## The High Cost of Being Good

## -or Calling on All Alumni

## by Donald D. Davidson

Some of Caltech's best friends are its alumni. And the Institute needs the wholehearted support of all 11,500 of them to maintain and expand its research programs, to build new laboratories, to hire new faculty, and to increase its general operating funds.

So, the Caltech alumni are now launching an Alumni Fund drive for 1972-73. Under the direction of an Alumni Fund Council, we are planning and conducting a drive to raise \$300,000. From California to Florida, 72 area chairmen are set to begin solicitation programs---and their goal is *total* alumni participation.

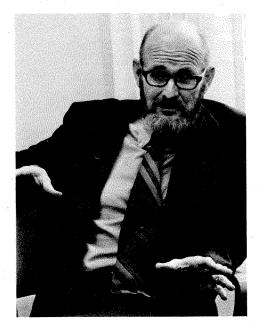
Of course, \$300,000 is only a small part of Caltech's total budget—and only a small part of what Caltech currently needs. But it is a vitally important sum, because it is for general operating expenses. Without it a lot of urgent needs simply won't be met.

Being a great university has never been easy—or inexpensive. Today it's harder than ever. Costs are higher, and underwriting them is more difficult—particularly for a private, non-tax-supported school.

For the last ten years Caltech's costs have grown at an average rate of about 1 percent a year above its income, accelerating during the last two years at the rate of \$3-400,000 a year. An internal austerity program has resulted in considerable savings, but has by no means been able to close the gap.

In 1971, for the third year, the Institute was forced to draw from its reserves in order to balance expenditures and income. This time the withdrawal was more than threequarters of a million dollars.

Why is Caltech in such straitened circumstances? Because of spiraling inflation for one thing, and increased competition with other institutions for support—and because of the stiff price Caltech has to pay to maintain the quality of the vital research it does and the superb education it offers. The costs of educating a student are going up 7 or 8 percent a year, and tuition is farther than ever from meeting these costs. Last year the Institute spent over a million dollars just to renovate laboratories, and keeping up with current publications adds 15 to 19 percent to the library budget every year.



faculty salaries or awards of graduate student trainees and fellowships—despite the fact that total federal research at Caltech has been increasing during the past years."

"We are vulnerable," he adds, "in our dependence on the future of the space program, through Caltech's management of the Jet Propulsion Laboratory. And we are extremely vulnerable to fluctuations in gifts from private sources."

In an effort to bring its income into line with expenses, in the late 1960's the Institute adopted several guidelines for economies:

- Minimize support and service activities that are not essential to the instruction and research program.
- Go into new areas only when they are important, when Caltech can make a unique contribution, and when funds are visible.
- Curtail, or at least do not expand, any activities that appear to draw inordinately on Caltech's resources.

Applying those principles resulted in these savings:

Costs of administrative services and support have been held to a growth rate of 5 percent a year for the last two years—one-half the rate of growth of instructional and research activities.

## The High Cost of Being Good . . . continued

- The physical plant and campus architect's activities together have grown by less than 3 percent.
- Several departments in business administration have actually *decreased* their expenditures.
- Support of the computing center from the general operating fund is expected to drop below \$500,000 in 1972, after peaking at \$714,000 in 1971.
- Employees in central administration and services decreased by 100 (out of a total of 1,300) between July 1970 and July 1972.

Teaching and research offer other potential areas for cutting costs, but the Institute wants to move very cautiously here, to be sure that cutting costs doesn't cramp growth or lower teaching effectiveness or limit research.

Additional cost cutting is difficult because much of the Institute's income is committed to fixed obligations paying salaries of tenured faculty members and others on multi-year contracts, providing basic administrative services, heating and lighting buildings, and supplying student aid, for example.

Three years ago, at the same time it set up internal austerity measures, Caltech instituted a plan to stimulate growth of its endowment through more aggressive management. The Trustee Investment Committee split the endowment's equity portfolio into two parts and engaged two investment advisory firms to manage them. Results so far indicate that the new plan is likely to prove effective.

Now, with confidence that its own affairs are soundly managed, Caltech is ready to approach alumni donors and assure them that their gifts for general operating funds will be used with maximum effectiveness.

General operating funds provide the foundation that makes all of Caltech's programs possible. Without them, the Institute couldn't exist. They provide leeway in that critical time between the loss of one source of support and the discovery of a replacement. Often they pick up the tab for a project only partly funded by restricted gifts. In many instances, money in the form of governmental grants and contracts, corporate sponsorship, or gifts from individuals or foundations isn't sufficient to cover the total cost of the activity for which it is given. General operating funds can be used to pay the balance.

They provide the flexibility and stability Caltech must

have to innovate. Scientific progress follows an unpredictable path, and the money has to be available for the Institute to move quickly into new areas while it seeks out long-range sources of funding.

General operating funds may support an established professor, enabling him to launch a new project, or they may provide initial financing for research by a brilliant but unproven new professor. They may provide badly needed support for PhD thesis research. Graduate students are often restricted in their selection of research to areas where government funds are available, so general operating funds can give them increased freedom to explore undeveloped areas.

These funds are vital, too, in launching the teaching innovations that are among the Institute's greatest contributions to the educational community. They act as midwife to exciting new projects—a Saturday school on the campus to motivate and challenge high school students interested in science and mathematics, or new project laboratories in applied physics and experimental engineering to teach undergraduates how to apply the theoretical knowledge they have been acquiring at the Institute.

One other need for general operating funds is not always obvious to the casual observer. Every restricted gift for a new building or some other facility brings a corresponding need for spending for support services: equipment, furnishings, maintenance, utilities, staff—all funded through the general operating budget. Caltech has to have funds available to develop the potential created by restricted gifts.

In fact, the list of items funded by general operating money is as long and varied as the needs of the Institute. It includes money to supplement the salary of a valued faculty member in order to keep him on the staff; to replace outworn or obsolete laboratory equipment; to publish a special piece of work; to buy new books; or to help pay the Institute's power bill (an unglamorous but absolutely essential item that costs three-quarters of a million dollars a year).

The individual who makes his gift to the Institute in the form of general operating funds never knows the exact dimensions of his act. But as an alumnus, he knows that he may have helped to start something that could change the world.