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Campaign Concluded

The Campaign for Caltech: A Second Century of Discovery has reached its goal of raising \$350 million in gifts and pledges by the end of 1993. A \$2 million gift for scholarships put the figure over the top on October 20. The total was projected to be about \$30 million over the \$350 million by the end of the campaign on December 31.

The fourth such fund-raising effort in Caltech's history, the campaign got under way in October 1989 with a "quiet phase," and entered its public phase in January 1991. The effort has been spearheaded by the Institute's board of trustees under the leadership of board chairman Ruben Mettler; William Kieschnick, vice chairman of the board and chairman of the Campaign Executive Committee; and the late James Glanville, who served as the initial campaign chairman. Caltech's Development staff, under the direction of Tom Anderson, vice president for Institute relations, and Tanya Mink, campaign director, collaborated with the trustees in the endeavor.

The campaign's overall aim has been to provide funds for a wide range of academic priorities that were first identified and outlined in a 1989 Institute-wide Aims and Needs Study. These priorities fall into three basic areas: endowment, capital funds, and programs and current operations. As of mid-December, with gifts and pledges still coming in at an increasing rate, almost all of the priorities had been funded and many of the goals exceeded.

Among the major projects that will change the physical and scientific landscape of Caltech in the near future are the Moore Laboratory for Electronic Materials and Structures, funded with a \$16.8 million gift from Gordon and Betty Moore; Avery House, a new student residence made possible by a \$10 million gift from R. Stanton Avery (trustee chairman emeritus); the Keck II Telescope, being constructed with \$74.6 million from the W. M. Keck Foundation; and the Braun Athletic Center, completed last year with a \$4.7 million gift from the Carl F Braun Trust.

Monies raised for endowment, as of mid-December, will support 15 new named professorships. So far 6 postdoctoral fellowships, 18 graduate fellowships, and 49 undergraduate scholarships have been funded; although these represent only two-thirds of the goal of \$40 million in that category, Anderson and Kieschnick emphasize that filling this need will remain a high priority.

Conclusion of the campaign won't signal a slowing of fund-raising initiative. Already, says Anderson, the Institute is looking ahead, knowing that in any successful campaign, the conclusion of one phase is but a steppingstone to the next. "Post-campaign, we will be studying specific campaign objectives that weren't fully funded to determine which ones need more work," he says. "The campaign has helped people think about Caltech's scientific priorities, and I consider that to be one of our significant accomplishments. We hope that Caltech alumni and friends who have learned more about the Institute's teaching and research will continue to give their support."

Right: At dinner in the Oviatt Building penthouse, Lance Davis (left) discusses what does not appear to be “the dismal science” with Nobel laureate Douglass North and his wife, Elisabeth Case.



Below: This year’s Engineering Design Laboratory (ME 72) challenged students to design motorized scooters (easily stowable in a car trunk) to help senior citizens cart groceries and run other errands. Six teams showed off their inventions to a panel of judges (potential users), who rated them on safety, ease of use, comfort, durability, and aesthetic appeal. Son Chu Nguyen’s team’s scooter drew praise for its handy rain shelter and other special features, but didn’t fare too well on the speed and handling test around campus.



Economic Historians Honor Lance Davis

When economic historian Lance Davis turned 65, some of his California colleagues decided to throw a party—and a conference—in his honor. The All University of California Group in Economic History—a group that also includes some non-UC scholars—hosted a conference at UCLA on November 13–14. The conference was organized around topics that Davis has dealt with in his work. Coincidentally, for the first time this year’s Nobel Prize in Economics went to two economic historians—Robert Fogel of the University of Chicago and Douglass North of Washington University; both were on hand for Davis’s birthday celebration.

Davis came to Caltech as professor of economics in 1968 and was named the Mary Stillman Harkness Professor of Social Science in 1980. He had earned his BA from the University of Washington in 1950 and his PhD from Johns Hopkins in 1956. Before coming to Caltech he taught at Purdue. At the dinner, Davis was hailed as one of the earliest and most innovative practitioners of what has become known as “cliometrics” (Clio was the Greek muse

of history) or the “new economic history,”—a discipline that emphasizes the application of economic theory and massive amounts of data—from such sources as business records and government documents—to quantify hypotheses in order to reach accurate conclusions about history and longterm economic growth. It was this approach that was recognized in the most recent Nobel award. Specifically, Davis is best known for his work on the nature of capital markets, particularly in 19th-century United States and Great Britain. He has also written widely on the impact of British imperialism and on patterns of technological change.

Honors and Awards

Harold Brown, Caltech president emeritus and trustee, has received the Enrico Fermi Award from the Department of Energy “for his outstanding contribution to national security” in the areas of nuclear-weapon development and deterrence policy.

Erik Carreira, assistant professor of chemistry, has received a Beckman Young Investigator Award from the Arnold and Mabel Beckman Foundation.

Peter Dervan, the Bren Professor of

Random Walk continued

Chemistry, has been selected as the 1994 recipient of the Nichols Medal, for being "largely responsible for moving bio-organic chemistry into a new era."

Dennis Dougherty, professor of chemistry, and Edward Stone, vice president, professor of physics, and director of JPL, have been named Fellows of the American Association for the Advancement of Science.

Richard Flagan, professor of chemical engineering, was presented the 1993 David Sinclair Award of the American Association for Aerosol Research.

Douglas Flamming, assistant professor of history, has won the Philip Taft Labor History Prize for "the best book on labor history published in 1992." The book, *Creating the Modern South: Millhands and Managers in Dalton, Georgia*, was reviewed in the Winter 1993 issue of *E&S*.

Konstantinos Giapis, assistant professor of chemical engineering, has received a Camille and Henry Dreyfus New Faculty Award.

Stephen Mayo, assistant professor of biology, has been awarded a five-year Fellowship in Science and Engineering by the David and Lucile Packard Foundation, one of 20 awarded nationally to outstanding young professors.

Anatol Roshko, the von Kármán Professor of Aeronautics, has been awarded the Raman Chair by the Indian Academy of Sciences, a visiting professorship at the Indian Institute of Science.

Theodore Yao-Tsu Wu, professor of engineering science, has been awarded the Fluid Dynamics Prize, sponsored by the Office of Naval Research and presented by the American Physical Society.

Gordon Moore Elected Trustee Chairman

Gordon Moore, chairman of the board of Intel Corporation, has been elected chairman of Caltech's board of trustees, succeeding Ruben Mettler, who is retiring from the post he has held for nine years. Both men are Caltech alumni and leaders of industry.

Moore's long association with Caltech began when he entered Caltech as a graduate student in 1950, after earning his BS from UC Berkeley. Moore became one of a handful of scientists in the mid-fifties who grasped the enormous potential of semiconductor technology; shortly after receiving his PhD in chemistry from Caltech in 1954, he joined the Shockley Semiconductor Laboratory, and then in 1957 cofounded Fairchild Semiconductor Corporation with several colleagues. Here he oversaw a number of key innovations, including development of the first applications for the integrated circuit, invented by his Fairchild colleague Robert Noyce in 1959.

In 1968 Moore and Noyce founded Intel, which three years later helped launch the information revolution when it developed the silicon chip microprocessor. Intel's reported earnings last year exceeded \$1 billion. Moore served as Intel's executive vice president from 1968 to 1975, as president and CEO from 1975 to 1979, and as chairman and CEO from 1979 to 1987. Currently chairman of the board, he has been a company director since 1968. In 1990

Moore won the National Medal of Technology "for leadership in the microelectronics innovations of large-scale integrated memories and microprocessors."

Moore has been an Institute trustee since 1983, and he and his wife, Betty, are life members of the Caltech Associates and members of the Presidents Circle. Their gifts to Caltech include the Gordon and Betty Moore Professorship in Engineering (held by Carver Mead) and the Gordon and Betty Moore Undergraduate Scholarship Fund. In 1991, as a major gift to the Campaign for Caltech, the Moores pledged \$16.8 million to build the Moore Laboratory for Electronic Materials and Structures, scheduled to begin construction north of the Thomas Watson Lab next year.

Mettler's connection to Caltech is even longer (*E&S*, March 1986). He arrived in 1943 to participate in the Navy's V-12 program, eventually receiving his BS ('44), MS ('47), and PhD ('49) from the Institute. He then went on to play a leading role in the development of the aerospace industry, which culminated in his becoming president and CEO of TRW in 1969 and chairman and CEO in 1977, a position he held until his retirement in 1988. Named to the Caltech board of trustees in 1969, he was elected chairman in 1984, his tenure including the recently completed, successful Campaign for Caltech. As chairman emeritus, Mettler will remain on the board. The Mettlers are also Life Members of the Caltech Associates and in 1988 established the Ruben and Donna Mettler Professorship in the Division of Engineering and Applied Science.