

Research in Virginia's Future

Kenneth R. "Ken" Plum

(Appeared on May 14, 2003 in the *Reston Connection*.)

Over the last couple of weeks I have participated in activities that clearly demonstrate that research can play an important role in Virginia's future economic development. The very setting of the Governor's Higher Education Research Summit at the Herbert H. Bateman Virginia Advanced Shipbuilding and Carrier Integration Center in Newport News made the point. With a state and private investment in the advanced center to plan for the ultimate use of technology in naval warfare, Virginia has enabled itself to stay competitive and to preserve thousands of jobs in the Tidewater region.

But the news inside the ultra-modern, technology-filled auditorium of the Advanced Shipbuilding and Carrier Integration Center was not so good. While enormous amounts of federal dollars flow into private research and development in Virginia, the amount coming to the colleges and universities in the state is ho-hum. According to a report by Dr. Charles W. Steger, President of Virginia Tech, only Virginia Tech (49th) and the University of Virginia (78th) are among the top 100 research universities in the country. In a candid, town hall discussion, Governor Warner told the university and private sector representatives that he wants to increase Virginia's national standing in sponsored research.

That increase has a price tag, some believe as high as \$100 million. And that comes at a time when Virginia's colleges and universities have been cut by a quarter-billion dollars, and the Commonwealth Technology Research Fund and the equipment trust fund have been reduced.

The investment in research has a potential for a big pay-off. Dr. Steger's report indicates that research at MIT has spurred the growth of 4,000 companies and 125,000 employees. The Research Triangle in North Carolina has attracted 100 research and development companies with 37,000 employees.

At the same time and through little effort on its part Virginia has landed what may be the most important research facility of the future – the Howard Hughes Medical Institute in Loudoun County. Certainly the beauty of the 281 acres of Janelia Farm was attractive to the Institute's leaders as it was to me and the persons attending the groundbreaking last week, but the environmentally-sensitive, technologically-sophisticated 760,000 square foot complex to be built at a half-billion dollar cost is likely to be very appealing to the permanent research staff of 200 to 300 scientists who will carry out a broad range of biomedical research programs.

The Howard Hughes Medical Institute is one of the largest philanthropies in the world with an endowment of more than \$10 billion and an annual budget of nearly \$600 million. Whether Virginia's colleges and universities will realize significant benefit from this tremendous presence in the state will depend in part on the willingness of legislators to make an investment in our institutions. Our track record has been anything but impressive lately, and that will limit our ability to attract research projects to our universities in the future.