

New Directions

Volume 11 | Issue 4

Article 3

7-1-1984

Partners for Progress

Abdulkadir N. Said

Follow this and additional works at: <http://dh.howard.edu/newdirections>

Recommended Citation

Said, Abdulkadir N. (1984) "Partners for Progress," *New Directions*: Vol. 11: Iss. 4, Article 3.

Available at: <http://dh.howard.edu/newdirections/vol11/iss4/3>

This Article is brought to you for free and open access by Digital Howard @ Howard University. It has been accepted for inclusion in New Directions by an authorized administrator of Digital Howard @ Howard University. For more information, please contact lopez.matthews@howard.edu.

Partners for Progress

By Abdulkadir N. Said

Name a topic. Bring together a group of knowledgeable individuals and have them share ideas and information for half a day with one goal in mind: Enhanced cooperation.

This is what occurred in March at a forum on "Industry/Government/University Partnerships for Advancing Research and Graduate Education" at the Howard Inn. And the cumulative result of the effort was this: That the partnership(s) was necessary and that it must be expanded for the common good of all of the parties.

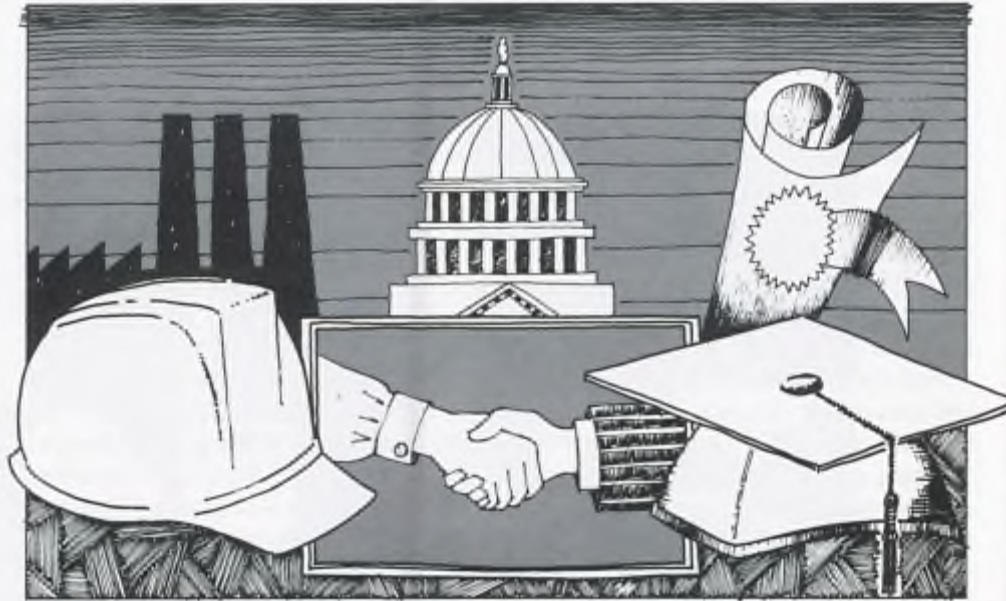
While varying opinions were presented regarding the role industry or government should play in this cooperative effort with the academic world and who should bear the lion's share of the funding, what transpired made it clear that the key to success can only be achieved through renewed commitment.

Indeed, industry/government/university partnership is hardly a phenomenon new to the 1980s. It has often moved side by side with the emergence of the industrial/space/computer age.

Richard D. DeLauer, undersecretary of defense for research and engineering, put it this way in his keynote address:

"The nation's economic health, as well as its defense, is dependent upon our ability to maintain a strong scientific and technological capability. In turn, this capability is based on having an adequate supply of qualified technical personnel who will make the technological advances of the future.

"The nation's universities are foremost among those institutions carrying out the research in this country which underpins our technological advances, and hence they play a vital role in maintaining the country's economic and military strength. The universities are also the principal educational institutions for our future scientists and engineers and research is a



fundamental element of quality education in science and engineering. Engaging in research as a part of the educational experience has expanded our knowledge, stimulated advances in the engineering and science curricula, and enabled the United States to assume world leadership both in performing research and in training research workers for industrial and government laboratories."

To drive his point home, DeLauer presented some statistics that told part of the story: "Last year (1983) we awarded \$30 million to over 80 universities in 33 states in response to 2,500 proposals requesting \$645 million," he said. Then turning his attention to the host institution, he noted: "Howard University, by the way, was one of our award recipients . . . at \$155,000 . . ."

And the future looks good, provided each group intensifies the effort to strengthen the partnership. DeLauer suggested the following: Faculty/industry exchange programs; summer research experiences for university and high school faculty and students in industry laboratories; increased support for fellowship, scholarship and other financial support programs for outstanding science

and engineering students; donations of laboratory equipment to improve [the] nation's teaching laboratories at the secondary and post-secondary levels; and increased use of educational technology to improve high school and college education.

John B. Slaughter, chancellor of the University of Maryland at College Park, indicated that universities represent a major source of highly trained manpower from which industry can tap. "Both parties stand to benefit from cooperation," he noted. "Universities have to offer something to industrial organizations and vice versa . . . the transfer of knowledge from university to industry has a tremendous payoff."

While expressing optimism, Slaughter quickly noted that it will take "a great deal of work" to strengthen the bond.

S. Alan Heinger, a vice president with the Monsanto Company, was more sober in his assessment. While he did not disagree with the overall goal of the partnership and the expected results, he said "it was naive to think that industry (alone) will pick up the tab." Universities should continue to look up to federal agencies for the bulk of research and development funds. "Industry funding will never re-

place government funding," he emphasized.

Heininger, however, stressed the need for ongoing dialogue and the flow of information on a regular basis. "We need people. The university system is our source for people . . . Industry must support the university in training the next generation of our manpower force."

Donald Senich, a division director with the National Science Foundation, gave an upbeat and optimistic assessment of the state of affairs: "There is significant research money out there from which the universities can tap . . . an exciting new era in which universities can participate," he said, while emphasizing renewed collaboration between universities and the small business sector.

An overview report by the National Science Foundation had this to observe:

"Industry-university research cooperation is clearly a national trend. This relationship represents an active partnership aimed at re-energizing the innovation and productivity of the U.S. industrial machine that has been the model for the free world. They are cooperating to meet the scientific and technical challenges posed by our domestic needs as well as international competition. Interest in industry-university cooperative research is now more intense because of the growing perception that industrial products and services are increasingly dependent on fundamental scientific understanding. . . ."

George K. Littleton, an associate dean of Howard's Graduate School of Arts and Sciences, remarked that "government/university/industry nexus is extremely important . . . but very difficult." This was not to suggest it was impossible to achieve. "Howard University," he said, "is very much interested in enhancing the partnership."

Among some of the priorities he listed are the following:

- Highly competitive research fellowships in life science, engineering, etc.
- Refurbishing and modernization of research facilities.
- Access to highly motivated, highly trained postdoctoral fellowships.
- Endowed research fellowships.

One of Littleton's concerns involved publication rights and academic freedom, which he explained can be enhanced "through communication and dialogue." Earlier, Slaughter of Maryland touched on the issue of publication rights. He said:

"Universities have a vested interest in academic freedom and the open exchange of ideas. Such an atmosphere is absolutely necessary for creative and productive research. At the same time, industry is legitimately concerned about protecting its rights to the results of the research it supports. Further, all participants in cooperative ventures need to know who has the right to publish results and who gets the patent rights and the royalties from the application in consumer products."

Roger D. Estep, Howard's vice president for the Division of Development and University Relations, the senior university representative at the forum, said: "The partnerships . . . are not a new phenomenon in either higher education in general or at Howard University in particular; but they are emerging as a powerful force in the development and advancement of new technologies. Their increasing importance is highlighted in the area of science and engineering research."

"For decades," he noted, "American universities have played a major role in advancing technology and enhancing productivity through research and research training. It might even be said that a disproportionate share of basic research has been conducted on American campuses. The current establishment of university/industry/government research institutes

and centers has propelled universities further into the area of applied research. At the same time, the development of new technologies and the resolution of debilitating diseases are largely dependent upon the quality of education and research at American universities and colleges. Consequently, the partnerships being forged by industry, government and universities are necessary and must be expanded.

"It is estimated that \$97 billion will be expended for national research from public and private sources in 1984, and that federal spending for research and development in 1985 will increase by 14 percent. Universities will receive a significant portion of this projected research spending. However, research and development support to predominantly Black colleges and universities from government and industry has traditionally been low. According to National Science Foundation FY 1981 data, 10 predominantly Black colleges and universities received 60.8 percent or approximately \$22 million of the total federal research and development award of \$40 million to the nation's 110 historically Black colleges and universities. Howard University placed first and received \$8 million of the total support. A survey of industry research and development support will show even less has been given to Black colleges and universities."

It was evident from what had transpired during the forum, including the new proposals and new concerns that were presented by some of the participants, the partnership is moving into a new phase that will ultimately result in bigger rewards.

Indications are there will be many more forums and dialogues to follow in the months ahead. This one was sponsored by Howard's departments of Development and Federal Affairs.