

The History of Caltech's Underrepresented Students

by Edray Herber Goins



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Introduction

The California Institute of Technology has never been known for its diverse campus. For every four men, there is only one woman. In last year's freshman class, there were 225 students; only nine were Hispanic, two were Native American, and two were African-American.

Naturally, one would expect that progress has been made over the years. This would not provide much hope, however, considering that the number of underrepresented students are so low. Yet, we underrepresented students feel we have made positive changes, and life is better now than it was twenty years ago.

In September of 1991, I received a scholarship from the American Physical Society (APS) that assigned mentors for its scholarship winners. My mentor was a Robert Thornton, who worked at Xerox Corporation in Palo Alto, California. I thought no more about it, because school work was higher on my list of priorities than arranging a job in northern California.

About six months later, I received another notice from the American Physical Society that asked if I had been in contact with my advisor. Without hesitation, I sent a negative reply, and again thought no more about it.

Less than a month after that, I found myself at a conference at Stanford University for African-American physicists. Little did I realize that Stanford was in Palo Alto, and Robert Thornton was an African-American physicist. I arrived at the conference site just ten minutes after he left. As things would turn out, I never saw him during that weekend.

One year passed, and in September of 1992, my scholarship with the American Physical Society was renewed. I expected to receive another notice from the APS asking whether I had contacted my mentor, and I expected to answer no once again. However, there was a slight twist.

While looking through some old Caltech yearbooks, I found something out of the ordinary. Page after page showed the homogeneous white male at work and play, and every once in a while reality would return and I would be reminded of the small progress we as underrepresented students had made over the years. Unexpectedly, I came across a photograph of a Black Student Union that was once at Caltech. Robert Thornton was once president.

Within a month, I contacted him. After he and I discussed the mundane facets of the scholarship, we inspired each other with historical facts about Caltech. I was beginning to realize there is a whole history that we have forgotten.

I wanted to know more about what happened to the students that began to break down the color barriers of the institute. I wanted to hear more interesting stories. I wanted to know if we underrepresented students had made any real progress over the years.

History of Caltech's Underrepresented Students

This project is that incredible search and the incredible journey of trying to put together the history of a people.

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Grant Venerable, as he appeared in the 1932 Caltech yearbook.

Let's Get This Started Right

William Shockley would go on to win the Nobel Prize in Physics, and be seen by millions across the nation as a scientist that could prove that Negroes did not have the mental capability to excel beyond their white counterparts.

It must have been ironic that in his 1932 graduating class at Caltech there was a Negro student.¹

Grant Delbert Venerable, Jr. was born in Kansas City, Missouri in 1904. His father was born in the same state during the end of slavery. Although Venerable was more than a tenth generation American, he was of African, Cherokee, and Scottish descent.

At the age of 15, he and his family moved to the San Bernadino area. In 1920, at the age of 16, he was graduated from San Bernadino High School. From there, he attended the University of Southern California (USC), the University of California at Berkeley (UCB), and the University of California at Los Angeles (UCLA).

¹ Most of the information in this chapter comes from the April 1989 edition of *Caltech News*.

At UCLA, he was exposed to a myriad of experiences. He ran the quarter mile on the track team, played the coronet, and was an associate of the late diplomat and Nobel Prize winner Ralph Bunche. As he was finishing his degree, he was expelled for dropping a course required for the teaching candidacy in geometry. He did not obtain the permission of the department chairman, and had to pay the consequences. Venerable had to change schools.

"My father knew about Caltech," stated his son, Grant Venerable II. "He probably wouldn't have tried for it if he hadn't felt pushed to the wall by the UCLA experience." In 1928, the elder passed the entrance exams at Caltech and was admitted as a sophomore.

"He particularly valued his Caltech experience because he felt he reached his emotional and intellectual maturity there," the son continued.

Although his family hoped he would become a doctor, Venerable decided to become an engineer. He was quite active on campus while he was a student; he was a member of the YMCA, the American Society of Civil Engineers, and the track team for two years, while president of the Cosmopolitan Club.



Grant Venerable is in the center of the front row in this photo of the Cosmopolitan Club from the 1932 yearbook.

At his right is William H. Pickering, former director of JPL.

Venerable made many close friends while he was at Caltech. He often joined study groups, and aspired to strengthen his academic prowess. These ties were retained over the years.

His career at Caltech was not free of problems. Once, Venerable applied to live in one of the student houses. Robert Millikan took this to the Board of Trustees, because he was concerned about whether a colored student should be permitted to live there. Millikan informed Venerable later that he was welcome in the house. However, Venerable had already decided that he could not afford the cost, and he

continued to live in a small apartment off campus. He paid for college through odd jobs; he would mow lawns and work as a butler for a family in Beverly Hills.

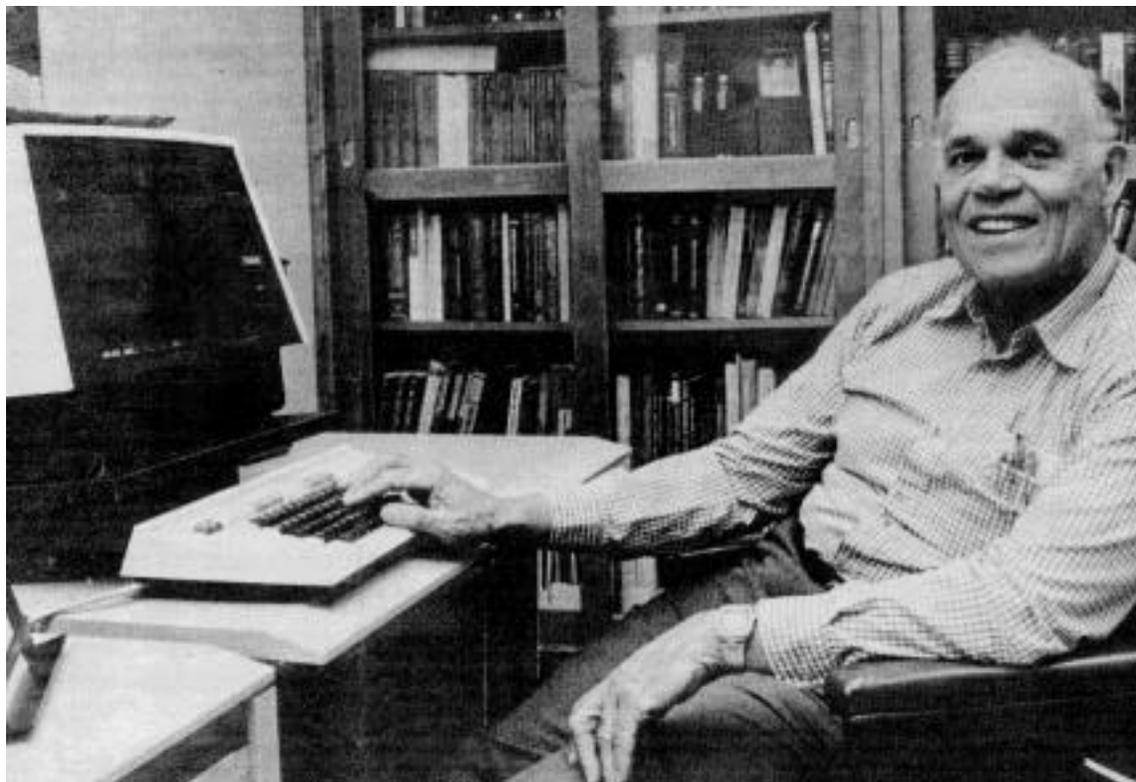
Venerable would be graduated with a bachelor of science degree in civil engineering in 1932. His class contained some prominent scientists. William Pickering, a fellow member of the Cosmopolitan Club, would become director of the Jet Propulsion Laboratory (JPL), and William Shockley would win the Nobel Prize in Physics for his invention of the transistor.

Even a degree from Caltech could not ensure a job during the Great Depression. Almost three years from the Crash of 1929, Venerable was unable to find work in his field. He went to Montana and spent a year at his aunt's gold mine. He earned somewhat of a profit, but decided to return to California. He went to work for the Golden State Mutual Life Insurance Company, the only black owned insurance company west of the Mississippi.

Eight years after graduation, Venerable met a former classmate that helped him to find work in mining engineering. Eventually, he would work for the Hayward Spyglass Company, where he used his knowledge of optics. Wanting to be closer to his family in Los Angeles, he bought a hotel there with his brother.

After several years, he decided to buy an eraser manufacturing company in Montebello, California. He managed the George R. Healey Manufacturing Company until his death on March 27, 1986. He was 81 years old.

Caltech honored Venerable's life by establishing a memorial book fund in 1989. The Venerable family has asked that the endowment be used to purchase books that "bear upon the human condition, especially of African-American and Native American cultures, and which bear upon the impact of modern technology on the human condition." The book fund is in memory of both Grant Venerable and his second wife, Naomi Venerable. The books can be found in Millikan library in the humanities section.



In this photograph from 1984, Dr. James Lu Valle sits in his office at Stanford University.

A Lifetime Filled with Awards and Honors

It may have seemed like any normal day in 1940, but for James Ellis Lu Valle it meant the end three years in Pasadena and three years of hard work. At this graduation ceremony, he would be bestowed the title of Doctor Lu Valle in not just chemistry, but mathematics as well.

He was perhaps the first African-American to receive this honor from Caltech. There are no others known to receive doctorates before the year he received his. But this would not be the only honor that James Lu Valle received over his lifetime.

He won an Olympic medal in 1936, just a year before he entered Caltech's doctoral program.¹

¹ Most of the information for this chapter comes from a January 18, 1984 article in the *Campus Report* of Stanford University, written by Donald Stokes.

In 1920, just over a month after his eighth birthday, Jimmy Lu Valle awaited, with some anticipation, the arrival of Christmas day. Under the tree he found a gift that would change his life forever: a chemistry set. Within weeks, he toyed with all of the experiments. After filling the house with smoke, he yielded the reaction "Out!" from his mother, and decided to spend the rest of his childhood career in chemistry on the porch.

He then moved from those days in San Antonio, Texas to Los Angeles, California, where he attended Los Angeles Polytechnic High School. There was a slight detour on his road to becoming a renowned chemist. One day, the track coach needed someone to pace one of his half mile distance runners. Lu Valle agreed, and, rather unexpectedly, he won.

"As of then I was officially on the team," recalled Lu Valle. "The first race I was entered was two days later. They put me in the quarter mile, and I asked the coach, 'How do you run this race?' The coach was a bit of a joker, and he replied, 'Run as fast as you can as far as you can - then sprint!' Being rather gullible, I did. I nearly died, But I won."

Although he played football and basketball, he did not know he could run that fast. Jimmy Lu Valle had only concentrated in his schoolwork; he was a "straight A" student.

While an undergraduate at the University of California, Los Angeles (UCLA), he attended the Inter-Collegiate Amateur Athletic Association of America (AAA) meet in Boston in 1932. He won the quarter-mile in 46.9 seconds; after that, he was established in college athletics. In fact, Lu Valle was captain of the track team in 1935.

His academic career at UCLA was equally as impressive. Besides being a "straight A" student, he was inducted into both the Phi Beta Kappa and Sigma Xi, honor societies, and had a short story published in the *Atlantic Monthly* as the result of winning a writing competition. By 1936, he would be graduated with bachelor's degrees in chemistry and mathematics.

Lu Valle qualified for the summer Olympics to be held in Berlin, Germany, less than six months after he was graduated. That year, Jesse Owens was a teammate.

"The Germans adored Jesse," recalled Lu Valle. "When we arrived, the public mobbed him, because just before leaving for Germany, he had set four world's records in the United States. *In one day.*"

Although Jesse Owens ran in both the 100 and 200 meter races, Lu Valle himself ran in the 400 hundred meter race. Coming out of the final turn, Lu Valle was in second place behind Archie Williams, a Negro man from Oakland and a student at the University of California, Berkeley. With only 40 meters to go, Lu Valle appeared to have a silver medal. However, he had to settle for bronze, because Arthur Godfrey Brown on Great Britain passed him. The finish was very close; Brown came within 7 inches of Williams, and Lu Valle finished with a time of 46.8 seconds, less than 0.3 seconds of the gold medalist's time.



The image shows a table titled "Leichtathletik" (Athletics) for "Männer" (Men). It lists the top three finishers for the 100 Meter, 200 Meter, and 400 Meter races. Jesse Owens is the winner of the 100m race, and James Lu Valle is the winner of the 400m race.

Leichtathletik	
Männer	
100 Meter	1. Jesse Owens-USA. 10,3 Sek. 2. Ralph H. Metcalfe-USA. 10,4 Sek. 3. M. B. Osendarp-Holland 10,5 Sek.
200 Meter	1. Owens-USA. 20,7 Sek.* 2. Robinson-USA. 21,1 Sek. 3. Osendarp-Holland 21,3 Sek.
400 Meter	1. Archie Williams-USA. 46,5 Sek. 2. G. K. Brown-England 46,7 Sek. 3. James Lu Valle-USA. 46,8 Sek.
	1. Woodruff-USA. 1:52,9 Min.

This excerpt from the 1936 Berlin Games Program shows the final times for the races.

Later that year, Lu Valle decided to come back to UCLA and enter as a graduate student. He went on to earn his master's degree in chemistry and physics.

In 1936, he entered Caltech as a doctoral candidate in chemistry and mathematics. He worked under the infamous Linus Pauling.

"Linus is a great person, he took time and trouble as my research advisor. He did not take on many people, but those he did, he worked closely."

After earning two degrees in 1940, he went on to teach at Fisk University in Tennessee. He then worked at Eastman Kodak, where he was the first African-American employed at the laboratories. Eventually, Lu Valle settled in Palo Alto. He became director of physical and chemical research in 1969 at SCM laboratories. Later, he became director of undergraduate labs at Stanford, where he advised over 900 pre-medicine students.

Lu Valle's career was officially honored by the Board of Regents of the University of California in 1983, when it decided to construct the James E. Lu Valle Commons, a graduate student union located at UCLA.

After working at Stanford, researching the human brain and processes in memory, he passed away on January 30, 1993. He was 80 years old.

Oh, to Follow that Linus Pauling

Dr. James Lu Valle was not the only African-American graduate student to come to Caltech and work under Linus Pauling. After him, there were several others.

In 1953, twenty year old James King, Jr. had just been graduated from Morehouse college in Atlanta, Georgia with a bachelor of science degree in Chemistry. It was quite an achievement; there were not many African-American students with college degrees at the time. He felt that he should further his education. The only question was: where?

James King felt that he should make some changes in his life. He was born and raised in Columbus, Georgia, a town located just outside of Atlanta, so he had lived in the just about the same place all of his life. Morehouse was a Historically Black College for young men, (the only of its kind, in fact), and although there were limited opportunities for African-Americans, he felt he should experience other cultures. King finally decided to make a dramatic change; he would fly to the other side of the country and go to a small school in Pasadena.

The trip to California was his first form of culture shock. He had never been out of Georgia, let alone on the west coast, and certainly not on a plane before. His first experiences at Caltech were even more shocking. After arriving in Pasadena in September of that year, he arrived to campus and asked to receive a room. He felt rather comfortable, for all of the arriving graduate students received rooms with no problem.

"There are no rooms left," responded the secretary that assigned rooms.

King was taken aback. He had traveled more than four hours by plane, only to find himself in a peculiar situation. As he thought about his predicament, he realized that those in line after him received rooms with no problem.

Whether it was because he was the only entering African-American student that year or not, no one may know for sure. We do know that James King spent his first two months at Caltech sleeping in the gymnasium of the local YMCA.

Even with his first experiences at Caltech, King managed to survive. Two years later in 1955, he received a master's degree in chemical physics, and then in 1958, he received his doctorate. He is presently Assistant Laboratory Director at the Jet Propulsion Laboratory where he oversees more than 4000 personnel.

William D. Hutchinson was a good friend of King's and saw how well he was doing. Hutchinson was graduated with bachelor's degrees in chemistry and mathematics the same year King earned his

master's degree. Hutch decided to consider Caltech as a potential school at which to further his education.

Although it was rare at the time for African-Americans to go on to graduate school, many members of Hutchinson's family had higher degrees. His father was a physician that attended Meharry Medical School¹, and his brother was also in medicine.

At the time Hutchinson was graduated, there was a great deal of discussion about integration in schools. There were those at Morehouse that wanted him to apply to the University of Alabama. No African-American student had ever attended the school, because if one did, he would receive a draft notice immediately. Hutchinson decided not to get involved in these politics, and did not apply. A fellow classmate Valerie Lucy applied instead².

The only two colleges he considered attending were University of Chicago and Caltech. One of his college professors earned his doctorate at the Chicago campus, but an article in *Time* magazine that described Caltech caught Hutchinson's eye. Although it emphasized the competitive nature of the institution, Hutchinson's friend King seemed to be surviving. Hutchinson finally decided on Caltech.

Hutchinson was quite fortunate to receive a full scholarship to the institute. The case *Plessy v. Ferguson* ordered equal educational opportunities for all students regardless of race, so Hutchinson petitioned the state of Alabama to fund his education. The state agreed, simply because it cost close to nothing to attend the University of Alabama. Hutchinson eventually received a double stipend, so after a few years at Caltech, he brought a car with the extra money. He paid only \$345.50 for it.

Linus Pauling had just won the Nobel prize in chemistry while at Caltech.³ Because Hutchinson used his book *The Nature of Chemical Bonds* in an undergraduate course, he was familiar with caliber of advisor he was to work under.

From the moment he set foot on the campus, Hutchinson learned that Caltech had an informal atmosphere. He had an experience of culture shock similar to King's; he had never flown in an airplane before, and did not realize that he needed transportation to get from the airport to the institute. He used public transportation to travel from Los Angeles International airport to Caltech. (Anyone that has tried this knows that it takes at least an hour.) After a long plane flight, and arriving on the street in the middle of night, Hutchinson was a little disoriented. Hutch had a kinder welcome to Pasadena than King's; Jim Bonner, who happened to see Hutchinson arrive, helped him to find a room in the Athenaeum. He found out later that Bonner was a professor of Biology.

1 Meharry Medical School is a Historically Black College.

2 Lucy applied to the University of Alabama and got in. He was the first black student in the history of the university to enroll at the school.

3 Pauling won the Nobel Prize in 1954.

Hutch ended up with a African-American roommate, Richard Lee McGriff, but it is questionable that this happened by chance. Although all graduate students had roommates at the time, he did not ask for one that was black, and there were very few black at Caltech at the time. McGriff was from Florida Agricultural and Mechanical University (FAMU), another Historically Black College. They both lived in Throop Hall⁴.

There was not much in the way of social life at Caltech. There was an Inter-Nation Association that catered primarily to international students. There were no black female students - either undergraduate or graduate - at the institution. Hutchinson found going to church to be the most helpful social event; he went to Scott Methodist in Pasadena. Even so, he could not do much until he got a car.

Hutchinson and his roommate, McGriff, often went out into the local community. One time, they went to a bar in Old Pasadena. The two were immediately thrown out, probably because they were black.

Later that year, Hutchinson decided that he wanted to live off-campus in the black community. He had made a friend that was a lawyer from Morehouse; the two would often discuss racial issues. At the time in Pasadena, there were restrictive covenants that kept blacks out. Because Hutchinson had an "ambiguous" background (he even admits that he does not appear to be black), he decided to attempt to get an apartment. When he had more evidence of racism, he would have a lawsuit.

By 1960, Hutchinson had his evidence. He and his friend went to court and won. Under the Fourteenth Amendment, the landlord could not evict anyone on the basis of race. Hutchinson helped to make great advances for blacks in Pasadena this way.

Hutchinson was intrigued by the caliber of student that he met while he was at Caltech. Placement exams were given the first week of school for graduate students. Many students did well, as Hutchinson observed, but better academic backgrounds, not superior intelligence, gave these students the edge. After a few months, however, all students were on equal footing.

Initially, Hutchinson did not embark on a doctorate because he did not have confidence in himself. He simply wanted to earn a master's degree. He decided to work on sickle cell anemia because his cousin suffered from it. Hutchinson's advisor, Jerry Venegrad, gave him the confidence he needed to complete his doctorate and discover new results in the field.

Even with his social adventures, Hutch made great advances in science. For his doctoral thesis, he solved a fundamental problem in sickle cell anemia. He showed that sickle cell anemia was caused by an aberration in the base chain in DNA. Even today, this result is always used in sickle cell research, and Hutchinson feels proud that he was the first to discover it.

Hutch was graduated with a master's degree in 1957, and a doctorate degree in 1960. He is presently manager of laboratory operations at Rockwell International in Canoga Park.

⁴ Throop Hall used to be where Winnett Center now stands.



Here is a picture from the 1965 *Big T* which shows Charles McGruder as a graduating senior in Ricketts House.

In the Beginning: 1958 to 1969

Caltech had many African-American graduate students in the 1950's, while only a handful were Hispanic and Native American. The undergraduate population, on the other hand, was not as diverse.

Very few Hispanic and Native American students, and no Black.

In the later half of the 1950's, Caltech's undergraduate population attempted to bring the world's social issues to the campus. In 1958, the YMCA created *Leaders of America* which was to bring prominent leaders to the campus to speak. The first speaker was Clarence B. Randall, special consultant to President Eisenhower in the field of foreign economic policy. He visited the campus on February 10 and 11.

The second speaker was perhaps a little more controversial. The Reverend Martin Luther King, Jr., then president of the Montgomery Improvement Association (MIA) was asked to visit Caltech from Tuesday, February 25 to Thursday, February 27.

King had earned quite a name for himself in less than a year. In the summer of 1955, at the age of 26, he earned his doctorate from Boston University. In December, he began the Montgomery Bus Boycott. Two months later, his home was fire bombed with his wife and three month old baby inside. His hardship seemed to have paid off when bus segregation was declared unconstitutional in the fall of 1956.

The nation became aware of King's efforts when Time magazine declared him "Man of the Year" in February of 1957. During this time, he was president of the Montgomery Improvement Association (MIA), creator of the Southern Christian Leadership Conference (SCLC), and pastor of his father's church, Dexter Avenue Baptist. King had turned 28.

Just when his career was beginning, Caltech decided to ask him to speak here in Pasadena. He was the age of most graduate students at the institute; he was barely 29 when came to the campus for three days in February of 1958. When he arrived on Tuesday the 25th, he gave a speech in Dabney Hall. That night, the only two Negroes in the audience were Lee F. Browne and his wife.

In addition to giving a speech, Dr. King spent most of his time in the student houses talking with students. The following is an excerpt from the school newspaper:

"We must have active commitment rather than mere academic acceptance if we are to solve the racial problems that face Americans today," concludes Rev. Martin Luther King, Jr., second Leader of America to visit Caltech this year. King, a Negro Baptist minister, President of Montgomery, Alabama, Improvement Association and leader of the integration movement, spent three days on campus under the sponsorship of the YMCA.

"The oppressed peoples of the world are coming through the wilderness of adjustment and into the promised land of liberty," King said in an address in Dabney Hall Tuesday night. "The older order of segregation is passing away and a new order of justice and freedom is gradually coming into being." The accompanying world tensions are "the usual pains that accompany the birth of anything new."

King pointed out that there are "challenges to be met if the new order is to survive. The first is to rise above the narrow confines of individual concerns to the broad concerns of all humanity."

"There are four things a Caltech student could do to help the racial situation," King said in an interview with the *California Tech*. "He should seek to give impetus to movements and to political leaders. He should seek to solve local problems. Injustice anywhere is a threat to justice everywhere.

"He should give support, both moral and financial, to freedom fighters everywhere. The vast majority of people believe in integration, but they need organization and support. And finally, he should help to educate himself and others. Very few people are totally free of misconceptions about Negroes."¹

Dr. King was not the only prominent African-American leader to visit Caltech. Roy Wilkins of the NAACP and Ralph Bunche of the United Nations also had the opportunity.

It must have been very odd for Dr. King to make such statements at Caltech, considering there were no black undergraduates living in the student houses at the time. In fact, the second black undergraduate to matriculate at Caltech was Charles McGruder, who did not enter until 1961.²

Charles Hosewell McGruder, a resident of Bristol, Pennsylvania, entered Caltech as a major in Astronomy. He was a member of Ricketts House.



Charles McGruder, in his senior picture from the 1965 *Big T*.

¹ This article is taken from *The California Tech* published on Friday, February 28, 1958. It was written just after King's visit by Cleve Moler.

² Many people feel that McGruder was the first African-American student to enter Caltech as an undergraduate. However, Grant Venerable was the first African-American undergraduate to enroll. He did so in 1928. There were no other African-American undergraduates from the time he left in 1932 until 1961.

When he entered, there were no other students of his kind. He felt that “he would have felt more comfortable if more students of his same race enrolled at Caltech,” and although “Caltech had a stressful atmosphere, it was more stressful for underrepresented students such as African-Americans, Hispanic, and Native Americans.”³

He was graduated in 1965, and went on to work at Fisk University in Tennessee. He now works in the Department of Physics and Mathematics at Western Kentucky University. But by 1965, there was only one other black student to follow in his footsteps.

Joseph Rhodes, Jr. entered Caltech in September of that year. He was also from Pennsylvania, but grew up in the ghettos of Pittsburgh. He was a mix of Filipino and black cultures.

Like many freshman at the time, he entered and wished to major in physics. However, everyone soon saw his unique nature when by his sophomore year, he changed over to history.

By his junior year in 1968, he was president of the Associated Students of the California Institute of Technology (ASCIT) and very much involved with the Caltech Y⁴. One major project he led was a community outreach program that brought black students from the local community onto Caltech’s campus.⁵ This was a continuation of a local community outreach program that was held every year. Every year brought many tensions, as there were several race riots across the country during this period. Watts had burned in 1965, and Detroit, Washington DC, and Oakland soon followed. The following is an excerpt from the 1968 *Big T*:

The major program of the YMCA this year was a study in the depth of the problems of the ghetto and the city. In Phase I, prominent speakers were brought to campus to air their views on civil rights and the problems facing their race as Negroes. Phase II brought militant young Negro activists to campus for a week to live and interact with students. Finally, Phase III saw Caltech students take off time to spend an extended weekend in Northwest Pasadena with Negro families, spending their time with them as they worked and played. The program was arranged to a large extent through the Westside Study Center. It was viewed with mixed feelings by its participants, but certainly produced a greater understanding of another way of life.

From this project, Rhodes established himself as a controversial, but socially conscious leader.

³ These remarks are from the survey that was sent out to all underrepresented Caltech alumni.

⁴ The YMCA was renamed the Caltech Y.

⁵ See the 1968 *Big T* for more pictures on the event.

History of Caltech's Underrepresented Students

“Caltech was a difficult challenge,” recalled Rhodes. “As a leader of the student body, I had to worry about the welfare of the entire student body, not just other blacks or myself. For my first year at the Institute, I was the only black *person* at Caltech, period. My problems were not so much on campus as off. After all, I arrived only a few weeks after Watts exploded.

“I did what I could to improve the overall climate at the Institute during my two terms as ASCIT president. We failed and we succeeded, but we tried. There were many people who participated in this. I am only the one who led the effort.

“As the years go by, I think back to my Caltech experience as something priceless. I even played in the one football game we won in four years.”

When Rhodes was graduated in 1969, four more African-American students entered the school. However, Rhodes' career was not to stop here. He went on to Harvard University as a graduate student, and at age 22, was placed on President Nixon's Presidential Commission to Study Campus unrest. He was the subject of many newspaper articles, nationwide debates, and a few cartoons. He later went on to become senator of Pennsylvania, and is now Pennsylvania Public Utility Commissioner in Harrisburg.



Joseph Rhodes, Jr. in a photograph from 1970, just a year after he was graduated from Caltech.

Let the Changes Begin: 1969 to 1978

Joseph Rhodes had begun the process of changing the attitudes at Caltech. However, he had moved on and was now in the public eye.

Lee F. Browne stepped in bring Caltech through it most troubled times.

Lee F. Browne was a Pasadena school teacher for 16 years before he came to Caltech in 1968. He taught chemistry at Muir High School from 1954 to 1964, then at Blair High School from 1964 to 1970. He was a science - mathematics consultant for the American Chemical Society Test where his students competed against schools in Los Angeles, Ventura County, and Beverly Hills.

Lee Browne was always at Caltech in one way or another. He often came to the lecture series that the school had, and acted taught the children of the faculty. In fact, Lee Browne and his wife were the only two African-Americans in the audience when Dr. Martin King, Jr. came to speak at Caltech on February 25, 1958.

He felt that something needed to be done about the lack of cultural awareness at the institute. He worked with Joseph Rhodes in his senior year and created the Student Support Program (SSP) which was designed to help underrepresented students to survive at Caltech. For six weeks before the school year began, about ten students, who were selected from the freshman class, attended an intense program in mathematics, physics, chemistry, and English.

Over the years, the SSP proved to be very effective. Whereas only 17% of all incoming underrepresented students were graduated from Caltech, 58% of all underrepresented students that attended the program were graduated.

Some of the students still felt the need to help out the underrepresented students. As there were no Native American students and only a handful of Hispanic, there were almost ten new black students enrolling every year during the early half of the 1970's. These black students created a Black Students Union.

The following is an excerpt from the 1975 *Big T*:

The Black Students Union at Caltech, perhaps due to the small number of Black students on campus, is one of Caltech's less often mentioned organizations. We were organized in recognition of the fact that the intense academic atmosphere of Caltech represents an environment to which it is particularly difficult for minority students to adjust, much more difficult than for the typical Tech student.

The purpose of the BSU, therefore, is to provide activities for the Black students on campus that allow them to become more aware of themselves as individuals. In the past year our activities have included a welcoming cookout for the returning students, an inter-collegiate party in Winnett Lounge, a reception dinner for the Black poetess Leona Welch, who gave a recitation of her poetry, and an end-of-year farewell picnic at Chantry Flats.



In this photograph from the 1975 *Big T*, we have the Black Students Union. Pictured are, from left to right, Lorenzo Cotton, Robert Thornton, Lee Browne, Richard Eshun, and Gregory White.

Robert Thornton, originally from Washington, DC, attended Caltech from 1973 to 1977. For his first two years at Caltech, he majored in Electrical Engineering, but as a junior and senior, he took many physics and applied physics courses.

Black Students Union would have, on average, ten students per meeting. He felt that, ironically, there were more active students before he came, when there were less black students at the institute.

The BSU was the center of life for the underrepresented students during the 1970's. They organized activities such as cookouts, outings to the movies, trips to the mountains, and parties. Although all of the Hispanic students attended the meetings, there was no concern about inviting the white population to participate in the activities. Both Thornton and Virgil Shields, who was one year older than Thornton, were presidents at one time or another.

For the most part, the BSU did not find any opposition. However, one year, they wanted to have a red, black, and green flag posted in the yearbook. While one editor agreed that this was a good idea, his successor felt the opposite. He did not feel the yearbook was an appropriate place for such a statement.

The black students also wished to establish a chapter of the National Society of Black Engineers (NSBE), but there were not enough students to do so. This was around the year that NSBE was first organized nationally. The second annual NSBE conference was held at California State Polytechnic University at Pomona (Cal Poly Pomona), which was just twenty minutes away from Caltech. This gave the students in the area motivation to get some type of chapter started.

Students from the local colleges such as Caltech, Cal Poly Pomona, University of Southern California (USC), California State University at Long Beach (Cal State Long Beach), and others organized the Los Angeles Consortium of Black Engineers. This was to act as a joint NSBE chapter, since each of these schools could not form a chapter alone.

For almost half of the blacks at Caltech, participation was a concern; they were filled with hesitation about being involved. This seemed ironic to Thornton, because organizations such as the Chinese Student Association and other groups for Jewish Students were well established. During January of 1974, the Symbionese Liberation Army (SLO) was credited with the kidnap of Patty Hearse. This and the shoot-out with the Black Panthers in Sacramento helped to give blacks bad press. This put a damper on the drive to organize black students.

At Caltech during the 1970's, there was a general "agreement" on behalf of the institute to recruit minority students based on academic promise, rather than SAT scores. There were several students from inner city Los Angeles public high schools, such as Crenshaw, Jefferson, and Washington. In fact, Lorenzo Cotton, a graduate of Washington High School, was Thornton's roommate. However, during Thornton's final years at Caltech, he saw a definite change to recruit blacks from private high schools and secondary schools where there were few black students.

Brave New World: 1990 to 1993

After more than 20 years of struggling at Caltech, Lee F. Browne decided to retire.

Eduardo Grado, who had experience in admissions processes and recruiting at the Massachusetts Institute of Technology, took his place.

Caltech would never be the same.

On Monday, August 6, 1990, Lee Browne introduced himself to the last class of students he would admit. It meant the end of an era of social change, and the end of an era of strange encounters.

Eduardo Grado worked towards the empowerment of the students while he was at Caltech. He helped to start a chapter of NSBE and a chapter of SHPE. Also, the enrollment of underrepresented students increased.

The future contains many mysteries, but one thing is certain. The past should never be forgotten.