Nobel laureate Y.T. Lee once expressed a sentiment shared by many of his colleagues when he said, “I first came to Berkeley in 1962 to pursue my graduate studies because Berkeley had the best professors in the world. I returned in 1974 as a professor because we have the best students.”

Indeed, it is this synergy among creative, passionate, intelligent scholars that defines UC Berkeley’s excellence across disciplines.

What fuels this synergy is the generosity of people like Helen ’22 and Andrew Neumann and Emma ’28 and Derrick Henry ’27 Lehmer. The Neumanns established a fellowship that enables graduate students like Rosa Guzman M.A. ’12 to enter careers of service as teachers. The Lehmers funded a fellowship for graduate students who delve deeply into the mathematical field of number theory.

These donors exemplify the thousands of Berkeley alumni, parents, faculty, staff, and friends whose support for students is an essential contribution to Berkeley’s success through the generations.
Some people who grow up in rough neighborhoods can’t wait to leave — for good. Others leave only to return with a fervent resolve to create change.

Rosa Guzman M.A. ’12 — a student in the Graduate School of Education’s Multicultural Urban Secondary English (MUSE) program and a Helen Murphy Neumann Teaching Scholarship recipient — is a first-generation Mexican American who grew up in an impoverished community south of Los Angeles. Many of her peers became pregnant, joined gangs, or dropped out of community college.

“I spent time on the wrong side, but I didn’t want to be a part of it,” says Rosa, who is the first in her family to attend college. “My life, my struggle, is my motivation to succeed.”

Mrs. Saxton made the difference

As a child, Rosa’s first language was Spanish, and she was placed in an endless cycle of seemingly low-achieving English Learning Development (ELD) classes. “It was like a scratched CD — relearning the same material over and over again,” she recalls. “I dreaded school.”

It was not until she met her high school English teacher that her options broadened. Mrs. Saxton motivated her to excel and instilled the idea that she could accomplish whatever she set her mind to.

By her junior year, Rosa had tested out of ELD and become an honor student. “Mrs. Saxton worked hard to make sure I had what I needed,” she says. “I was one of the ones she wanted to save. She changed me. That’s why I wanted to be a teacher.”

As an undergraduate at California State University, Chico, Rosa began interning in classes for English language learners at a nearby high school. She wanted to help students transition into standard classes and asked their teacher for advice.

Rosa was told that the students had no chance to make it to college — “They had already burned that bridge,” the teacher said.

Despite feeling disheartened, Rosa persevered. She developed a workshop in which college students shared their personal stories of success with the ELD students. “I was able to lead by example and let it be known to students that the dream of obtaining a higher education degree is possible,” she says.

Rosa’s leadership and tenacity made her the perfect candidate for Berkeley’s MUSE program and for one of the graduate teaching fellowships funded by Andrew and Helen ’22 Neumann.

When the Neumanns were 99 and 100 years old, respectively, they established a charitable trust to fund the fellowships, which are intended to support students who want to become teachers.

“We are grateful for the Neumanns’ foresight and generosity,” says Judith Warren Little, dean of the Graduate School of Education.

“Since most aspiring educators cannot anticipate high salaries after graduation, financial support is critical to ensuring that they meet their own dream for an education, while impacting the students, families, and communities they will one day serve.”

As part of MUSE, Rosa is now teaching English full time at Berkeley High School and forging a powerful vision for the potential in teaching and learning. She hopes to stay at Berkeley High for five years and then may pursue a Ph.D. in education. Eventually, she wants to return home to Southern California.

“You have to be there for them and tell them, ‘You’re a learner,’” says Rosa, whose commitment to students is palpable. “I want to do for my students what Mrs. Saxton did for me.”
A match made in math

It was 1926 when Derrick Henry "Dick" Lehmer met Emma, his wife-to-be, in his father's math lab at UC Berkeley. Both intrigued by number theory, Emma and Dick became a renowned Berkeley math duo during their 63 years of marriage. Upon her passing at age 100 in 2007, Emma's bequest established the Lehmer Fellowship in Number Theory to support future Berkeley scholars.

Crossing the Pacific

Emma was born in 1906 in the Russian town of Samara on the Volga river. "My first recollection is of a large bare room with a huge trunk in the middle of the floor from which appeared such treasures as an ancient phonograph, which produced wonderful sounds ... like a band playing the Blue Danube," wrote Emma in a memoir. She spent her childhood in Manchuria, where her family had relocated for her father's work with a Russian sugar company. She set her sights on studying engineering at UC Berkeley, saving money from tutoring to buy a ticket aboard a ship bound for California.

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“The day she enrolled, she found a place to stay and a job,” recounts daughter-in-law Marsha Lehmer ‘58. Even though Emma arrived late for the term because of an immigration glitch, she reportedly said, “I'm here, I'm starting.”

After studying engineering for two years, Emma took a job locating prime numbers in Professor Derrick Norman Lehmer's lab and collaborating with his son, Dick. The students fell in love and married upon Emma’s graduation. Both went on to graduate school at Brown University. Dick eventually followed in his father’s footsteps and in 1940 became a Berkeley math professor. Nepotism rules prevented Emma from teaching, but she expressed satisfaction doing research. On not having a Ph.D., Emma once commented: “There are lower expectations. If one happens to discover something new, one’s peers are pleasantly surprised and generous in their praise. This is good for the morale.”

Emma was an accomplished mathematician who published 56 papers in her lifetime, the last in 1993 when she was 87 years old. She often collaborated with her husband and father-in-law.

In 1930, the Lehmers constructed a mechanical sieve that would check a million numbers in about three minutes in order to find factors of very large numbers. A box about the size of a microwave oven, the machine contained wooden pulley heads at different distances from a main beam, with 16-mm movie film running in loops between them. “We used to joke about waiting for ‘it all to come up lemons,’” like the slot machines of Nevada,” says daughter Laura Lehmer Gould ‘65.

A gathering place

“Our house was a place where people congregated not only to discuss mathematics but also to make music with good friends, sometimes forming trios and quartets,” says Laura, about the family's Berkeley hills home. “The food was good, and it was a great gathering place.”

Famous number theorists from around the world would stay at the house. Laura and her husband, Severo Ornstein, a computer hardware designer, agree that Emma had “enormous social grace” and that Dick was “whimsical and very funny, with a dry sense of humor.”

“They were certainly very remarkable people and a joy to be around,” adds Marsha. Emma’s family says she cherished the notion of a Lehmer Fellowship. Although Emma named the fellowship for her husband and father-in-law, the Lehmer children say it really celebrates all three of them and their math legacy at UC Berkeley.

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Answer to “Famous Alum”

Three-time NBA All-Star Kevin Johnson ’87 — a Cal political science major — is now the mayor of Sacramento, California. Johnson was a two-time All Pac-10 Conference player who led the Bears to post-season play in 1984 after a 20-year playoff cold streak. While at Cal, he also excelled in baseball and was recruited by the Oakland A’s before settling on the NBA. Johnson spent the majority of his 12-year basketball career with the Phoenix Suns and won a gold medal during the World Championships with Dream Team II in 1994. At the onset of his NBA career, he launched St. HOPE Academy, a nonprofit committed to inner-city communities. Upon his retirement from the NBA in 2000, he became the organization's CEO. Known for championing public education and safety, Johnson is the first native Sacramentan and the first African American to become mayor of Sacramento.

In 1945, when Dick was working at the Aberdeen Proving Ground in Maryland to help prepare an early electronic computer, the ENIAC, for use in the war effort, he and Emma would experiment with the machine late at night or on weekends.

“My brother and I liked to describe ourselves as the world’s first ‘unprogrammers,’” laughs Laura, explaining how she and brother Donald ’56 would remove cables from the ENIAC’s “switchboard.” sort them by length, and store them for the next problem. The experience may have been formative. Laura, a Berkeley linguistics major, became a lecturer who received Cal's coveted Distinguished Teaching Award in 1971 for doing what was thought to be impossible at the time: teaching humanities students how to program a computer. Donald, whose two sons are also Cal graduates, became an electrical engineer.
Chancellor Robert J. Birgeneau announced in December that UC Berkeley is launching a groundbreaking new financial aid program to help middle-income families with the ever-increasing costs of an undergraduate education — forging a new path for public universities nationwide.

The Berkeley Middle Class Access Plan (Berkeley MCAP) will ease the financial burden on middle-income families beginning in fall 2012. Berkeley is the first public university in the United States to cap the contribution parents make toward the total annual cost of a student’s education at 15 percent of their earnings, for families with incomes between $80,000–$140,000 annually. Total cost includes tuition, fees, room, board, and books.

A rapid state disinvestment in public education has led to a spike in tuition and fees. It now costs an in-state Berkeley undergraduate student approximately $12,834 for tuition and fees annually. The total cost for a student living on campus is estimated at $32,634 annually.

“Today, the total cost of attendance is at a level that can be easily accommodated only by affluent families,” said Vice Chancellor for Student Affairs Harry LeGrande. “Even as we continue to advocate for increased state support, we feel the need to address the very real issues of our middle-class families.”

The cost of MCAP, which is estimated to fall between $10 and $12 million a year, will be largely funded by philanthropic giving.

It is Berkeley’s approach to making undergraduate education more affordable for all and to drawing a diverse economic and geographic cross section of high-achieving students to campus.

**Director’s Column**

I have now been at Berkeley for more than seven years. In that time I, like you, have witnessed a massive disinvestment by the state in public education. When I arrived in 2005, the state provided 30 percent of the campus operating budget. Now it provides about 10 percent. In the short term, the only way to compensate for this deficit without compromising Berkeley’s excellence has been to dramatically increase tuition. Tuition and living expenses now total $32,634 per year for an undergraduate who lives on campus. The decreased state support draws into sharp focus the importance of building Berkeley’s endowment, which increasingly provides consistent and critical support to meet ongoing challenges and opportunities.

One way we are building Berkeley’s endowment is by encouraging our alumni and friends to express their lasting commitments to Cal through their wills or living trusts. Donors like Mr. and Mrs. Neumann and Professor and Mrs. Lehner did just that by creating charitable bequests to benefit students for generations to come. A charitable bequest is simply a clause stating that a certain dollar amount, a specified percentage, or the entire residue of an estate (after all other gifts are made), shall pass to UC Berkeley.

When you let us know of your intended generosity, we will be able to ensure that your wishes match the University’s needs — whether you want to support future teachers, math students, or the highest priorities of the campus at the time your gift is received. When you notify us of Berkeley’s inclusion in your estate plan, we will be pleased to welcome you into the Benjamin Ide Wheeler Society — Cal’s legacy society.

Sample bequest language:

“I give ______* to the UNIVERSITY OF CALIFORNIA, BERKELEY FOUNDATION, a California non-profit public benefit corporation, to provide endowed support to be used at the discretion of the Chancellor on the Berkeley campus of the University of California.”

“For example, ‘$____’ or ‘_____ percent (or all) of the residue of my estate.’

Please contact the Office of Gift Planning so that we may work together to match your philanthropic desires with the University’s goals. Together we can ensure that a Berkeley education is available — and accessible — to future generations.

**Fiat Lux!**

Kevin T. Crilly, J.D.
Director, Office of Gift Planning

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*For example, "$____" or "_____ percent (or all) of the residue of my estate."
How to contact the
Office of Gift Planning

call 510.642.6300 or 800.200.0575 (toll free)
e-mail ogp@berkeley.edu
web planyourlegacy.berkeley.edu

Please □ call me/us □ send information about:

Gifts the University can use today
□ Cash/Securities/Mutual Funds
□ Real Estate ($100,000 minimum)

Gifts that pay you income
□ Cash/Securities/Mutual Funds ($10,000 minimum)
□ Real Estate ($150,000 minimum)

Gifts that take effect at your passing
□ Retirement Plans — IRA/401(k)/403(b)/other
□ Bequests
□ Brokerage Accounts
□ Life Insurance
□ Real Estate

□ I/We have already included Cal in my/our estate plan.
□ I am/We are not sure which gift plan would work best. Please contact me/us.

Name(s)

Best time of day to contact me/us: __________________________ a.m./p.m.
( ) ( )
Home Phone Business Phone

E-mail
You can make a difference for generations to come.

Complete and return the information inside to discover the benefits waiting for you — including the potential for substantial tax relief and lifetime income — while providing for Cal's future.