

**A REPORT ON THE R&D STRATEGIC ROADMAP
AND
R&D INITIATIVES IN THE COMMONWEALTH**



**ANNUAL REPORT
JULY 1, 2009 – JUNE 30, 2010**

**Submitted by:
Center for Innovative Technology
The Commonwealth of Virginia
Innovation and Entrepreneurship Investment Authority
October 1, 2010**

In accordance with Code of Virginia section 2.2-2221, paragraphs 16 and 18, the Center for Innovative Technology (CIT) respectfully submits this report addressing a comprehensive research and development strategic roadmap for the Commonwealth and the status of research and development (R&D) initiatives in the Commonwealth of Virginia. CIT submits this report on behalf of the Innovation and Entrepreneurship Investment Authority.

Legislation in the 2009 Session of the General Assembly consolidated the responsibilities of the Innovative Technology Authority (ITA) and the Virginia Research and Technology Advisory Commission (VRTAC) into a new entity, the Innovation and Entrepreneurship Investment Authority (IEIA, the “Authority”). IEIA’s codified responsibilities include statewide research and development initiatives.

Paragraph 16 calls for the Authority to develop a comprehensive R&D strategic roadmap for the Commonwealth to identify research areas worthy of institutional focus. This roadmap is to incorporate the strategic plan for each research university in the Commonwealth, identify common themes, and make recommendations for the alignment of research and development and economic growth in the Commonwealth. This examination and improved understanding of academic R&D capabilities in the Commonwealth will facilitate strategic investments and other decisions by the state’s academic, industry, and political leadership, including synchronization of higher education’s capabilities and direction with industry’s needs and direction. The Authority created an R&D Committee in order to lead and coordinate this undertaking with Virginia’s colleges, universities, and other R&D performers and funding sources. Dr. Charles Steger, President of Virginia Tech, chairs the Committee; other participants are board members Dr. Alan Merton, President of George Mason University; Dr. Linwood Rose, President of James Madison University; and Dr. Lydia Thomas, retired President and CEO of Noblis, Inc. and member of the Board of Trustees of George Washington University.

Complementing the strategic planning initiative described above, Governor McDonnell created the Commission on Higher Education Reform, Innovation and Investment with Executive Order Number 9 (revised July 9, 2010). The Commission will provide the Governor with recommendations related to university research and development, including how academic R&D can contribute to economic development. Thus, the Authority’s direction for the roadmap is pending decisions and recommendations of the Commission. The Commission’s charge includes developing findings and recommendations to address the following priorities:

- Attracting and preparing young people for the STEM (science, technology, engineering, and math) areas and other disciplines (e.g., healthcare and advanced manufacturing) where skill shortages now exist and/or unmet demand is anticipated;
- Forging new effective public-private partnerships and regional strategies for business recruitment, workforce preparation, and university-based research; and
- Crafting a sustainable higher education funding model that will systematically move Virginia toward higher levels of educational attainment and economic competitiveness over the next decade-and-a-half.

The Commission's Regional Strategies/Partnerships for Research and Economic Development Committee, whose members includes Dr. Steger and Dr. Rose, is engaged particularly in developing recommendation in the following areas:

- Plan to dramatically increase the leveraging of private and federal research funding by Virginia's colleges and universities;
- Coordination with development of a Virginia Energy Institute and other energy-related research initiatives;
- Coordination with the Office of Commerce and Trade to develop region-specific strategies and partnerships through which public and private colleges and community colleges participate actively in economic development, workforce training, development of research parks, and related activities; and
- Identification of funding streams through which financial incentives for regional collaboration and public-private partnerships may be introduced.

The Commission will produce initial recommendations for Governor McDonnell in October 2010 and plans to refine them by December 2010; the Commission will continue its work in 2011.

The second element of this report addresses Code of Virginia section 2.2-2221, paragraph 18, which calls for the Authority to receive and review annual reports from state institutions of higher education regarding the progress of projects funded through the Commonwealth Research Initiative or the Commonwealth Research Commercialization Fund. The Authority submitted a separate report discussing CRCF projects and the status of the Fund in FY 2010; the report is entitled "The Commonwealth Research Commercialization Fund: Advancing Technology and Economic Development in Virginia by Investing in Higher Education Research." The Executive Summary follows; it and the full report are available online via Legislative Information Services.

THE COMMONWEALTH RESEARCH COMMERCIALIZATION FUND:

ADVANCING TECHNOLOGY AND ECONOMIC DEVELOPMENT IN VIRGINIA BY INVESTING IN HIGHER EDUCATION RESEARCH

July 1, 2009 – June 30, 2010

EXECUTIVE SUMMARY

In accordance with Section 2.2-2233.1 E of the Code of Virginia, the Center for Innovative Technology (CIT) respectfully submits this report regarding the performance of the Commonwealth Research Commercialization Fund (CRCF) in FY 2010.

The predecessor of CRCF, the Commonwealth Technology Research Fund (CTRF), was created in the 2000 Session of the General Assembly. Its purpose was to attract public and private

research funding for institutions of higher education in order to increase technological and economic development in Virginia. Awards from the Fund could be made to Virginia public institutions of higher education or their associated intellectual property foundations. The CTRF was renamed in the 2009 Session of the General Assembly to the Commonwealth Research Commercialization Fund (CRCF). At that time its goals were oriented more strongly towards commercialization.

This report addresses FY 2010 progress of the four awards made in FY 2008 that remained active; the Virginia Innovation Partnership program, created in FY 2009; and an award made in FY 2010 using remaining funds from an FY 2008 award that was terminated early. The FY 2010 report for each project is on file with the Fund Administrator, and the Table of Grants provided in Appendix A identifies all awards discussed in this report as well as the two FY 2008 awards that concluded prior to FY 2010.

As of this writing, no monies are in place for new awards. The \$1 million for CRCF in the FY 2010 budget was withdrawn during budget shortfall actions, and the FY 2011 and FY 2012 budgets do not include CRCF appropriations.