pond
	Sculpture	Robert Millikan bust
William B. Munro	Seminar series	William Bennett Munro Memorial Seminar
Henry M. Robinson	Building	Linde + Robinson Lab (formerly Henry M. Robinson Laboratory of Astrophysics)
Albert B. Ruddock	Student house	Ruddock House
	Professorship	Albert Billings Ruddock Professor of Biology
Thomas J. Watson Sr.	Building	Thomas J. Watson, Sr., Laboratories of Applied Physics

Millikan Library



Chandler Dining Hall



Linde + Robinson



Ruddock House



Appendix E

Community Input Form

COMMUNITY INPUT FORM

September 2020

There is concern within the Caltech community about the formal Institute recognition that memorializes Robert A. Millikan, given his involvement with eugenics through the Human Betterment Foundation. Likewise, Thomas J. Watson Sr., Harry Chandler, Henry M. Robinson, and Albert B. Ruddock have garnered attention.

Caltech President Thomas F. Rosenbaum recently appointed a task force of trustees, alumni, faculty, students, postdoctoral scholars, and staff to advise on Caltech naming and recognition policies: present and future. He also charged the task force to provide a historical assessment of the individuals named above, including the role, if any, of changing ethical standards over time; and to advise on the impact of naming and recognition practices on Caltech's ability to be a destination of choice for a diverse community of exceptional scholars.

The question of naming and recognition practices on university campuses has engendered debate across the country. As part of its work, the task force would like to provide an opportunity for the Caltech community to contribute perspectives to committee deliberations. If you would like to submit your thoughts and opinions for the task force to consider during its work, please do so below.

Your response will be confidential and anonymous. If you would like to tell us your affiliation with Caltech, please do so within the context of your response.

Thank you.

[Caltech Committee on Naming and Recognition](#)

Appendix F

Peer Policies, Principles, and Educational Programs

EXCERPTS FROM PEER RENAMING POLICIES AND PRINCIPLES

Stanford

<https://campusnames.stanford.edu/renaming-principles/>

Factors to be Considered

The harm caused by retaining the name

The critical question is whether the honoree's behavior compromises the university's mission, including both its commitment to intellectual integrity and its commitment to diversity and inclusion of all members of the Stanford community. This is a question of fact whose answer should not be casually assumed. Among other things, it will depend on the nature of the conduct at issue, the prominence and role of the named feature in daily life at the University, and the degree to which retention of the name interferes with the ability of University community members to teach, learn, work, and live in the community.

The potential harms of renaming

- The committee must take care that renaming not establish a University orthodoxy with respect to particular opinions or otherwise inhibit free inquiry.
- The names of certain University features may have a positive value for students, faculty, staff, or alumni, who may find renaming disrespectful of their views.

The relevant factors and how they should be weighed

1. ***The centrality of the person's offensive behavior to his or her life as a whole.*** The case for renaming is strongest where the honoree's offensive behavior is inextricably connected with his/her public persona.^[2] The case for renaming is weaker where the honoree's offensive behavior, though publicly known, is not a central or inextricable part of his/her public persona^[3] – especially when the honoree's behavior was conventional at the time of the behavior or the naming, and when, despite the objectionable behavior, other aspects of the person's life and work are especially praiseworthy.
2. ***Relation to the University history.*** The case for renaming is weaker when the honoree has had an important role in the University's history, and stronger when the honoree is a person without a significant connection to the university. (The concern about "erasing" the university's history – or any history, for that matter – is diminished to the extent that the relationship between Stanford's history and the honoree is incidental to begin with.)
3. ***Harmful impact of the honoree's behavior.*** The case for renaming is strongest when the morally repugnant behavior of an honoree for whom a feature is named has a significant negative effect on the core University missions of pursuing knowledge and

receiving an education. Thus, the case for renaming is strong to the extent that retaining a name creates an environment that impairs the ability of students, faculty, or staff of a particular gender, sexual orientation, race, religion, national origin, or other characteristic protected by federal law or University policy, to participate fully and effectively in the missions of the University. The case is also strong to the extent that the morally repugnant behavior is connected to academic fraud or misconduct. In assessing the negative effects, the salience of the named feature for members of the Stanford community should be considered: The case for renaming is stronger where the name is prominent and encountered in a personal or intimate setting (e.g., a student residence) and generally is weaker where the feature is a relatively impersonal public place. As a result, when several features are named after the same individual, the impact may be more harmful for some features than for others.

4. ***Community identification with the feature.*** The case for renaming is weaker where the feature is part of a valuable positive tradition or identification shared by a substantial number of Stanford community members, including alumni.
5. ***Strength and clarity of the historical evidence.*** The case for renaming is strongest when evidence of the honoree's wrongful behavior is clear and unambiguous, and is weakest when the evidence is scant or ambiguous.
6. ***The University's prior consideration of the issues.*** The case for renaming is stronger when the honoree's offensive conduct came to light after the naming, or where the issue was not the subject of prior deliberation. The case for renaming is weaker when the University addressed the behavior at the time of the naming and nonetheless decided to honor the person, or when the University has already considered and rejected a prior request for renaming. (The original decision deserves some degree of respect if the decision makers considered the competing interests, but not if they made the decision in ignorance of relevant facts,^[4] or if they did not address the honoree's questionable behavior at the time of the naming.)
7. ***Possibilities for mitigation.*** In considering whether to retain or eliminate a name, the University should take into account whether the harm can be mitigated and historical knowledge preserved by recognizing and addressing the individual's wrongful behavior. When a feature is renamed or when the name is retained but the committee considers it a close question, the University should consider describing the history in a prominent way—at the feature, where practicable, or in some other suitable location.

UCL

<https://www.ucl.ac.uk/provost/reports/report-and-recommendations>

Principles

Six key principles underpin the Recommendations:

- a) Universities are public institutions that play a key role in social equality, equity and mobility. Provosts and Vice Chancellors need to manage them as such and take bold steps for the sake of social progress.
- b) The statutory duty of care upon universities must be accompanied by a culture of caring within them.

- c) UCL must confront its role in eugenics by understanding the past. This past should not be hidden but openly and critically discussed – it should be talked about more not less, in a way that restores agency, visibility and dignity to its targets.
- d) UCL must approach this history pro-actively, with sincerity, humility and honesty. This problematic history is to be used as a platform to centralise matters relating to equality, for example by taking steps to make ‘critical diversity literacy’ more visible and welcomed in teaching.
- e) The history of eugenics at UCL must be tackled using a multi-level approach that encompasses action at the individual, collective and environmental level.
- f) Where possible, funds historically linked to eugenics should be used to cover the cost of implementing the recommendations made in this Report.

UNC Chapel Hill

<https://bot.unc.edu/files/2020/07/Final-Policy-Adopted-7.16.2020.pdf>

The Board of Trustees adopted these principles for renaming on July 16, 2020.

Principles for Evaluating a Written Request for Removal

The University must assure that any requests to remove a name from a University building or public space are the result of a consistent approach to weighing and balancing the relevant factors and aforementioned principles. Written requests for removing a name are more compelling when the scholarly historical evidence is clear and convincing and when they satisfy one or more of the following criteria:

- The namesake was found to have committed a serious violation of a state or U.S. law prior to or during that individual’s lifetime following the naming recognition.
- The repugnant conduct in question was central to a namesake’s career, public persona, or life as a whole.
- Allegations of repugnant behavior are supported by documentary evidence that demonstrates both the extent and the intentionality of a namesake’s actions.
- Honoring a namesake demonstrably jeopardizes the University’s integrity and materially impedes its mission of teaching, research, and public engagement; or significantly contributes to an environment that excludes some members of the University community from opportunities to learn, thrive, and succeed.
- The removal of the name would not stifle viewpoint diversity or fail to acknowledge the historical complexity or holistic contributions of the individual to the University or the public.

Written requests for removing a name are weaker when one or more of the following elements are present:

- The namesake’s offensive behavior or viewpoints were conventional at its time and other aspects of the namesake’s life and work are especially noteworthy to the University or the greater community.
- Despite the evidence of objectionable behavior or views, there is also evidence of significant level of evolution or moderation of the namesake’s behavior and/or views.

Opportunities for contextualization, education, and preservation of historical knowledge to advance the University's mission and values must be considered in any final determination on the potential removal and/or renaming of a University building or public space.

Yale

https://president.yale.edu/sites/default/files/files/CEPR_FINAL_12-2-16.pdf

Yale's committee laid out principles, but did not decide on a process or procedures to be followed:

In our judgment, it is not within the authority of this committee to set out specific procedures to be followed. But a process would serve the University well. It has been our aim to gather information and conduct a scholarly inquiry in a way that models what such a process might look like.

Principles

A. Presumptions: Renaming on account of values should be an exceptional event

- There is a strong presumption against renaming a building on the basis of the values associated with its namesake. Such a renaming should be considered only in exceptional circumstances.
- The presumption against renaming is at its strongest when a building has been named for someone who made major contributions to the University.

B. Principles to be considered: Sometimes renaming on the basis of values is warranted

- Is a principal legacy of the namesake fundamentally at odds with the mission of the University?
- Was the relevant principal legacy significantly contested in the time and place in which the namesake lived?
- Did the University, at the time of a naming, honor a namesake for reasons that are fundamentally at odds with the mission of the University?
- Does a building whose namesake has a principal legacy fundamentally at odds with the University's mission, or which was named for reasons fundamentally at odds with the University's mission, play a substantial role in forming community at the University?
- Decisions to retain a name or to rename come with obligations of non-erasure, contextualization, and process
- When a name is altered, there are obligations on the University to ensure that the removal does not have the effect of erasing history.
- When a name is retained, there may be obligations on the University to ensure that preservation does not have the effect of distorting history.
- The University ought to adopt a formal process for considering whether to alter a building name on account of the values associated with its namesake; such a process should incorporate community input and scholarly expertise.

Bowling Green State University

<https://www.bgsu.edu/content/dam/BGSU/president/documents/gish/Gish-Task-Force-Report.pdf>

Relevant Policy

Bowling Green State University has an approved “Naming” policy that governs the naming of facilities, programs and spaces. In addition, BGSU also has a policy to address racial and ethnic harassment. The Task Force relied on these policies to determine appropriate actions.

University Policy 3341-9-2 Naming. Under this policy, naming and renaming rules are set out. Relevant to this issue, Section C.2.a considers the transfer of the name from a demolished facility that “will not be transferred to a new facility except in such cases when a useful facility is relocated to serve the greater interest of the university.” In addition, the Name Approval Criteria (Section C.1) sets out parameters for the naming of any facility. “The Name [must] not call into question the public respect of the university” (C.1.b). The Task Force points out that the transfer of the name from the Hanna Hall facility in Fall 2018 was the appropriate moment to reassess the naming of the theater; the University did not consider the naming issue at that time. Reconsideration of the naming now must consider whether the name “calls into question the public respect of the university.” Now located in a more prominent location and used by a broader representation of the BGSU student body, the matter required urgent action.

University Policy 3341-5-36 Racial & Ethnic Harassment. Under this policy, the university “will use its influence and encourage the community-at-large to treat its students, faculty and staff and affiliated visitors in a manner consistent with this policy”; specifically, “racial and ethnic harassment will not be condoned.” We note that this policy is intended to prevent “an intimidating, hostile or offensive educational, employment, or living environment” (Section B.1) and extends to all “pictorial illustrations, graffiti or written documents or material” (Section B.1.b).

Indiana University

<https://news.iu.edu/stories/2020/07/iub/releases/02-jordan-review-committee-appointed.html>

<https://policies.iu.edu/policies/ua-06-institutional-naming/index.html>

Changes or Removal of Names

1. The removal of or change in the name of a facility or organization may be initiated only by the provost, a chancellor, a vice president, the president of the IU Foundation, the president of the university, or a trustee.
2. In the absence of an express delegation by the President to a special committee appointed and charged by the President, the same process for naming a facility or organization in the first instance shall be implemented for changing or removing the name of a facility or organization, and the Naming Committee shall retain the authority for administration of this process.

3. When a facility or organization ceases to exist, the university will make every effort to continue to commemorate memorial or benefactor recognition in an appropriate way; however, the university will not usually transfer a name to another facility or organization.
4. In the case of a benefactor naming, the university may remove a name upon the failure of a financial commitment to be satisfied.
5. The university reserves the right to remove a name from a facility or organization under extraordinary circumstances when the continued use of the honoree's name would compromise the public trust and reflect adversely upon the university and its reputation. The removal of an honoree's name from a facility or organization must not be undertaken lightly, and it must be approached with respect for the considered judgments of the past, especially when exercised by the contemporaries of the honoree, and with an awareness of the fallibility of our own judgments. The decision-making process must include, at a minimum, the following:
 - a. An articulation of specific behavior(s) or course(s) of conduct on the part of the honoree on which the request for the removal of the honoree's name is based;
 - b. A fact-finding investigation of the specific behavior(s) or course(s) of conduct, including an examination of contemporaneous records related to the consideration of the naming, and the historical, personal, and (if relevant) academic context, of the behavior(s) or course(s) of behavior;
 - c. Thoughtful consideration of the impact on the university and the university community of both retention and the removal of the honoree's name from the facility or the organization, including but not limited to the following:
 - i. The nature of the specific behavior(s) and course(s) of conduct;
 - ii. The centrality of those behavior(s) and course(s) of conduct to the honoree's life as a whole;
 - iii. The prominence or role of named facility or organization in the daily life of the university;
 - iv. The relationship of the honoree to the university's history;
 - v. The degree to which retaining the name will interfere with the ability of the university community to teach, work, learn, and live in the community;
 - vi. Whether retention of the honoree's name compromises the university's mission or conflicts with the university's fundamental values.

The university may also consult with immediate relatives and heirs of the honoree, as well as individuals involved in the initial naming decision, before making a recommendation.

6. Upon the removal of a name under this section, the name of the facility or organization will revert to name immediately previous. If there is no previous permanent name, an administrative name will be adopted. The process for an initial naming will be utilized if the facility or organization is subsequently renamed.

SAMPLE PEER EDUCATIONAL PROGRAMS

Stanford

<https://campusnames.stanford.edu/wp-content/uploads/sites/14/2020/10/Jordan-report.pdf>

Augmented Reality Experience

One opportunity is for Stanford to build on its local expertise in art and technology (<https://arts.stanford.edu/for-faculty/art-tech/>) to create an augmented reality (AR) experience that visitors can access that would show them the history of Jordan Hall and its statues at different moments in Stanford's past as well as furnish more information about Jordan's complex biography and role in Stanford's history. There have been similar projects undertaken by Monument Lab (<https://monumentlab.com/>) and by Stanford Public Art Committee member and former Trustee Christy MacLear. Committee member Anna Toledano has also worked on an art/AR project at Stanford called Art++ (<https://brown.columbia.edu/portfolio/art/>), which could inform such a display. Such an AR experience would allow visitors access to the Stanford of past generations while simultaneously giving building occupants the option not to engage with Jordan's fraught legacy. If the AR project were expanded to cover more of campus, it might also address the concerns raised by alumni that it is difficult to connect with the physical structure of campus today due to its significant transformations. In addition to the augmented reality experience, the University could consider mounting an explanatory plaque located in Jordan Hall.

Visitor Center Exhibit, Publications, and Website

One of the commentators suggested using the Stanford Visitor Center to host a permanent exhibit that would highlight Jordan's role in the history of Stanford as well as discussing the history of eugenics at Stanford. We believe this is a productive recommendation which could be further augmented by having Stanford fund a scholarly research project that would furnish material for this exhibit as well as possibly a traveling exhibit and educational materials along the lines of the Chinese Railroad Workers Project (<https://news.stanford.edu/thedish/2019/10/13/chinese-railroad-workers-project-exhibit-honored-by-california-preservation-foundation/>) pioneered by Stanford faculty members Gordon H. Chang and Shelley Fisher Fishkin. Such investigations could also build upon and incorporate the work already accomplished by the Stanford Eugenics History Project.

UCL

<https://www.ucl.ac.uk/provost/reports/report-and-recommendations>

Teaching of the history of eugenics:

- A cross-Faculty Working Group comprising staff and students to be created to design ways to ensure that all UCL graduates know and understand the history of eugenics at UCL. Heads of Department to determine whether this will be a compulsory module for all 1st years.
- A UCL-education to include engagement with the critical histories of disciplines. UCL graduates are to be 'global citizens' engaged with the real world and familiar with the implications of scientific theories and practices on the real world, rather than as abstractions from society.
- As diverse communities make better decisions, UCL to ensure a pipeline of students

and staff from BAME, disabled and low-income backgrounds at all levels and in all areas of activity and disciplines.

- UCL to undertake work to embed the teaching and learning of Britain and Empire in schools in the UK. This could be through paid posts in relevant UCL Centres such as the Sarah Parker Remond Centre for the Study of Racism and Racialisation.

Yale

<https://news.yale.edu/2017/02/11/yale-change-calhoun-college-s-name-honor-grace-murray-hopper-0>

Yale renamed the college but left all other references to Calhoun.

Bowling Green State University

<https://www.bgsu.edu/content/dam/BGSU/president/documents/gish/Gish-Task-Force-Report.pdf>

Educational materials should be integrated into the theater display area that provide:

- a history of the Gish Theater from its original location in Hanna Hall, to the renaming of the Union Theater, to the reaction of the BGSU students initiated by BSU after the new display was revealed;
- the reasons for renaming the theater, including Lillian Gish's association with *The Birth of a Nation*, the power of her likeness in evoking both the film and its racist and exclusionary messaging, and the contribution the film has made to the construct of race in America;
- an acknowledgment of the Gish sisters' contributions to film history and culture, to be included in a display in the lobby or inside the theater and designed in collaboration with a film historian, the University archivist, and the Office of Marketing and Communication.

There should be coordinated use of and support for the theater for existing film programming and for the development of additional programming that focuses on cinema of social change, silent film, and classic Hollywood film.

Indiana University

<https://news.iu.edu/doc/2020-09-23-jordan-naming-review-committee-report.pdf>

For Jordan Hall, this would at least include a plaque or sign noting who Jordan was and the reasons for renaming. In addition, the committee favors some other means—e.g., an exhibit, lectures, a course, installation, public art, a periodic public event—of visibly acknowledging this history to avoid its erasure.

Imperial College London

<https://www.imperial.ac.uk/news/199434/departments-earth-science-engineering-history-legacy/>

Listening Exercise

With the help of an expert facilitator, we will explore the experiences and views of staff and students in the context of recent global events (e.g. ‘Black Lives Matter’ protests in light of the killing of George Floyd), and ESE and Imperial’s institutional history. The aim of the listening exercises will be to deepen collective understanding within ESE of the issues of racial inequality. We will think about the context of ESE’s pioneers’ history and the institutional impacts upon the lives and experiences of colleagues, and students. The first sessions will take place in Summer 2020 for staff, and Autumn 2020 for students.

Equality Diversity Inclusion and Culture Committee

To support these changes, the Department of Earth Science and Engineering will form an Equality, Diversity, Inclusion and Departmental Culture (EDIC) Committee in September 2020, in parallel to the equivalent committees at Faculty and College Level. The Athena SWAN Self-Assessment Team Lead will report into this committee on issues relating to gender equality.

Training for Staff and Students

The Department will host a number of new Equality, Diversity, Inclusion and Culture training workshops. These will include sessions on racism, micro-aggressions and racial-sensitivity as well as any suggestions that may come out of the listening exercise.

Endowment Review

In Summer 2020, ESE will review its endowments. The department has a number of funds that support our students or research, but which have a long and potentially complex history, so may benefit from an in-depth investigation. From this review, the Department will identify a source of continuous funds that can be used to provide financial support Black, Asian, and minority ethnic students to improve diversity in the department and widen participation.

University of Oxford Report

The ESE Management committee will explore how to take forward structural and procedural recommendations from an Oxford University report on improving recruitment and retention of Black, Asian, and minority ethnic students and staff in geosciences.

Princeton

<https://www.princeton.edu/sites/default/files/documents/2017/08/Wilson-Committee-Report-Final.pdf>

In citing and remembering Wilson, Princeton has venerated him in a way that has not been forthcoming or transparent about his failings, and especially about his views about race. If the stature and character of Princeton today result partly from reforms that Wilson launched, they likewise benefit from efforts by subsequent generations to repudiate the exclusionary views

he espoused. It is critical that one outcome of this process be a much more multi-faceted understanding and representation of Wilson on our campus, especially at the school and the college where his name is commemorated.

The discussion about Woodrow Wilson's legacy has revealed a compelling need for Princeton to provide more opportunities for members of the campus community and others to learn—in courses, lecture series, exhibitions, campus markings, and other ways—about aspects of Princeton's history that have been forgotten, overlooked, subordinated, or suppressed. The University must be more transparent about its historical legacy, especially as it relates to Wilson and especially as it relates to race. We need to acknowledge that Wilson held and acted on racist views and that pernicious racial attitudes and racist actions are part of our institutional history. We also need to focus renewed attention on those who have helped make Princeton a more diverse and inclusive place.

We are pleased that the Wilson School is planning an exhibition and panel discussion this spring about Wilson's legacy; the exhibit, co-sponsored with the Seeley G. Mudd Manuscript Library, will draw on modern scholarship, newly digitized resources, and Princeton's special collections. We encourage additional efforts along these lines, drawing on scholarly resources at Princeton and elsewhere. We encourage the school to install a permanent marker on-site that educates the campus community and others about both the positive and negative dimensions of Wilson's legacy.

Finally, we have greatly appreciated the opportunity over these past few months to think deeply and expansively about issues related to historical legacy, and we encourage the administration and faculty to consider ways in which Princeton could play a leadership role in encouraging similarly expansive thinking about national and international issues related to race, inclusivity, and cross-cultural understanding—perhaps through some kind of global symposium that seeks to shed new light on these persistent and vexing issues. As many have pointed out, the issues that have been raised at Princeton reflect deep currents in this and other countries.

Appendix G

Notes on Thomas J. Watson for Caltech's Committee on Naming and Recognition

Peter Sachs Collopy
August 18, 2020

Thomas J. Watson Sr. was leader of IBM—carrying at various times the titles of general manager, CEO, president, and chairman—from 1914 to 1956. During this period, the company became a major player in the American and international data processing industries, setting the stage for its dominance of computing in the decades that followed.

Watson is a controversial figure principally because of IBM's relationship with the government of Nazi Germany. The history of this relationship, and of Watson's role in it, is complex. It is the subject of a bestselling 2001 book, *IBM and the Holocaust*, by journalist Edwin Black.¹ Unfortunately, *IBM and the Holocaust* is generally regarded as hyperbolic and inaccurate by historians who research related subjects.

The book puts IBM and its punch card calculating machines at the center of the story of the Holocaust. "I was haunted by a question whose answer has long eluded historians," writes Black. "The Germans always had lists of Jewish names.... How did the Nazis get the lists?... The answer: IBM Germany's census operations and similar advanced people counting and registration technology."

According to reviews of *IBM and the Holocaust* and other accounts of this history, this is incorrect. "Historians have long since established that the Nazis had great success in using residential registers or extorting lists of their victims from Jewish communal organizations," writes Henry Ashby Turner, Jr. The Nazi census of 1939 did ask respondents about Jewish grandparents, and responses were tabulated by punch card. But those cards, one for each resident, did not include personally identifying information like names that could be traced back to the individuals they represented in order to arrest them; the tabulation produced statistical knowledge of the geographic distribution of populations, not locations of individuals. "Compilation of names and addresses from the millions of supplemental questionnaires was a separate undertaking," writes Turner, and one probably completed manually by people.²

Another reviewer, Michael Allen, confirms this, writing that "by May 1939 the SS Sicherheitsdienst (security policy) had prepared a *Reichskartei der Juden und juedischen Mischlinge*, or 'Reich

¹ Edwin Black, *IBM and the Holocaust: The Strategic Alliance Between Nazi Germany and America's Most Powerful Corporation*, expanded edition (2001; Washington, DC: Dialog Press, 2012).

² Henry Ashby Turner, Jr., review of *IBM and the Holocaust*, *Business History Review* 75, no. 3 (2001): 636–639, <https://www.jstor.org/stable/3116406>. See also Friedrich W. Kistermann, "Locating the Victims: The Nonrole of Punched Card Technology and Census Work," *IEEE Annals of the History of Computing* 19, no. 2 (1997): 31–45, <https://doi.org/10.1109/85.586070>.

Card File of Jews and Partial Jews.’... The German authorities did not use Hollerith [IBM] cards for these files. Instead, bureaucrats had to compile information by hand, a task for which they had resource to quite traditional methods: they cross-referenced the national card file with the police files of Jewish identification cards, and statisticians then attached black tabs to Jewish registration cards in the national card file.”³

Similarly, in his *Punched-Card Systems and the Early Information Explosion, 1880–1945*, Lars Heide reports that “information about religion was already perforated into the punched-card used to process the German census in 1933 in Prussia,” but both in this census and in 1939, the punch cards did not include names or individual identifying numbers.⁴

IBM punch card machines were used inside concentration camps and death camps. Here too, though, both reviewers argue that Black overstates his case. “Black fails to provide evidence that IBM was aware its machines were being used for genocidal purposes while the United States was at war with Germany,” writes Turner. “Hollerith tabulations appear in the records of the concentration camps only in the middle of 1944,” writes Allen, “when Nazi Germany had, for all intents and purposes, already lost the war.”

Heide argues that what was exceptional about Nazi Germany was how little use they made of this technology. The US began using punch cards for the census in 1890, and for Social Security in 1937. Vichy France began developing a punch-card-based national register for conscription in 1940. Due to the chaos of its government, writes Heide, “the Nazi regime only started to develop a national register of punched cards in 1943, in spite of the technology’s capacity to facilitate control.” In contrast to Black’s account, Heide writes that “a system of local registers using simpler methods had been established in the 1930s, and their cruel efficiency was proven when Jews had to be located for deportation.”⁵

According to Heide, Germany’s development of punch card calculation was slow in part due to the limited resources of IBM’s German subsidiary, Deutsche Hollerith Maschinen Gesellschaft mit beschränkter Haftung, or Dehomag. IBM had acquired Dehomag in 1922 when hyperinflation had made it impossible for the German company to pay its debt to the American one. During the 1930s, writes Heide, “IBM controlled Dehomag, while Dehomag maintained all relations in Germany”—with rare exceptions such as Watson’s 1937 meeting with Adolf Hitler and Minister of Economics Hjalmar Schacht, about which more in a moment. When the United States entered World War II in 1941, the German government took custodianship of Dehomag and other subsidiaries of American companies. Founder and managing director Willy Heidinger, who had resented IBM’s 1922 acquisition of his company, remained in his role, but was again independent, no longer reporting to IBM headquarters in New York.⁶

With the exception of *IBM and the Holocaust*, this literature has not focused on Watson’s personal culpability. Others have written about this, though.

³ Michael Allen, review of *IBM and the Holocaust*, *Technology and Culture* 43, no. 1 (2002): 150–154, <https://www.jstor.org/stable/25147861>.

⁴ Lars Heide, *Punched-Card Systems and the Early Information Explosion, 1880–1945* (Baltimore: Johns Hopkins University Press, 2009), 246.

⁵ Heide, *Punched-Card Systems*, 234.

⁶ Geoffrey Jones and Adrian Brown, “Thomas J. Watson, IBM and Nazi Germany,” Harvard Business School case 9-807-133 (Boston: Harvard Business School Publishing, 2019), 4; Heide, *Punched-Card Systems*, 240.

In 1933, nine months after Adolf Hitler became chancellor, Watson traveled to Germany on the occasion of Dehomag receiving a contract to operate the census. At the opening of a new factory, Heidinger was effusive about Hitler, giving a speech in which he said that “we... will follow his orders blindly, because we know that he will lead our nation towards a great future.” Watson, reading a transcript of this speech, wrote to Heidinger to congratulate him.⁷

In 1937, Watson and his family visited Berlin for a meeting of the International Chamber of Commerce, of which he had just been elected president. While there, he met with Hitler, and told reporters after that the Führer had promised that “there will be no war.” At a party hosted by Joseph Goebbels, the Nazi regime awarded Watson the Merit Cross of the German Eagle, a high honor given to foreigners. The next year, Germany awarded similar medals to Nazi sympathizers Henry Ford and Charles Lindbergh.⁸

Watson was well aware of the Nazis’ antisemitism. Jewish family friends were selling their department store and moving to Sweden, and when the Watson family attended a reception, Watson’s son reported later, “a Germany diplomat told us proudly that the place had belonged to a rich Jew who had fled the country.” Watson protested Nazi atrocities only by writing to Minister of Economics Hjalmar Schacht that he believed they would hurt trade relations with the United States.⁹

In 1938, shortly before *Kristallnacht*, Armand May, chairman of the American Lecithin Corporation, wrote to Watson to ask him why he had accepted a Nazi medal and what he thought about Nazi antisemitism. “I am an internationalist,” wrote Watson. “I cooperate with all forms of government, regardless of whether I can subscribe to all their principles or not.” He also claimed to be helping individual Jewish refugees, including “two young men I brought out of Germany” who worked for IBM and seven Jews fleeing Austria. “I do not feel it is necessary for me to answer any question as to whether I am in sympathy with the movement against the Jews,” he wrote, “because what I have been doing for the Jews is so well known, and, furthermore, no real American could subscribe to any principles of government that discriminate against race or religion.” Neither was really true: Watson’s acts of charity toward refugees were private, not well-known, and in the late 1930s many Americans supported white supremacy both domestically Jim Crow and internationally as Nazism. In a later letter, Watson was still more defensive: “I cannot understand,” he wrote May, “on what grounds you feel that you have a right to take the position of telling me what to do.”¹⁰

Nonetheless, in early 1939, Watson wrote to Hitler himself of a “loss of good will to your country” resulting from its oppression of Jews. “I respectfully appeal to you,” he wrote, “to give consideration to applying the Golden Rule in dealing with these minorities.”¹¹

⁷ Jones and Brown, “Thomas J. Watson,” 6.

⁸ Jones and Brown, “Thomas J. Watson,” 1, 20; Kevin Maney, *The Maverick and the Machine: Thomas Watson, Sr., and the Making of IBM* (Hoboken: Wiley, 2003), 206, 210.

⁹ Maney, *Maverick and the Machine*, 206, 210; Jones and Brown, “Thomas J. Watson,” 12.

¹⁰ Maney, *Maverick and the Machine*, 216–217.

¹¹ Maney, *Maverick and the Machine*, 218–219.

Hitler, of course, did not. Instead, Germany invaded France, Belgium, Luxembourg, and the Netherlands. In 1940, in protest of Watson's medal, Jewish leaders cancelled plans to participate in an IBM event at the World's Fair in New York. In May, Watson's son enlisted in the National Guard. In June, Watson returned his medal to Hitler, enclosing a letter in which he objected that Hitler had lied to him three years before about avoiding war.¹²

In 1941, the United States entered the war. From this point on, Dehomag was officially independent, and did not take its orders from Watson.¹³

¹² Maney, *Maverick and the Machine*, 219.

¹³ Heide, *Punched-Card Systems*, 241.

Appendix H

Related Contractual Obligations

Caltech's obligation to the endowment established with Human Betterment Funds Upon Ezra S. Gosney's death in 1942, the HBF Directors decided to convert Foundation assets into an endowment at "some educational institution competent to conduct such research in the general field of genetics and to make known the results of such research for the public benefit." A number of educational institutions were offered the endowment and rejected it. It was the California Institute of Technology that ultimately accepted the funds. The details of these decisions are not available, but the outcome is known.

The California Institute of Technology liquidated the Human Betterment Foundation's real estate holdings: a ranch was sold for \$19,000, a commercial building in downtown Los Angeles for \$100,000, a property in San Bernardino for \$24,000, and a lot on Sunset Boulevard for \$3,500. The Foundation also held approximately \$25,000 in cash.

To facilitate the dissolution of the HBF and the sale of Gosney's assets, the Institute established a small office for the HBF within the Biological Laboratory and retained the services of Lois Castle (Gosney's daughter) on a part-time basis. Castle managed the business transactions required to liquidate the assets being transferred to the Institute. Upon the sale of the assets, the Foundation was disincorporated, all cash provided to the Institute, the HBF office closed, Castle's services terminated, and the Gosney Research Fund established.

In January 1944, the Institute Executive Council approved a committee to recommend how to utilize the Gosney Fund. The committee consisted of Max Mason, William B. Munro, Robert A. Millikan, Alfred H. Sturtevant, Arie Haagen-Smit, Frits Went, Henry Borsook, and Anthonie van Harreveld.

After considering a number of other possible projects, the committee suggested that "the sum be used, for the present, to establish high-grade postdoctoral fellowships" that it hoped would come to be widely known and recognized as first rate opportunities.

At the March 1945 Board of Trustees meeting, the Board approved the use of the income from the Gosney Fund on the following terms. The detail below, excerpted from the meeting minutes, provides the proposal from the then Division of Biology to study the biological bases of human characteristics. It further details the Executive Council's ultimate decision to broaden the research scope to "studies of heredity or related subjects."

MEMO: TO THE EXECUTIVE COUNCIL OF THE INSTITUTE

The Council of the Biology Division, and the Staff of the Division, have devoted much thought to the question of the most advantageous way of using the interest from the Gosney Foundation. It is our understanding that the terms of the gift, while very liberal, indicate that this income is to be used for study of the biological bases of human characteristics. After considering a number of other possible projects, we should like

to suggest that the sum be used, for the present, to establish high-grade postdoctoral fellowships which we may hope would come to be widely known and recognized as first rate opportunities.

The following provisions are therefore suggested:

1. That the interest, when available, be used to establish a post-doctorate research fellowship in Biology, these to be known as Gosney Research Fellowships.
2. That these fellowships be awarded for fundamental research within the terms of the gift as stated above, along line that can profitably be studied at the Institute. Because of past interests served by the Gosney fund, it would seem fitting if at the initiation of the plan, the fellowships be devoted to studies of heredity or related subjects.
3. That the amounts paid to such fellows be liberal, the minimum being \$2,500 per year.
4. That appointments for one or two years, with the possibility of reappointment for one or two additional years when desirable.
5. That these Fellowships involve no teaching duties though the incumbents should be free to take part in seminars, and to give some lectures when that seems desirable.
6. That a part of the fund be available for special equipment when that is necessary for the work of a fellow.
7. That a committee be appointed to receive applications and make appointments.

Millikan then recommended the following committee to award the postdoctoral fellowships: Prof. Alfred H. Sturtevant (Chair), E. G. Anderson, Anthonie van Harreveld, Max Mason, and Thomas H. Morgan. The Board approved this committee, and the Institute began to use the endowed funds as outlined.

From the outset, the California Institute of Technology clearly distanced itself from the HBF's program. It used the newly established funds to support basic research, mainly in genetics.

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