director Donald S. Fredrickson says that the 1981 budget has in it the greatest increase in recent years over the previous year's actual appropriations. But, Fredrickson admits, "there will be belt tightening in many areas." Contract funding, for example, would be reduced in several areas, including cancer research. Of the 11 institutes that comprise NIH, the National Cancer Institute received proportionally the smallest proposed increase, less than 1 percent.

The belt continues to tighten around the collective waist of graduate students. Lacking a boost in funding, NIH has elected to raise stipends and decrease the number of trainees it supports. "We are down to a level where we are concerned about any further change," Fredrickson told SCIENCE NEWS. "No doubt the federal contribution is crucial to maintaining the high quality of people in biomedical and behavior sciences research."

The National Institute of Environmental Health Sciences is the only NIH institute to receive an increase greater than inflation. One of the smallest institutes, its proposed budget was raised 15 percent to a total of $97 million. That increase includes $5 million to continue staffing and equipping the new environmental health sciences facility in North Carolina. The project is scheduled for completion in late 1981. Money from NIEHS, and from NCI, would also go to expand the National Toxicology Program, which is concerned with testing chemicals of public health concern.

Stabilization of the number of NIH-funded research grants is an innovation of the 1981 budget. In the past, the number of new and competing grants vacillated from year to year. Because most grants run 3 to 4 years, the fluctuations made long-term planning difficult for the institutes. Under the new policy, approximately 5,000 research grants will be awarded each year (the average for five years has been 4,700), to make a total of about 16,000 grants receiving NIH support at any time.

Much of the mental health-related funding hinges on the final disposition of the proposed Mental Health Systems Act, which the administration hoped would pass last year but still remains before Congress. Included in the President's 1981 fiscal year proposals is an overall increase of $38 million — about 8 percent — in research, prevention and treatment of behavioral problems. About $20 million of this is aimed at bolstering community mental health center resources, particularly among the previously "underserved" — children and youth, the aged, minorities, the poor, rural residents and the chronically mentally ill. A proposed $18 million would go toward mental health research, with $4.3 million for drug abuse study and $3 million for alcoholism research. A supplemental request for a $50 million addition to the 1980 budget would enable some projects to be initiated in the current fiscal year. □

Science Talent Search finalists chosen

For 39 years the Annual Science Talent Search, financed by Westinghouse and administered by Science Service, has been selecting some of the top scientific talent among American youth. Three former STS winners have gone on to win Nobel Prizes in science, and one winner has subsequently won a Lasker Award.

Once again, 40 young people have been chosen as finalists in the STS competition. The 27 boys and 13 girls were chosen from among 950 completely qualified contestants. In late February they will visit Washington to attend the Science Talent Institute and to display their research projects and research results. Then 10 of the 40 finalists will be chosen by a board of judges as winners and will receive scholarships totaling $74,500. The remaining contestants will get awards of $500 each.

The qualities that helped lead to the selection of this year's 40 finalists are those shared by previous ones — curiosity, initiative, independence, entrepreneurship, creativity and nonconformity. For instance, Gary Eugene McGahan of Decatur, Ala., read about the ability of honey bees to communicate flower locations by secreting a substance and set out — successfully — to demonstrate the existence of a similar substance, an alarm pheromone, in earthworms. Mark William Turner of Niceville, Fla., studied the effect of nozzle design on the performance of solid propellant rocket motors. Using engineering skills he had learned while repairing cars, he designed and built an eight-foot air track, a small glider, eight types of rocket nozzles and a Time Pulse Generator for measurements. Using two types of solid propellant rocket motors, he conducted a series of 50 tests with various combinations of nozzles, fed test data into a computer and found that his experimental results using relatively inexpensive, homemade components compared favorably with proven rocket propulsion theory. George Frank Weinert of Gaithersburg, Md., analyzed the feasibility of a theory that the parting of the Red Sea described in the Old Testament could have been caused by heavy celestial bodies passing the earth at close distance, thereby creating a strong gravitational attraction similar to the tidal forces caused by the moon and sun.

Although most of the finalists are planning on a science career, they have other interests besides science. For instance, Faith Louise Van Nice of Hillsboro, Ore., dances ballet and works on an old sports car. Kenneth Gainsford Brownlee of Schenectady, N.Y., skis, which probably explains why his winning STS project is a ski lift arrangement that slows ski lift chairs when skiers want to get on or off. Jenae Rose Bunyak of Cut Bank, Mont., plays on basketball and track teams, jogs, collects stamps and photographs wildlife.

In addition to their wide interests, the finalists come from 32 cities in 17 states.

The 40 finalists are:

ALABAMA: *Gary Eugene McGahan,* Austin H.S., Decatur.

ARKANSAS: *David Edmund Wickliff,* Fayetteville H.S., Fayetteville.

CALIFORNIA: *Scott Cameron Thornburg,* Alhambra H.S., Alhambra; *David Thomas Gleba,* La Jolla H.S., La Jolla; *Robin Chu Hsin Chang,* Los Altos H.S., Los Altos; *Bryan Edward Penprase,* San Marino H.S., San Marino; *Alan Glenn Murray,* Foothill H.S., Santa Ana.

CONNECTICUT: *David Benjamin Rothenberg,* Staples H.S., Westport.

FLORIDA: *Pamela Lynne Epstein,* Merritt Island H.S., Merritt Island; *Mark William Turner,* Niceville H.S., Niceville.

HAWAII: *Anthony Charles Laberge,* Aiea H.S., Aiea.

ILLINOIS: *Joel Friedman,* Evanston Twp. H.S., Evanston; *Craig Richard Bina,* Wheeling H.S., Wheeling.

INDIANA: *Tony James Bohnert,* Jasper H.S., Jasper.

MARYLAND: *George Frank Weinert,* Seneca Valley H.S., Germantown; *Heather Lynn Dick,* Rockville H.S., Rockville.

MICHIGAN: *John Michael Andersland,* East Lansing H.S., East Lansing; *Craig Thomas Perdue,* Stevenson H.S., Livonia.

MONTANA: *John Ward Vidic,* Helena Sr. H.S., Helena; *Jenae Rose Bunyak,* North Toole County H.S., Sunburst.

NEW YORK: *Naomi Taylor,* Benjamin N. Cardozo H.S., Bayside; *Mark Paul Prestigiacomo,* W.C. Mepham H.S., Bellmore; *Karen Lisa Jerome,* South Shore H.S., Brooklyn; *Arielle Nadine Bienenstock,* Yeshiva of Flatbush Joel Braverman H.S., Brooklyn; *David Elmer Galbi,* Maine-Endwell Sr. H.S., Endwell; *David Chiang,* Bronx H.S. of Science, New York; *Sarah Julia Kupferberg,* Bronx H.S. of Science, New York; *Lee Diana Turkel,* Bronx H.S. of Science, New York; *Philip Sung-En Wang,* Bronx H.S. of Science, New York; *Melissa Willene Hull,* Hunter College H.S., New York; *Paul Neil Feldman,* Stuyvesant H.S., New York; *Brian Randolph Greene,* Stuyvesant H.S., New York; *Lisa Joy Randall,* Stuyvesant H.S., New York; *Kenneth Gainsford Brownlee,* Linton H.S., Schenectady.

OREGON: *Faith Louise Van Nice,* Hillsboro Sr. H.S., Hillsboro.

TENNESSEE: *Eugene Giles Brady III,* Memphis Catholic H.S., Memphis.

TEXAS: *Lourdes Gamez,* Loretto Academy, El Paso.

VIRGINIA: *Michael Vincent Finn,* Lake Braddock Secondary School, Burke; *John Alexander Maturi,* J.E.B. Stuart H.S., Falls Church.

WISCONSIN: *Karen Laurel Middleton,* James Madison Memorial H.S., Madison. □