Arthur Garson, Jr., Executive Vice President and Provost
University of Virginia
Senate Finance Committee, Education Subcommittee
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With the Commonwealth Research Initiative investment of $19.3M ($11.45M GF and $7.85M ETF), the University generated $52.6M in external federal/private funds —a return-on-investment of 272%. This investment has enabled the University to attract distinguished scientists, develop new research programs, support graduate students, obtain new equipment, and foster research-related business development.

Distinguished Scientists. The University recruited five new distinguished senior scientists who have brought $40M in sponsored research from federal and industry sponsors. Their research covers a broad spectrum, including fiber optics in telephone systems; catalysis (used in catalytic exhaust converters and to fabricate semiconductor chips); development of drugs for heart attack guided by examination of the heart's molecular structure; and, prevention and treatment of birth defects and cancer. The University also recruited five mid-career and junior faculty members in biology, environmental sciences, psychology, and electrical engineering.

Research Programs. University research programs supported by the Commonwealth's investment focus on heart disease, cancer, imaging, and muscle, bone, and tissue regeneration.

Graduate Students. The Commonwealth's investment provided $1.6M for graduate student support. Graduate students generate new ideas, and support research.

Equipment. The Commonwealth's investment provided $2M for the purchase of an NMR machine (nuclear magnetic resonance). This is the only machine of its kind in Virginia. University researchers are using it to develop novel treatments for leukemia patients.

Business Start-Ups. Investment by the Commonwealth can lead to effective business start-ups. For example, two University investigators, one in biomedical engineering and one in cardiology, who were funded partially with state money have developed new technology that allows Magnetic Resonance Imaging (MRI) to proceed so rapidly that it replaces three expensive and sometimes dangerous methods for examining the heart: cardiac catheterization, nuclear imaging, and echocardiography. The investigators' small business has developed nine patents. A major imaging company has acquired the business.