Texas Norman Hackerman Advanced Research Program (NHARP)

NHARP

- Created by the Texas Legislature in 1987
- Administered by the Texas Higher Education Coordinating Board
- Statewide basic research grant program
- Peer-reviewed, highly competitive grants
- Goals of the program:
  - Develop a talent pool of research-educated students for Texas' future workforce
  - Fund "proof of principle" studies that improve investigators' ability to secure external funding
- Supports individual investigator research and students at Texas' institutions of higher education
- Grants support a wide array of scientific and engineering research

The 70th Texas Legislature recognized the need to "exploit the potential of technology" in the state and responded by funding the Advanced Research Program.

Program Supports

Basic research projects in

- Biological sciences
- Chemistry
- Computer sciences
- Earth sciences
- Engineering
- Materials science/Nanoscience
- Mathematics
- Physics and Astronomy

NHARP contributions

- Grants awarded since 1987: 1,646
- Total state funding: $203 million
- External funding attracted: $673 million
- Economic impact on Texas of external funding attracted: $2.2 billion
- Education and training
  - 4,800+ undergraduates
  - 7,600+ graduate students
  - 90+ high school science and math teachers
- Development of new knowledge
  - Refereed papers: 5,400+
  - Conferences and technical reports: 4,300+

Investment for Texas

NHARP projects:

- Attract and retain the best students and researchers in Texas
- Provide the knowledge base needed for innovation
- Average award: $123,000
- Average external funding for each project: $410,000
- Average number of graduate students per project: 5.0
- Average number of undergraduates per project: 2.9
- Average published papers: 3.4

Ten biennial merit review panels of distinguished scientists and engineers have concluded that the program is high quality and beneficial to the state.

An Impact Assessment conducted by Dr. James Jarrett of the McCombs School of Business at UT Austin, found that NHARP investigators believed, "the projects attract outstanding graduate students and serve as an important element in their graduate school experiences. NHARP projects also enable students to develop new skills and competencies that enhance their attractiveness to Texas employers."

NHARP graduate students said, "NHARP appears to have achieved the original legislative intent. Students are attracted to Texas universities by components which the NHARP has the ability to enhance. They view their NHARP experience as a strong component of their education, and large numbers of these students remain in Texas after graduation, infusing the Texas workforce with the benefits of their expertise."

"The greatest effect of research is to produce scientists and engineers. A big question in the future of science and technology is where we are going to get the people to do the innovative work."

Norman Hackerman (1912-2007)

National Medal of Science Recipient

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