



Larry Hogan | Governor
Boyd Rutherford | Lt. Governor
Kelly M. Schulz | Secretary of Commerce
Benjamin H. Wu | Deputy Secretary of Commerce

December 10, 2019

The Honorable Thomas V. Mike Miller, Jr.
President, Maryland Senate
State House, H-107
Annapolis, Maryland 21401-1991

The Honorable Adrienne A. Jones
Speaker, Maryland House of Delegates
State House, H-101
Annapolis, Maryland 21401-1991

The Honorable Nancy J. King
Chairman, Senate Budget and Taxation Committee
3 W Miller Senate Office Building
Annapolis, MD 21401

The Honorable Anne R. Kaiser
Chairman, House Ways and Means Committee
131 House Office Building
Annapolis, MD 21401

RE: E-Nnovation Initiative Fund Program FY 2019 Annual Report

Dear President Miller, Speaker Jones and Chairmen King and Kaiser,

In accordance with §6-623 of the Economic Development Article, we are pleased to submit the annual report on the E-Nnovation Initiative Fund Program.

We look forward to your review of this report and are happy to furnish any additional information that is required. If you have any questions regarding this report, please contact Sarah Sheppard at 410-767-6368.

Sincerely,

Kelly M. Schulz
Secretary

Robert Hallenbeck
E-Nnovation Initiative Fund Authority Chair

Enclosure

cc: Members, Senate Budget and Taxation Committee
Members, House Ways and Means Committee



FISCAL YEAR 2019 ANNUAL REPORT
OF THE
E-Nnovation Initiative Fund Program
As required by the Economic Development Article Section 6-623

Respectfully submitted to the General Assembly of Maryland by

Robert Hallenbeck, Chairman

401 East Pratt Street

Baltimore, MD 21202

December 2019



Larry Hogan, Governor | Boyd Rutherford, Lt. Governor

OPEN *for* **Business**

Overview

Pursuant to Section §6–623 of the Economic Development Article as amended, on or before January 1st of each year beginning in 2016, the Department of Commerce (Commerce) shall submit a report on the implementation of the E-Nnovation Initiative Fund Program (Program) to the Governor and, in accordance with § 2–1246 of the State Government Article, to the Senate Budget and Taxation Committee, and the House Ways and Means Committee.

The Program became fully operational on July 1, 2014, and this is the fifth Annual Report. The purpose and intent of the Program is to retain and recruit top university researchers and encourage collaboration among Maryland research universities, federal agencies, and the private sector (especially entrepreneurial companies). The combination of top talent and collaboration can enhance the economic competitiveness of the State as it builds on existing clusters of research and innovation. The Program gives Maryland a tremendous advantage in the intense global competition for the best minds in the world, and will provide for opportunities, jobs, and industries created by their work.

The Program leverages the impact of State funds through matching funds from private donors to universities. The legislation which created the Program calls for an annual appropriation of \$8.5 million from FY 2016 through FY 2021. The Authority feels that the Program is meeting legislative goals. The breadth of applicants and the stature of the awardees provide Maryland with a depth of experience that will advance the State's competitive advantage. The Authority brought together a number of these highly talented individuals together in FY 2019 to share their learnings. This was a highly illustrative and informative convening of select awardees in order to best enable the Authority in driving the Program's implementation and effectiveness.

I. Members of the E-Nnovation Initiative Fund Authority

Members of the Maryland E-Nnovation Initiative Fund Authority (Authority) are:

- Robert Hallenbeck (Chair), BD Biosciences (retired)
- Kelly M. Schulz, Secretary, Maryland Department of Commerce *ex officio*
- Robert Caret, Chancellor, University System of Maryland *ex officio*
- George Davis, Executive Director, TEDCO *ex officio**
- Renee Winsky, President & CEO, Leadership Maryland and President & Founder, Bay One Group, LLC
- John M. Wasilisin, President & Chief Operating Officer, TEDCO *ex officio***
- Andrew Jones, Managing Director, Maryland Venture Fund, TEDCO *ex officio* ***

*George Davis submitted his resignation from the Authority on July 31, 2019. A replacement and a new member will be made once the position has been filled.

**John M. Wasilisin submitted his resignation from the Authority on January 31, 2019. A replacement and a new member will be made once the position has been filled.

***Andrew Jones submitted his resignation from the authority on June 31, 2019. A replacement and a new member will be made once the position has been filled.

Commerce staff and the Office of the Attorney General provide administrative and legal support to the Authority.

II. Meetings of the Authority

The Authority conducted four meetings from July 1, 2018 to June 30, 2019 (FY 2019).

- November 28, 2018 – Review, discussion, and approval of round 2 applications (due November 1, 2018)
- December 18, 2018 – Review, consideration, and determination of University of Maryland, Baltimore’s request to amend its FY 2016 Robert C. Gallo Distinguished Professorship Endowment Plan.
- January 25, 2019 – Review, consideration, and determination of University of Maryland, Baltimore’s request to amend its FY 2016 Robert C. Gallo Distinguished Professorship Endowment Plan; discussion of changes made to the College of Southern Maryland’s changes to its FY 2018 Endowment for the Entrepreneur and Innovation Institute Research Endowment Plan.
- June 27, 2019 – Review, discussion and approval of FY 2020 round 1 applications (due June 1, 2019); update and discussion on the status of the College of Southern Maryland’s FY 2018 Endowment for the Entrepreneur and Innovation Institute Research Endowment Plan; symposium event held for the colleges and universities to provide updates on the research where the Authority has provided matching funds to determine the impact of the program.

III. FY 2019 Matching Fund Awards and Disbursements

FY 2019 Matching Fund Awards

Activities which continued in FY 2019 included the approval of matching funds to successful applicants. The Authority made ten awards to nine different institutions. Six of the ten awards were made during the Round 1 application process, with the Authority approving awards at the June 26, 2018 meeting. The Authority made four additional awards during the Round 2 application process, with those awards finalized at the November 28, 2018 meeting.

Awards totaled \$9.5 million in FY 2019.

The following decisions were announced for FY 2019 round 1 awards:

- Hood College for the *Endowed Chair in Project Management* – \$1 million
- Johns Hopkins University for the *Endowed Fund in Honor of Marcella E. Woll* – \$800,000
- Mount St. Mary’s University for the *Endowed Professorship in Computational Science and Mathematics* – \$1 million
- University of Maryland, Baltimore for the *James and Carolyn Frenkil Dean’s Professorship Fund* – \$1.4 million
- University of Maryland, Baltimore for the *Frederick G. Smith, MD, DDS and Venice K. Paterakis, DDS, Professor in Oral and Maxillofacial Surgery* – \$1.5 million

- University of Maryland, College Park for the *Brin Family Endowed Professorships in Theoretical Computer Science* – \$1 million

Total Awarded: \$6.7 million

The following decisions were announced for FY 2019 round 2 awards:

- Maryland Institute College of Art for the *Design & Health Initiative at the MICA Center for Social Design (CSD)* – \$500,000
- Towson University for the *Towson University E-Innovation Endowed Professorship* – \$500,000
- University of Maryland, College Park for the *Clark Leadership Chair in Data Analytics* – \$714,000
- Washington College for the *Directorship in Geographic Information Systems* – \$1 million

Total Awarded: \$2.7 million

FY 2019 Disbursements

The following are the nonprofit institutions of higher education that received allocation and distribution of funds from the Fund during FY 2019:

Hood College

401 Rosemont Avenue

Frederick, MD 21701

- Contact: Jaime Cacciola, Director of Grants
- Number of FY 2019 Awards: 1
- Amount of FY 2019 Awards: \$1,000,000
- Cumulative Awards: \$1,944,000
- Undisbursed amount at the end of FY 2019: \$0
- Funding:
 - *Endowed Chair in Advanced Bioproducts Research and Education* – FY 2017
 - *Endowed Chair in Project Management* – FY 2019

The Johns Hopkins University

3400 North Charles Street

Baltimore, MD 21218

- Contact: Denis Wirtz, Ph.D., Vice Provost of Research
- Number of FY 2019 Awards: 1
- Amount of FY 2019 Awards: \$800,000
- Cumulative Awards: \$7,281,250
- Undisbursed amount at the end of FY 2019: \$0
- Funding:
 - *Professorship in Water and Public Health* – FY 2016
 - *Reta Hiers Professorship in Tarlov Cyst Disease* – FY 2016
 - *Mary Jo Rogers Professorship in Melanoma* – FY 2017
 - *Charles Glenn Grover Estate for Advanced Macular Degeneration* – FY 2018
 - *Branna and Irv Sisenwein Estate* – FY 2018

- *Jennison Family Professorship in Neurosurgery* – FY 2018
- *Endowed Fund in Honor of Marcella E. Woll* – FY 2019

Maryland Institute College of Art (MICA)

1300 Mount Royal Avenue

Baltimore, MD 21217

- Contact: Dr. David Bogen, Vice President for Academic Affairs and Provost
- Number of FY 2019 Awards: 1
- Amount of FY 2019 Awards: \$500,000
- Cumulative Awards: \$500,000
- Undisbursed amount at the end of FY 2019: \$0
- Funding:
 - *MICA Center for Social Design* – FY 2019

Mount St. Mary's University

16300 Old Emmitsburg Road

Emmitsburg, MD 21727

- Contact: Jeffrey Simmons, Ph.D., Director of Assessment, Strategic Planning, Institutional Research and Effectiveness
- Number of FY 2019 Awards: 1
- Amount of FY 2019 Awards: \$1,000,000
- Cumulative Awards: \$1,000,000
- Undisbursed amount at the end of FY 2019: \$250,000
- Funding:
 - *Endowed Professorship in Computational Science and Math* – FY 2019

Towson University

8000 York Road

Towson, MD 21252

- Contact: Dr. David A. Vanko, Interim Provost and Executive Vice President for Academic Affairs
- Number of FY 2019 Awards: 1
- Amount of FY 2019 Awards: \$500,000
- Cumulative Awards: \$500,000
- Undisbursed amount at the end of FY 2019: \$175,000
- Funding:
 - *Towson University Maryland E-Innovation Endowed Professorship* – FY 2019

University of Maryland, Baltimore

220 Arch Street, 14th Floor

Baltimore, MD 21201

- Contact: Bruce Jarrell, Ph.D., Senior Vice President and Chief Academic Officer
- Number of FY 2019 Awards: 2
- Amount of FY 2019 Awards: \$2,986,000
- Cumulative Awards: \$7,956,250
- Undisbursed amount at the end of FY 2019: \$1,115,000

➤ Funding:

- *Endowed Professorship in Entrepreneurial Surgical Science* – FY 2016
- *Robert C. Gallo Distinguished Professorship* – FY 2016
- *Robert E. Fischell, ScD Dean's Endowed Professorship* – FY 2017
- *Drs. Angela and Harry Brodie Distinguished Professorship in Translational Cancer Research* – FY2017
- *Dr. Bizhan Aarabi Professorship in Neurotrauma* – FY 2018
- *Dr. Martin Helrich Professorship in Anesthesiology* – FY 2018
- *The James and Carolyn Frinkil Dean's Professorship Fund* – FY 2019
- *School of Dentistry – Frederick G. Smith MS., D.D.S. and Venice K. Paterakis, D.D.S. Endowed Professorship in Oral and Maxillofacial Surgery* – FY 2019

University of Maryland, College Park
4114 Samuel Riggs IV Alumni Center
College Park, MD 20742

- Contact: Brian Darmody, Associate Vice President, Corporate and Foundation Relations
- Number of FY 2019 Awards: 2
- Amount of FY 2019 Awards: \$1,714,000
- Cumulative Awards: \$9,032,750
- Undisbursed amount at the end of FY 2019: \$0
- Funding:
 - *Michael and Eugena Brin Endowed Chair in Mathematics* – FY 2016
 - *Endowed Professorship in Computer Science* – FY 2016
(Note that the application was amended in FY 2016 into two endowed professorships consisting of:
 - *Paul Chrisman Iribe Endowed E-Novate Professorship*
 - *Reginald Allan Hahne Endowed E-Novate Professorship*)
 - *Andrew and Mary Balo and Nicolas and Susan Simon Endowed Professorship* – FY 2017
 - *Elizabeth Stevinson Iribe Chair in Computer Science* – FY 2017
 - *Capital One Chair in Machine Learning and Computer Science* – FY 2018
 - *Ray R. Weil Distinguished Endowed Professorship in Soil Science* – FY 2018
 - *Brin Family Endowed Professorship in Theoretical Computer Science* – FY 2019
 - *Clark Leadership Chair in Data Analytics* – FY 2019

Washington College
300 Washington Avenue
Chestertown, MD 21620

- Contact: Kurt M. Landgraf, President
- Number of FY 2019 Awards: 1
- Amount of FY 2019 Awards: \$1,000,000
- Cumulative Awards: \$2,944,000
- Undisbursed amount at the end of FY 2019: \$0
- Funding:
 - *Chair in Sustainable Food Systems/Eastern Shore Food Lab* – FY 2017

- *Chair of Entrepreneurial Science at the Center for Environment & Society* – FY 2018
- *Chair in Geographic Information Systems* – FY 2019

IV. Observations and Recommendations

Supply and Demand

The Authority notes that there was strong demand for the matching grants, and expects this demand to continue as Commerce increased promotion of the Program to non-profit institutions of higher education in the State in FY 2019. The Authority recommends continued level funding in future years.

Increased Participation of Institutions

There continues to be increased participation in the program by smaller colleges, contributing more broadly to economic development across Maryland. Continued funding of the Program should continue to stimulate private, multi-million dollar donations to Maryland's colleges and universities.

Diversity of Awards

The Authority notes that the awards and the recipient institutions in the fifth year of the Program are characterized by diversity in demographics, geography, and technical and scientific fields of study. While large, research-oriented universities garnered five of the ten awards, the Authority was pleased to see participation in the Program for the first time by other institutions. It is important to note that highly talented, entrepreneurial individuals need not contribute only through the State's traditional research institutions. Fields of study funded by the Program in FY 2019 include ophthalmology, oral and maxillofacial surgery, geographic information systems, cybersecurity, computer science, design and health, and project management.

Request for Change in Research Endowment Plan and Determination

The Authority met on December 18, 2018, to review and consider University of Maryland, Baltimore's (UMB) request to amend its FY 2016 *Robert C. Gallo Distinguished Professorship* Research Endowment Plan (REP). The Authority had awarded the institution \$999,500 on July 17, 2015, in round one of the selection process. The original REP was intended for the professorship to be a single appointment, in the course of an internal audit by Commerce, it was discovered that UMB had split the position into two professorships with both receiving proceeds from the MEIF endowment. The Authority determined this to be a substantive change which requires approval of the Authority, and sent a letter informing UMB on November 26, 2018, with response due by December 10, 2018. UMB made an appeal to amend its REP and asked for approval from the Authority to include either a single position, or to include two positions as previously implemented by UMB. The Authority decided to approve the amendment, contingent that the funds be used for a sole professorship. UMB submitted an amendment to its REP in a letter dated January 9, 2019, for the Authority's discussion and approval. The Authority met on January 25, 2019, to review and consider UMB's amendment, which was accepted by the Authority.

College of Southern Maryland Update

On June 27, 2017, the Authority awarded the College of Southern Maryland (CSM) \$500,000 in matching funds in Round 1 of FY 2018 based on *its Endowment for the Entrepreneur and Innovation Institute* Research Endowment Plan (REP). The REP of CSM discussed the formation of a Velocity Center and the intention to hire a world class faculty member, such as Hugh Burrell. The Authority learned that CSM did not hire Mr. Burrell, but promoted from within and the job was not posted for external candidates. After discussion on January 25, 2019, the Authority unanimously requested that a letter be sent to CSM requesting a complete written explanation of the hiring process, including all the facts and circumstances surrounding such hiring.

On June 27, 2019, the Authority invited CSM to attend the meeting to provide the Authority with an update. Representatives of CSM noted that CSM had several personnel changes that contributed to the miscommunication regarding the hiring process and that they have removed the current professor as the Endowed Chair and are in negotiations with Hugh Burrell as stated in their original REP. CSM also provided the Authority with an update on the Velocity Center and the delay in construction. CSM believes the Velocity Center will be open in fall of 2019. The Authority determined that no further action is required at this time in regards to CSM's REP.

MEIF Authority Symposium Event

On June 27, 2019, the Authority held a symposium event of previously MEIF grant recipients. Those in attendance included Hood College, Johns Hopkins University, University of Maryland, Baltimore, and University of Maryland, College Park. The purpose of the Symposium was to hear from colleges and universities regarding the research where the Authority has provided matching funds to determine the impact of the program. The colleges and universities in attendance gave presentations on their programs and provided the Authority with information on the impact of their research on the community.