Hughes Institute Spreads the Wealth

The Howard Hughes Medical Institute is launched on a series of programs that will affect education and training of researchers at all stages of their careers

HE Howard Hughes Medical Institute (HHMI),* one of the world's richest private philanthropies, is exuberantly spreading its wealth among the nation's colleges and graduate schools.

Within the past couple of weeks, HHMI officials have: (i) awarded \$30 million to 44 undergraduate colleges, (ii) selected 60 postdocs from a pool of 1000 to receive generous fellowships for up to 5 years, and (iii) announced the expansion of the current program to give medical students a chance to interrupt the 4-year M.D. curriculum with a year in a research lab.

For years, the Hughes institute, founded in 1953 by the late billionaire entrepreneur and recluse, has supported a small, handpicked corps of researchers in institute labs at a dozen universities. Expenditures totaled only a couple of million dollars a year. After Howard Hughes' death and a protracted battle over his will, HHMI's resources grew in a flash with the sale of Hughes Aircraft to General Motors for more than \$5 billion. Now Hughes spends closer to \$200 million a year on its basic laboratories on 27 campuses. In addition, it is in the early stages of a 10-year commitment to spend at least \$500 million foundation-style on grants and projects. With resources like that, Hughes is poised to have a significant influence on the course of science for the rest of the century.

Colleges. Last fall, Hughes invited 94 undergraduate colleges to compete for \$30 million in grant money (*Science*, 9 October, p. 150). On 23 May, the institute reported that 44 have been chosen. Xavier University in New Orleans came out on top, with an award of \$1.8 million that includes funds for an intensive tutorial program for 350 science majors a year for 5 years. Xavier is one of ten "historically black" colleges to join the elite ranks of Hughes recipients.

With grants of \$1.2 million each, Wesleyan University in Connecticut and Haverford College in Pennsylvania also topped \$1 million. Wooster College of Ohio came in at an even \$1 million. Among the other successful schools are Vassar (New York) at \$700,000,

Wabash (Indiana) at \$900,000, and Occidental (California) at \$500,000. The money will be used for a range of purposes including: hiring new faculty, increasing opportunities for faculty and students to do research together and updating curricula.

One of the undergraduate program's principal goals is to attract students to research careers, with efforts beginning in the grammar and high school years, according to Joseph G. Perpich, the Hughes vice president for grants and special programs. Efforts

Kong, Israel, Nigeria, Switzerland, Tanzania, and West Germany. Says HHMI president Purnell W. Choppin, "the group reflects remarkable international diversity."

Medical students. In 1985, Hughes inaugurated a novel program in cooperation with the National Institutes of Health to allow students to take a year off from medical school and spend it in an NIH lab. With headquarters in a former cloistered convent of the Order of the Visitation on land that is now part of the NIH campus, the HHMI Research Scholars Program has had 129 students so far, from 49 of the country's medical schools. The NIH year, devoted to time in the lab, gives students a concentrated taste of research, and the opportunity to wrestle with the often anguishing decision of whether to end up in clinical or research medicine. Choppin reports that the majority appear headed for the lab, although there have been a few who have decided that research is not for them. "Whether these young people end up in research or practicing medicine, we believe they will have

The Cloister

The HHMI research scholars program for medical students who want a year in a lab is housed in a beautiful old convent on the NIH campus in Bethesda.



to attract female and minority students are particularly high on Hughes' agenda.

Postdocs. At the postgraduate end of the spectrum, Hughes is also making a determined effort to attract top people to the areas of biomedical research within its chosen purview: genetics, cell biology, structural biology, immunology, and neuroscience (Science, 18 September, p. 1406). With an eye to supporting a total of 300 postdocs when the program is in full swing 5 years from now, Hughes has given doctoral fellowship awards to its first group of 60 students. In addition to tuition support, fellows will get stipends of \$12,300 a year for 3 years, with the option of a 2-year extension.

The 60 new Hughes fellows will train in laboratories at 21 universities nationwide. Nine of the fellows have chosen Stanford, seven each have been attracted to MIT and Yale. Berkeley will get five, Harvard four.

The first batch of fellows, 40 men and 20 women, include 15 foreign nationals—from Canada, Belgium, England, France, Hong

benefited greatly from their experience at NIH," Choppin says.

The HHMI-NIH program has been so successful that Hughes intends to expand it beyond the cloister to university research laboratories nationwide.

HHMI staff. With its recent infusion of funds and new activities, it is no surprise that Hughes is adding to its professional staff. Its most recent recruit is David W. Kingsbury, a physician and virologist from St. Jude Children's Research Hospital in Memphis, who will join HHMI as a senior scientific officer for the institute's research laboratories.

Land. With its programs and staff expanding, Hughes is looking for a permanent home to replace current space in an office canyon in suburban Bethesda. The institute has purchased prime, wooded real estate not far from NIH and is currently negotiating with the local citizenry over its plans to build on 2 of its 22 acres. Even with \$5 billion, some things don't come easy.

BARBARA J. CULLITON

*HHMI, 6701 Rockledge Drive, Bethesda, MD 20817

SCIENCE, VOL. 240