ing it dividing); targeted differentiation (signaling it to make the type of tissue that is desired); scaling up (making lots of the tissue for use in patients); transplantation (getting it into the patient); and clinical studies.

“The way the institute is organized,” says Melton, “we might get all the people who are interested in diabetes together and ask how we are going to get a stem cell all the way into a patient.” He continues, “Let’s say we are stuck on the process of self-renewal. We can now bring together people from all different areas of disease expertise, people who never really talked to each other before—neurologists, endocrinologists, hematologists”—to try to solve the problem. A researcher working on Parkinson’s disease might have come up with a novel way of ensuring self-renewal that could be applied to other disease targets.

“One of the key things is that people become multilingual,” echoes Scadden. “Those who focus predominantly on clinical care will start to appreciate the necessary components of computational science and developmental biology that are all necessary to take advantage of emerging opportunities in stem-cell science and regenerative medicine.”

HSCI will have “a very big influence on developing new models of educational people. Having people from Harvard and MIT with training in mathematics and computational science as part of the creative process will be an important part of training the next generation of doctors and scientists so that they are comfortable with spanning these worlds.” These new models of inquiry, Scadden hopes, will attract both students and faculty to work in regenerative medicine.

“Harvard [in] its history always has been striving to be a leader in critical areas of knowledge,” says Hyman, “and areas like stem cells [are among] the most exciting intellectual challenges in the world today. We would really be abdicating our role as intellectual leaders if we didn’t do everything in our power to make it possible for our faculty to engage in these new areas.”

### Class-conscious Financial Aid

**Harvard has enhanced its undergraduate financial-aid program in an effort to make the College more attractive to lower-income students.** Beginning this fall, the parental contribution toward tuition, room, and board will be eliminated for entering and continuing students from families whose income is less than $40,000 per year. That contribution has averaged $2,300 in the past year. Families with incomes from $40,000 to $60,000 will have their expected contribution reduced $1,250 on average (the University did not quantify their current financial obligation). Students will remain responsible for contributing to their expenses to the tune of $3,500 next year (met through outside scholarships, term employment, or loans), plus an average of $2,000 from summer earnings ($1,850 for freshmen).

The aid enhancements, announced in late February by President Lawrence H. Summers, are expected to assist more than 1,000 families in the next academic year, when the program will boost Harvard’s undergraduate scholarship funding by $2 million, to nearly $80 million. (The bill for tuition, room, board, and fees in 2004-2005 will increase by $1,052, to $39,880—5.15 percent more than the $37,328 cost of attending the College during the current academic year.)

At a time of considerable public interest in admissions issues ranging from affirmative action (see “Affirmative Amicus,” May-June 2003, page 50, and “Citing Harvard,” September-October 2003, page 76, for discussion of the University of Michigan cases decided by the Supreme Court last year) to “legacy” preferences for the children of alumni, Summers defined a new challenge. Speaking before the American Council of Education, in Miami, he said “the most serious domestic problem in the United States today is the widening gap between the children of the rich and the children of the poor, and education is the most powerful weapon we have to address that problem.” (The full text is available at www.president.harvard.edu.)

Data released by the University show that measured by family income, parents’ education and occupation, and other factors, 73.9 percent of students entering the College come from the highest socioeconomic quartile of society, where family incomes are above $81,000 (based on 1999 census data). In contrast, just 6.8 percent of entering students come from the first, or lowest, socioeconomic quartile (incomes below $33,000), and 9.2 percent from the second quartile. By this measure, Harvard actually does a better job of accommodating disadvantaged students than do “highly selective colleges” overall, where just 9 percent of entering students come from the bottom half of the socioeconomic distribution. In other words, Summers said, “Children whose families are in the lower half of the American income distribution are underrepresented by 80 percent” at selective institutions.

The boost in financial aid was shaped in part by interviews with students who said they already shouldered the expected parental
contribution toward their Harvard education expenses, rather than burdening their families further.

Although the aid message is meant to be clear and simple, it is not expected to be sufficient to overcome the hurdles. Summers noted that “a student from the highest income quartile and lowest aptitude quartile is as likely to be enrolled in college as a student from the lowest income quartile and the highest aptitude quartile,” reflecting differences in counseling and preparation, as well as financial resources. So Harvard will step up its recruiting targeted at schools and students in lower-income areas, and is “re-emphasizing” in its admissions process “the policy of taking note of applicants who have achieved a great deal despite limited resources at home or in their local schools.” Funds will also be made available for prospective students to visit the campus as they decide whether to enroll, and to pay for books, winter clothing, and medical or other emergencies while at the College, as needed.

The goal, Summers concluded, is to “encourage talented students from families of low and moderate income to attend Harvard College.” If the program has the intended effect, it will be a small part in a larger societal mission of increasing access to excellent higher education when the economic impact of doing so is greater than ever—particularly for students from the poorest families.

**Arts’ Rising Place**

The practice of the arts is in the ascendant at Harvard. And even though there is not now enough space to contain this explosion of student talent and creativity, the Faculty of Arts and Sciences (FAS), in a move that bodes well for future artistic endeavors, is creating new opportunities for integrating the practice of the arts into the curriculum.

Half the College population participates in the arts. There are a thousand musicians, nearly as many students involved in drama, more than 600 dancers (fully 22 percent of undergraduate women participated in dance last year), and 300 to 400 practitioners of the visual arts. There are 45 music organizations, including five orchestras, two jazz bands, six choruses, and 12 a capella groups. There are 19 student dance groups and 16 drama organizations. “Harvard is attracting an increasingly diverse and more artistically connected community of students than it did 15, 20, or 30 years ago,” says Jack Megan, director of the Office for the Arts.

That is very good news for anyone who cares about a vibrant student arts community. But it has led to serious space shortages, particularly because room for arts has actually been contracting even as student interest has grown. Harvard’s colossally expensive orchestral harp, for example, used in performances at Sanders Theatre, keeps company in a maintenance closet with a timpani, vacuum cleaners, dirty mops and buckets, and bottles of cleaning liquids. This is not an oversight. Think of it as a metaphor for the arts at Harvard: overflowing with talent, democratic in the extreme, and tucked away into the most unlikely places.

What accounts for burgeoning student interest in the practice of the arts? Megan says “students with a real gift in the practice of the arts are seeing Harvard as a place where they can come and achieve things without being plugged into the formality of a conservatory institution suddenly see a whole new form of artistic expression.” The practice of the arts is seeing Harvard as a place where they can achieve things without being plugged into the rigor and narrowness of a conservatory environment. They can take the time to explore other parts of their lives. Harvard has nurtured a community of artists who will in some cases, Megan says, “have careers in the field and influence development of that form.” He cites playwright Christopher Durang ’71, saxophone player Josh Redman ’91, director Peter Sellars ’80, actor John Lithgow ’67, and cellist Yo-Yo Ma ’76, D.Mus.’91: “Harvard’s developed an environment where people that want to come and do fine work and then go on and do great work.”

Furthermore, Megan notes, as Harvard becomes more culturally diverse, “students who arrive here, who come from a given cultural background, want to find ways of expressing that, and they are looking beyond the traditional means.” Forty years ago, a glee club, a chorus, and the Harvard-Radcliffe Orchestra might have encompassed the needs of most student musicians for artistic expression. “But now,” he says, “we have students who come from a tradition of gospel music or who are, for instance, Indian, and have a background in the tabla or sitar.” In dance, there are not only ballet and jazz, but also the Asian-American dance troupe, the Ballet Folklórico de Aztlan, the Caribbean Club Dance Troupe, the Israeli Dance Troupe, and the South Asian Dance organization.

“These organizations make this an exciting and incredibly interesting place, as students who grew up in one cultural tradition suddenly see a whole new form of artistic expression,” notes Megan. Facilitated by physical proximity, there has been an increase in creative collaborations among students in drama, dance, and music, he says. “Students crave that kind of interaction.”