

WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

October 11, 2022 | 9:00 a.m. | West Virginia Regional Technology Park

Or Zoom: 1-646-558-8656 and enter meeting ID 899 1385 2220

AGENDA

- I. Call to Order**
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DRAFT MINUTES

WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

June 10, 2022

I. Call to Order

Chairman Andrew A. Payne convened a meeting of the West Virginia Higher Education Policy Commission on June 10, 2022, at 9:00 a.m., in the David K. Hendrickson Conference Center, Room 1220, Building 2000 of the West Virginia Regional Technology Park, 2001 Union Carbide Drive, South Charleston, West Virginia, and by Zoom videoconference and conference call. The following Commission members participated: Clayton Burch, Ex-Officio; Christina Cameron, Ex-Officio; James W. Dailey; Michael J. Farrell; Diane Lewis Jackson; and Andrew A. Payne. Other participants included state college and university representatives, Chancellor Sarah Armstrong Tucker, and Commission staff.

Chairman Payne secured a quorum and welcomed all participants to the meeting. He announced changes to the order in which agenda items would be presented.

II. Chairman's Report

Chairman Payne asked Commissioner Cameron to report on the action taken by the Nominating Committee.

A. Nominating Committee Report and Election of Officers

Commissioner Cameron reported that the Nominating Committee recommended the following slate of officers:

Chairman: Andrew A. Payne
Vice Chairman: Michael J. Farrell
Secretary: Diane Lewis Jackson

Chairman Payne entertained a motion to approve the slate of officers for the upcoming year.

Commissioner Burch moved to approve the nominated candidates to serve as officers of the Higher Education Policy Commission from July 1, 2022 to June 30, 2023. Commissioner Dailey seconded the motion. Motion passed.

III. Chancellor's Report

Due to time constraints, Chancellor Sarah Armstrong Tucker did not provide a report.

IV. Consent Agenda

Chairman Payne entertained a motion to approve items A to D on the consent agenda.

Commissioner Farrell moved approval of the following items:

- A. Minutes from the May 12, 2022, meeting.
- B. The Fiscal Year 2023 WVNET budget.
- C. The Fiscal Year 2023 Higher Education Policy Commission division operating budgets and Higher Education Resource Assessment projects.
- D. Sunset date extension for Series 12, Legislative Rule, Capital Project Management; Series 42, Legislative Rule, West Virginia Higher Education Grant Program; and Series 55, Legislative Rule, Human Resources Administration.

Commissioner Lewis Jackson seconded the motion. Motion passed.

V. Approval of Annual Reauthorization of Four-Year Degree-Granting Institutions

Dr. Randall Brumfield, Vice Chancellor for Academic Affairs, provided an overview of the proposed annual reauthorization of four-year degree-granting institutions.

Commissioner Lewis Jackson moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the Annual Reauthorization for Bluefield State University, Concord University, Fairmont State University, Glenville State University, Shepherd University, West Liberty University, and West Virginia State University; Appalachian Bible College, Catholic Distance University, Davis and Elkins College, Future Generations University, University of Charleston, West Virginia Wesleyan College, American Public University System, Salem University, and Strayer University.

Further Resolved, That the West Virginia Higher Education Policy Commission approves provisional annual reauthorization for private institutions with a CFI score below 1.0, Alderson-Broaddus University and Bethany College. Commission staff are directed to collect and review additional financial information from those institutions.

Commissioner Cameron seconded the motion. Motion passed.

VI. Approval of Provisional Annual Reauthorization of Wheeling University

Ms. Nikki Bryant, Director of Academic Programming, provided an overview of the provisional annual reauthorization of Wheeling University.

Commissioner Cameron moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves provisional annual reauthorization for Wheeling University.

Commissioner Burch seconded the motion. Motion passed.

VII. Approval of Revisions to Series 2, Legislative Rule, Higher Education Finance Policy

Dr. Christopher Treadway, Vice Chancellor for Community and Technical College Education, who led the development of Series 2, Higher Education Finance Policy, provided an overview of the proposed revisions to the rule.

A. Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 2, Legislative Rule, Higher Education Finance Policy, to be filed as an Emergency Rule with the Secretary of State.

Commissioner Cameron seconded the motion. Motion passed.

B. Commissioner Farrell moved approval of the following resolution:

Further Resolved, That the West Virginia Higher Education Policy Commission approves the proposed revisions to Series 2, Legislative Rule, Higher Education Finance Policy, to be filed with the Secretary of State for a thirty-day public comment period, and if no substantive comments are received, extends its final approval.

Commissioner Cameron seconded the motion. Motion passed.

VIII. Approval of Revisions to Series 10, Procedural Rule, Policy Regarding Program Review

Vice Chancellor Brumfield provided an overview of the proposed revisions to Series 10.

Commissioner Dailey moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves revisions to Series 10, Procedural Rule, Policy Regarding Program Review to be filed with the Secretary of State for the 30-day public comment period and if no substantive comments are received, that the Commission extends its final approval.

Commissioner Burch seconded the motion. Motion passed.

IX. Approval of Revisions to Series 11, Procedural Rule, Submission of Proposals for Academic Programs at Public Regional Institutions and the Monitoring and Discontinuance of Existing Programs

Vice Chancellor Brumfield provided an overview of the proposed revisions to Series 11.

Commissioner Lewis Jackson moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves revisions to Series 11, Procedural Rule, Submission of Proposals for Academic Programs at Public Regional Institutions and the Monitoring and Discontinuance of Existing Programs to be filed with the Secretary of State for the 30-day public comment period and if no substantive comments are received that the Commission extends its final approval.

Commissioner Cameron seconded the motion. Motion passed.

X. Approval of Revisions to Series 32, Legislative Rule, Tuition and Fee Policy

Dr. Edward Magee, Vice Chancellor for Finance, provided an overview of the proposed revisions to Series 32.

Commissioner Dailey moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves revisions to Series 32, Legislative Rule, Tuition and Fee Policy to be submitted to the Secretary of State for a thirty-day comment period and if no substantive comments are received that the Commission extends its final approval.

Commissioner Lewis Jackson seconded the motion. Motion passed.

XI. Approval of Revisions to Series 52, Legislative Rule, Annual Reauthorization of Degree-Granting Institutions

Vice Chancellor Brumfield provided an overview of the proposed revisions to Series 52.

Commissioner Cameron moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves revisions to Series 52, Legislative Rule, Annual Reauthorization of Degree-Granting Institutions to be filed with the Secretary of State for the 30-day public comment period and if no substantive comments are received that the Commission extends its final approval.

Commissioner Lewis Jackson seconded the motion. Motion passed.

XII. Approval of Amendment to Chancellor's Contract

Ms. Kristin Boggs, General Counsel, provided an overview of the proposed amendment to Chancellor Tucker's contract.

Commissioner Lewis Jackson moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the First Amendment to the June 3, 2021, contract for Chancellor Sarah Armstrong Tucker, enabling the Chancellor to be eligible to receive the annual experience increment available to all State employees as provided by W.Va. Code § 5-5-2 and any legislatively authorized salary increases, in money or percentage terms, provided to other State employees through increases to the agencies' operating budgets as appropriated by the Legislature (the "across-the-board raises").

Commissioner Farrell seconded the motion. Motion passed.

XIII. Review of Tuition and Fees

Vice Chancellor Magee provided a report regarding institutional tuition and fees.

XIV. Review of Institutional Operating and Capital Budgets and the Approval of Institutional Capital Budgets

Vice Chancellor Magee provided an overview of the institutions' operating and capital budgets and the proposed approval of their capital budgets.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the Fiscal Year 2023 institutional capital budgets.

Commissioner Dailey seconded the motion. Motion passed.

XV. Approval of Institution Capital Assessments for Fiscal Year 2023

Vice Chancellor Magee provided an overview of the proposed institution capital assessments for Fiscal Year 2023.

Commissioner Lewis Jackson moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the institution capital assessments for Fiscal Year 2023.

Commissioner Farrell seconded the motion. Motion passed.

XVI. Correction of December 2021 Program Productivity Review

Ms. Bryant provided an overview of the correction to the December 2021 Program Productivity Review.

A. Commissioner Lewis Jackson moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission rescinds the December 2021 low-productivity report in its entirety, including the recommendation to the institutional governing boards that programs be placed on probationary status.

Commissioner Cameron seconded the motion. Motion passed.

B. Commissioner Farrell moved approval of the following resolution:

Further Resolved, That the West Virginia Higher Education Policy Commission adopts the revised low-productivity report as set forth below and recommends to the institutional governing boards that the programs listed thereon be placed on probationary status.

Commissioner Dailey seconded the motion. Motion passed.

XVII. Approval of Bachelor of Science in Nursing

Ms. Bryant provided an overview of the proposed Bachelor of Science in Nursing as requested by West Virginia Junior College.

Commissioner Farrell moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves West Virginia Junior College to begin offering bachelor's degree programs with the implementation of the Bachelor of Science in Nursing for implementation in June 2023. This approval expires two years from the date of Commission approval if the program is not fully implemented at that time.

Commissioner Cameron seconded the motion. Motion passed.

XVIII. Update from Constituent Groups

A. Advisory Council of Classified Employees

Ms. Jenna Derrico, Chair of the Advisory Council of Classified Employees and an employee at West Virginia Northern Community College, provided a report on behalf of classified employees. Ms. Derrico expressed the employees' concern over delays in the external market study and securing funding for its implementation. She mentioned that other concerns include PEIA's future liabilities, policy review affecting the area of Human Resources, and the need for institutions to conduct evaluations. Ms. Derrico added that the Council will hold its annual retreat in July.

XIX. Additional Board Action and Comment

There were no additional Board actions or comments.

XX. Adjournment

There being no further business, Commissioner Lewis Jackson moved to adjourn the meeting. Commissioner Cameron seconded the motion. Motion passed.

Andrew A. Payne, Chairman

Diana Lewis Jackson, Secretary

DRAFT MINUTES
WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION
SPECIAL MEETING

July 29, 2022

I. Call to Order

Chairman Andrew A. Payne convened a special meeting of the West Virginia Higher Education Policy Commission on July 29, 2022, at 9:30 a.m., by teleconference and Zoom video. The following Commission members participated: Christina Cameron, Ex-Officio; James W. Dailey; Michael J. Farrell; Diane Lewis Jackson; and Andrew A. Payne. Other participants included state and private college and university representatives, Chancellor Sarah Armstrong Tucker, Commission staff, and others.

Chairman Payne secured a quorum and gave a brief overview of the agenda.

II. Approval of Appointment to the Higher Education Student Financial Aid Advisory Board

Mr. Brian Weingart, Senior Director of Financial Aid, gave an overview of the proposed appointment to the advisory board.

Commissioner Lewis Jackson moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the appointment of Dr. Beverly Boggs to the Higher Education Student Financial Aid Advisory Board.

Commissioner Cameron seconded the motion. Motion passed.

III. Approval of Annual Reauthorization of Four-Year Degree-Granting Institutions

Dr. Randall Brumfield, Vice Chancellor of Academic Affairs, provided an overview of the proposed reauthorization of four-year degree-granting institutions.

Commissioner Dailey moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the annual reauthorization for Alderson Broaddus University and Bethany College.

Commissioner Cameron seconded the motion. Motion passed.

IV. Approval of Interim Presidential Compensation

Ms. Kristin Boggs, General Counsel, provided an overview of the proposed compensation contract for Interim President Dianna Phillips, Fairmont State University.

Commissioner Cameron moved approval of the following resolution:

Resolved, That the West Virginia Higher Education Policy Commission approves the compensation contract for Dr. Dianna Phillips as Interim President of Fairmont State University as proposed by the institutional board of governors.

Commissioner Lewis Jackson seconded the motion. Motion passed.

V. Additional Board Action and Comment

There was no additional Board action or comment.

VI. Adjournment

There being no further business, Commissioner Dailey moved to adjourn the meeting. Commissioner Lewis Jackson seconded the motion. Motion passed.

Andrew A. Payne, Chairman

Diana Lewis Jackson, Secretary

**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Update on International Programs

INSTITUTIONS: All

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Clark Egnor

BACKGROUND:

Dr. Clark Egnor, Coordinator of International Programs in the Division of Academic Affairs, will provide a summary of current international student and faculty outreach support services provided by the Commission.

Dr. Egnor also will speak about a new U.S. Department of Education Undergraduate International Studies and Foreign Language (UISFL) Program grant the Commission facilitated in partnership with West Virginia State University and Bluefield State University. The grant will expand collaboration across institutions and help carry out programs to strengthen and improve undergraduate instruction in international studies and foreign languages in West Virginia.

Increasing numbers of careers in West Virginia and around the world require global competency, familiarity with world languages and cultures, and the ability to work in global teams. Combined with the Commission's international efforts, this grant will empower more students, including first-generation and low-income students, to develop foreign language proficiency, engage in international internships, and pursue study abroad opportunities.

**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Research Challenge Fund Annual Report

INSTITUTIONS: All

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Juliana Serafin, Senior Director

BACKGROUND:

West Virginia Code §18B-1B-12(d) requires the Commission to report annually to the Legislative Oversight Commission on Education Accountability (LOCEA) on the results of the projects and activities funded by the research challenge appropriation (the Research Challenge Fund).

In compliance with this statutory requirement, the Commission is provided a draft annual report for the fiscal year activities. The Research Challenge Fund was established in 2004 and funds multiple projects administered by the Commission's Division of Science, Technology and Research with the approval of the West Virginia Science and Research Advisory Council.

MEMORANDUM

TO: Legislative Oversight Commission on Education Accountability (LOCEA)

FROM: Dr. Juliana Serafin, Senior Director, Division of Science, Technology and Research, HEPC

DATE: September 1, 2022

RE: Research Challenge Fund Annual Report

West Virginia Code §18B-1B-12 requires the West Virginia Higher Education Policy Commission to report to LOCEA annually on the results of the projects and activities funded by the Research Challenge Fund (RCF) appropriation.

Since it was created in 2004, the Research Challenge Fund supports undergraduate and graduate students in the STEM fields (Science, Technology, Engineering and Math) and creates a highly skilled diverse workforce, leading to new economic possibilities for West Virginia. The RCF is instrumental in helping West Virginia build its scientific research infrastructure and reputation by attracting and developing top university scientists who can obtain independent federal funding for important research. The Research Challenge Fund is evidence of the state's ongoing commitment to support science and technology research, education, and outreach.

In Fiscal Year 2022, RCF supported the following grant programs and services:

- **Research Challenge Grants** support the creation of research centers and foster economic development and workforce advancement (\$1.3 million for each of 3 awards distributed over 5 years).

For the period 2018 – 2022, the three Research Challenge Grants are:

- 1) Advancement of Science and Engineering for Localized Gas Utilization (WVU and Marshall University),
- 2) Foundation of the Vaccine Development Center at WVU (WVU)
- 3) Center for Cognitive Computing (C3): A Multidisciplinary Research Center for Excellence (WVU).

All three projects have made excellent use of the state's investment by leveraging the initial backing into further grant funding from federal sources, supporting scores of students and postdoctoral fellows, and producing hundreds of publications on important cutting-edge research. Additionally, these projects have thus far have resulted in \$59.2 million in external follow-on funding and have developed industry-academia partnerships. These three projects were featured in a recent edition of the *Neuron* magazine published by the STaR Division, which can be accessed here: https://wvresearch.org/wp-content/uploads/2022/06/Neuron_Vol18Issue1_Digital.pdf

These awards will expire at the end of 2022. New proposals for the 2023-2027 period have been received and are under external review. The new grants will start in January 2023.

- **Summer/Semester Undergraduate Research Experience (SURE)** awards are used for undergraduate research stipends to fully or partially support ~100 students annually at Marshall University, Shepherd University, West Liberty University, West Virginia State University, WVU, and WV Wesleyan College. (The sum of six awards is \$300,000 per year, for three years from 2020-2022. Note that due to 2020 summer COVID-19 shutdowns, these grants have been given an extension to 2023.) These awards help undergraduates develop much-needed research/laboratory skills and support their undergraduate work in STEM fields.
- **Science, Technology, Engineering and Mathematics (STEM) Fellows** grants are for STEM doctoral (PhD) students at WVU and Marshall. This grant provides significant support to WVU and Marshall for their STEM research programs and helps maintain their respective national R1 and R2 research rankings. These doctoral students play an important role in obtaining federal funding. Due to COVID-19 research lab shutdowns in 2020, the awards were extended a fifth year, i.e., to 2017-2022. The total for five years will be \$800,000 to Marshall and \$1,675,000 to WVU. New awards for 2022-26 started in FY23.
- **Technical Assistance** provides an external expert review service to help STEM faculty develop competitive proposals for funding from federal agencies. In FY22, 88 proposals from individual faculty, or from collaborations between faculty at multiple higher education institutions were reviewed by the service, providing critical feedback for improvement of the proposals to make them nationally competitive. Year to date, \$5.6 million has been funded for the proposals reviewed in FY22. Special review services were also provided for the NSF EPSCoR proposal which is for \$20 million grant over 5 years; the award decision for this proposal will be made in March 2023. (\$150,000)
- **Opportunity Fund** provides small, one-time awards (~\$5000 each) to assist research faculty/students and for STEM programming (total funding per year is \$40,000). In FY22, more proposals were funded (11) because COVID shutdowns resulted in a low number of proposals being received in FY21. Three events were funded: 2022 Undergraduate Research Day at the Capitol, the Chemical Landmark Dedication in Clendenin, and the Inaugural Marshall University Research & Creativity Symposium. There were 5 awards for faculty/student travel and/or research for Fairmont State University, Glenville State University, Marshall University, West Liberty University, and WV Wesleyan College. Community awards for STEM projects went to the Huntington Children's Museum, the A.D. Lewis Community Center, and Mylan Park Elementary School.
- **Innovation Grants** provides one-time awards for equipment, supplies and minor renovations of laboratory spaces for undergraduate education and research. A single FY'22 award went to West Virginia State University to build a student oriented Artificial Intelligence Lab with appropriate computers. (\$40,000)
- **Required Cost Share to NSF EPSCoR RII Grant and Grant Management** (\$255,000)

Summary:

In 2021, *Vision 2025: West Virginia Science & Technology Plan* identified growth of the research enterprise and development of the STEM Talent Pipeline at our universities as key areas of focus for the state. Clearly, the grants and programs funded by the Research Challenge Fund are some of the primary efforts needed to achieve this goal. It is especially impressive that the \$3.9 million seed funding state investment for the three Research Challenge Grants has resulted in a return on investment of \$59.2 million in independent funding from federal and private corporations. In the words of Professor Jianli (John) Hu, the principal investigator on the CIRGU Research Challenge Grant which makes higher value chemicals from natural gas: “By leveraging the RCG seed funding, now we can compete with research grants at the national level. Without this preliminary data or the findings, it’s very difficult to compete.” The \$59 million in further funding supports research facilities, students, and postdoctoral fellows, allows WV researchers to publish hundreds of publications, and brings important opportunities for industry-university partnerships. In the August call for proposals for the 2023-2027 Research Challenge Grants, a total of 18 proposals were received, indicating that state researchers also realize the value of the program.

**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Research Trust Fund Annual Report

INSTITUTIONS: All

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Juliana Serafin

BACKGROUND:

As provided in West Virginia Code §18B-18A-1 et seq. and reporting requirements outlined in Series 48, Legislative Rule, Research Trust Fund Program, the Commission receives annual reports from institutions and is required to submit a combined annual report on the Research Trust Fund to the Governor and the Legislative Oversight Commission on Education Accountability (LOCEA) by January 1 of each year.

In compliance with this statutory requirement, the Commission is provided a combined report for the fiscal year activities within the Research Trust Fund. The combined report by the Science, Research and Technology Division, West Virginia University and Marshall University has been provided annually since 2008. The Fiscal Year 2022 report is provided on the following pages.

In summary, the Fiscal Year 2022 report shows that Marshall University and West Virginia University continue to use the proceeds from investments of private gifts and state matching funds in the Research Trust Fund to provide scholarships and fellowships to undergraduate and graduate students, support prominent scholars and faculty, and support research initiatives at the universities.

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MEMORANDUM

TO: Legislative Oversight Commission on Education Accountability (LOCEA)

FROM: Dr. Juliana Serafin, Senior Director Division of Science and Research, HEPC

DATE: September 1, 2022

RE: Research Trust Fund Annual Report

Overview of Research Trust Fund

The State of West Virginia's initial \$50 million investment in STEM research through the Research Trust Fund (RTF), also known as Bucks for Brains, continues to support research important to the state's economy as well as the quality of life of West Virginians.

The two primary institutions to receive the majority of this investment in 2008 were the state's largest research institutions, WVU and Marshall. WVU was allotted \$35 million and Marshall, \$15 million. Each year, the Higher Education Policy Commission is required to submit to the governor and the Legislature this report on the status of the trust fund's distributions.

Please note that the state's initial \$50 million investment was a 50-50 matching program, whereby the research institutions had to obtain equal *private* investment dollars to draw down the state funds. Those state funds were then transferred to the institutions' foundations or investment arms to join with the private donations as an endowment. The institutions subsequently distribute the investment proceeds for sponsored faculty research.

By 2013, all of the \$50 million state investment was distributed to the institutions, so there no longer is a balance in the state's trust fund. That investment, combined with the matching private donations, is supporting research endowments at the institutions, as prescribed by the legislation and envisioned by its authors.

Summary of FY22:

As of June 30, 2022, the Marshall University RTF endowments total \$38 million, with \$6.7 million of endowment proceeds expended over the life of the program. Earnings to date are \$14 million. The amount spent in FY22 was \$558,548. There are a total of 16 endowments for research-related activities.

For West Virginia University, there are 85 endowments that fund chairs and professorships, student scholarships, fellowships, research activities, and library endowments. In FY22, \$19

million was spent from both private and matching state accounts. In FY23, \$15 million will be available. The current market value for all the private RTF endowments is \$63 million and that for the state RTF endowments \$42 million.

Background and History of the Research Trust Fund

Outlined in Legislative Rule Series 48, Research Trust Fund Program (RTF), the Higher Education Policy Commission (Commission) receives annual reports from institutions and is required to submit a combined annual report on the Research Trust Fund to the Governor and the Legislative Oversight Commission on Education Accountability (LOCEA) by January 1 of each year.

In compliance with this statutory requirement, the Commission is provided a draft annual report for FY2022 activities within the Research Trust Fund for review, comment, and approval.

The Commission completed its initial implementation plan during the fall of 2008 which resulted in Title 133 Legislative Rules Series 48, subsequently approved by the Legislature during the 2009 regular session. The rule establishes guidelines, procedures and documentation standards for the distribution of funds in the West Virginia Research Trust Fund. The final rules are available at [wvresearch.org: https://westvirginiaresearch.org/wp-content/uploads/2019/07/ResearchTrustFundRules.pdf](https://westvirginiaresearch.org/wp-content/uploads/2019/07/ResearchTrustFundRules.pdf)

Commission staff created an electronic “Match Request System” (MRS) in 2008 that allowed secure transactions for RTF requests made by the universities. All requests, documentation and invoicing are permanently recorded in files that allow sorting, analysis and up-to-date balance information. The MRS was cross referenced with university records annually to ensure accuracy in drawdown reporting for previous reports.

Required “Research Plans” specified by the legislation and approved by Marshall’s and WVU’s boards of governors were received. Both institutional plans are on file with the Commission and are found to be generally compliant with legislative requirements.

The RTF financial account was established in late June 2008 by the State Auditor and made accessible to Commission staff for distribution to public institutions in addition to Marshall and WVU. *All transactions from this fund were completed in 2013.*

Interest funds generated by the RTF account have been separately tracked for distribution to State Colleges as defined by the Legislature. On May 15, 2009, the Commission released the first competitive request for proposals for RTF interest funds collected on the account specifically for state colleges and the West Virginia School of Osteopathic Medicine, in accordance with provisions of §18B-18A-10 of the Code. A second request for proposals was issued on March 9,

2010; a third on June 2, 2011; a fourth on May 30, 2012; and a fifth on September 21, 2012. Proposals for up to \$100,000 each were received from eligible institutions and subsequently reviewed by external peers for program merit. Two awards were issued in 2009, two in 2010 and one in 2011 as a result. No applications were received in response to the May 2012 request for proposals. A request for proposals was issued September 7, 2012 – one institution was awarded. A final award was made on May 6, 2013.

The institutions that received awards from the RTF for State Colleges and Universities from 2008-2013 were Shepherd University, Fairmont State University, West Liberty University, West Virginia State University and West Virginia University Institute of Technology.

The Research Trust Fund has been fully matched, and no additional funds are available for distribution.

Attachments

Marshall University and West Virginia University Annual Reports for FY2022 are attached.



**Marshall University
Research Endowment Plan Annual Report
2021-2022**

Submitted to the Division of Science and Research at the
West Virginia Higher Education Policy Commission

I. Summary

The West Virginia Research Trust Fund program has created sixteen endowments at Marshall University to fund allowed research-related activity. Over fifteen million dollars of private donations and the fifteen million dollars of state match have been invested in the Marshall University Foundation and Marshall University Research Corporation, respectively. These endowments span research areas from Engineering to Clinical and Translational Research and specify uses from direct research support to student research stipends. In FY 2013, the full \$15MM in gifts and pledges was raised, along with an excess of over \$800,000.

As of June 30, 2022, the Marshall University Bucks for Brains Endowments totaled \$ 38,073,572, with \$ 6,705,261 of endowment proceeds expended over the life of the program. FY 22 expenditures totaled \$ 558,548. Earnings to date have amounted to \$ 14,054,295.

Past years' expenditures were as follows:

FY 16 \$450,000
FY 17 \$560,000
FY 18 \$672,000
FY 19 \$560,000
FY 20 \$3,100,000
FY 21 \$595,149

II. Review of the Marshall University Research Endowment Plan

Marshall's original Research Endowment Plan approved by the University's Board of Governors in 2008, directed donations to:

- Endowment of the Marshall Institute for Interdisciplinary Research (MIIR), continuing with the plan laid out in Marshall's application to the Eminent Scholars Recruitment and Enhancement (ESRE) initiative; and
- Advancement of Intelligent Transportation Systems research at the Rahall Transportation Institute (RTI).

In November 2010, the Marshall University Board of Governors approved a Research Trust Fund Addendum (Appendix One) that broadened the recognition of Biomedicine/ Biotechnology as a focus for donor activity across the University, and further included aspects of Engineering, Environmental Science and the Physical Sciences.

III. Endowed Research Area Highlights

A brief update on highlighted activities of one of the endowments is included below. A comprehensive summary of the endowments is included in previous versions of this report.

Dr. Uma Sundaram: Bucks for Brains Supported Researcher Has Dramatic Impact

Gastroenterologist Uma Sundaram, M.D., was the recipient of the VA Merit Review Senior Clinician Scientist Investigator (SCSI) Award, the most prestigious grant given by the U.S. Veterans Administration grants program. Sundaram is one of only 41 researchers across the country to hold SCSI status.

Sundaram, vice dean for research and graduate education at the Joan C. Edwards School of Medicine, first received a VA Merit Award in 2017, which was renewed in 2021, for research related to the causes of malnutrition and diarrhea in IBD, one of the most common causes of disability among U.S. Veterans serving overseas. This research is done jointly at the VA, School of Medicine and Cabell Huntington Hospital.

Dr. Sundaram's continued research will work to determine how the body's immune system affects intestinal absorption and secretion in IBD so that more specific and effective treatments can be developed.

Dr. Sundaram is also an NIH R01 funded researcher, and is Principal Investigator of the NIH COBRE award focusing on obesity. Bucks for Brains funding has enabled a tremendous enhancement in research activity via the investment in Dr. Sundaram's activities.

Other Highlights

The investments enabled by the Bucks for Brains funds is creating a cadre of researchers applying for and being successful in obtaining federal funding at Marshall University. In FY 22, these researchers are performing on NIH R01 awards, significant VA Merit awards and a VA Senior Clinician Scientist Merit award. This is some of the most significant competitive funding ever achieved at Marshall, and four of the investigators are women.

Appendix One- Marshall University's Research Trust Fund Addendum

The University's directed research endowment plan has concentrated initially in two domains of interdisciplinary research, which are strengths at Marshall: research clusters in biomedicine/biotechnology/ bionanotechnology and transportation technology/logistics. Marshall's Research Trust Fund activities are to be expanded to include the following areas:

I. Engineering

Engineering is a foundational discipline essential to the development and implementation of research in the approved areas in the Research Trust Fund legislation¹. Marshall has recently achieved ABET accreditation of its engineering program, and has experienced dramatic facilities growth with the construction and occupation of The Arthur Weisberg Family Engineering Laboratories facility and is planning for the future addition of an Advanced Engineering and Technology Center Complex. Development of robust undergraduate and graduate programs and the associated integral research opportunities are essential to developing and enhancing the capabilities and profile of the school.

¹

- 4.3.1. Energy and environmental sciences;
- 4.3.2. Nanotechnology and materials sciences;
- 4.3.3. Biological, biotechnical and biomedical sciences;
- 4.3.4. Transportation technology and logistics;
- 4.3.5. Biometrics, security, sensing, and related identification technologies; and
- 4.3.6. Gerontology.

Match from the Research Trust Fund will be requested to enhance private donations for endowed professorships and other research-related positions and initiatives in all aspects of Engineering as they relate to the allowed subject areas of the Research Trust Fund Program and the associated uses allowed in the legislation.

Two examples of gifts that have been received in support of engineering endowments are included, and a third solicitation is discussed:

A. Applied Research- Safety Engineering Program

Risk management is a highly specialized field that involves applying the principles of safety engineering and industrial hygiene and integrating them with economic and financial analysis. Marshall University will expand its Research Trust Fund Plan in this area important to transportation and logistics and energy to support an endowment in risk management research. The proposed endowment will support the development of research expertise in the school of engineering in the area of risk management, a highly interdisciplinary pursuit at the interface of management, engineering and applied mathematics.

The proposed applied research employs advanced risk management concepts and research to identify, trend, estimate and reduce workplace hazards in industry based in WV. The area will be supported by a \$100,000 endowment received from BrickStreet and the corresponding state match.

Risk management is of particular interest to the energy industry in our state because of the safety and economic risks associated with the extraction process. In energy, risk management research is essential to find new ways to:

- deal with its high element of monetary risk due to the uncertainty of the economic and regulatory outlook
- reduce the physical risk associated with extraction and development activities, and improve the safety of individual employee

In transportation and logistics research, risk management has become central to understanding many critical elements such as:

- the robustness and resilience of our transportation systems to interruptions due to system load, natural phenomena, and man-made disruptions
- the risks associated with transport of hazardous materials and the potential benefits of mitigation of those risks
- the robustness of logistics networks
- the risks associated with logistics and supply chain outsourcing

These benefits are of particular relevance to the state given current events, and are particular interests of the donor.

B. Mechanical Engineering

Mechanical engineering applies the principles of physics and materials science for analysis, design, manufacturing, and maintenance of mechanical systems. Mechanical engineers use the core principles of mechanics, kinematics, thermodynamics, materials science, and structural analysis along with tools like computer-aided engineering and product lifecycle management to design and analyze items as diverse as manufacturing plants, industrial equipment and machinery, heating and cooling systems, motorized vehicles, aircraft, watercraft, robotics, medical devices and more.

The field has continually evolved to incorporate advancements in technology, and mechanical engineers today are pursuing developments in such fields as composites, mechatronics, and nanotechnology. Mechanical engineering overlaps with aerospace engineering, civil engineering, electrical engineering, and petroleum engineering to varying amounts.

A gift from the Fletcher family will endow a founding Chair of Mechanical Engineering. Mechanical Engineering is an important discipline in Bioengineering and energy sectors. This endowment is essential to developing a Department of Mechanical Engineering, by attracting a senior-level professor to Marshall, with his/her associated research programs.

Another area that is endorsed by the Board of Governors for planning and an active source of solicitation is:

C. Bioengineering

In the translation of biomedical and biotechnology advances, bioengineering is a lynchpin in bridging the transition from academe to commercialization. Marshall University is planning to develop a Bioengineering Department contemporaneously with the construction of the Applied Technology and Engineering Complex. The development of the Department would follow a trajectory very similar to that of Mechanical Engineering, with the attraction of a founding research scientist/bioengineer.

“Biological engineering, biotechnological engineering or bioengineering (including biological systems engineering) is the application of engineering principles to address challenges in the life sciences, which include the fields of biology, ecology, and medicine. Biological engineering is a science based discipline founded upon the biological sciences in the same way that chemical engineering, electrical

engineering, and mechanical engineering are based upon chemistry, electricity and magnetism, and statics, respectively”².

“Biological Engineering can be differentiated from its roots of pure biology or classical engineering in the following way. Biological studies often follow a reductionist approach in viewing a system on its smallest possible scale, which naturally leads toward the development of tools such as functional genomics. Engineering approaches using classical design perspectives are constructionist, involving the building and research of new devices, approaches, and technologies from component concepts. Biological engineering utilizes both of these methods in concert relying on reductionist approaches to define the fundamental units, which are then commingled to generate something new”.³ “Although engineered biological systems have been used to manipulate information, construct materials, process chemicals, produce energy, provide food, and help maintain or enhance human health and our environment, our ability to quickly and reliably engineer biological systems that behave as expected remains less well developed than our mastery over mechanical and electrical systems”.⁴

Given Marshall’s research strengths in the biological and biomedical sciences and the emphasis of new initiatives, like the Marshall Institute for Interdisciplinary Research (MIIR), on translating key research findings into commercialization, the discipline of bioengineering sits at a nexus of opportunity for the University. It will be a critical element in fully developing the potential of Marshall’s applied research enterprise and its translation to economic development.

II. Mathematics and the Physical Sciences

Mathematics and the Physical Sciences are basic sciences that have relevance to all aspects of the allowed areas of the Research Trust Fund legislation. Research Trust Fund match will be sought to enhance private donations supporting endowed professorships and other research-related positions and initiatives focusing on research in the allowed areas in these disciplines.

The first application will be for an endowed rotating professorship to promote an undergraduate summer research experience in Chemistry.

This match for the undergraduate research endowment is being requested under the Research Trust Fund because undergraduate summer research in Chemistry is relevant to so many of the legislatively enabled areas:

² Cuello J.C., “Engineering to biology and biology to engineering, The bi-directional connection between engineering and biology in biological engineering design”, *Int. J. Eng. Ed.*, **21**,1-7 (2005).

³ Riley MR, “Introducing Journal of Biological Engineering”, *Journal of Biological Engineering* **1**, 1 (2007).

⁴ Endy D, “Foundations for Engineering Biology”, *Nature*, **438**, 449-4 (2005).

- Chemistry is one of the fundamental underpinnings of nanoscience because of the molecular nature of the discipline
- The Department of Chemistry at Marshall University has core groups in biochemistry/biotechnology and materials science
- Faculty members also work on energy research and molecular energetics.

WV Research Trust Fund

Annual Report

from

West Virginia University¹

August 15, 2022

¹ Address questions and requests for additional information regarding WVU's Research Trust Fund initiative to Provost Maryanne Reed, West Virginia University (maryanne.reed@mail.wvu.edu) or Vice President for Research, Dr. Fred King, West Virginia University (fred.king@mail.wvu.edu).

Introduction

This annual report describes the history of the Research Trust Fund, responds directly to the reporting requirements outlined in Series 48 (§ 133-48-14), and lays out the proposed spending plan for the earned interest and carry over funds from each endowment for FY 2022.

History of the Research Trust Fund (2008-2009)

In March 2008, the West Virginia Legislature enacted Senate Bill 287, commonly referred to as the Research Trust Fund, as an effort to build a critical mass in selected areas of research and thus lay the groundwork for future economic development. The initial Bill provided a five-year window for the deposit of qualified donations into research endowments. Senate Bill 239 (Passed March 12, 2011) amended §18B-18A-9 of the Code of West Virginia to provide a seven-year window. Senate Bill 287 committed \$35 million to West Virginia University as a basis for a 1:1 match with private dollars to create endowments that would provide a sustainable source of funds for research and development. West Virginia University's approved Strategic Research Plan identified four areas for investment:

- Energy and environmental sciences;
- Nanotechnology and material science;
- Biological, biotechnological, and biomedical sciences; and
- Biometrics, security, sensing and related identification technologies.

These areas were selected because in 2008 they complemented the expertise of WVU's faculty, were critical issues of importance to the public, and were at the core of WVU's land-grant mission.

An Addendum to WVU's Strategic Research Plan for the Research Trust Fund was approved by the WVU Board of Governors in December 2010 and incorporated therein. Three modifications were made:

1. Adding forensic sciences as an area of emphasis under the biometrics, security, sensing, and related identification technologies, providing the opportunity for private investment into this area of research.
2. Adding a Library endowment to support the acquisition of materials in the four research areas, clarifying the importance that library resources provide to a vibrant research agenda.
3. Removing the language "no research area may receive more than \$17.5 million in private donations within the first two years," allowing WVU to maximize private investment regardless of focus area.

Achieving the Goal: \$70 million in Private and State Endowments

During the first four years after the inception of the Research Trust Fund, West Virginia University received gifts and pledges totaling \$35 million, the total amount allocated to the University through the Research Trust Fund initiative. Each endowment was qualified by the West Virginia University Board of Governors and thus eligible for state matching funds. **Thus the University's goal was achieved.**

The seven-year pledge period has officially concluded. The 85 endowments in Appendix A represent the final portfolio established under the Research Trust Fund initiative. These endowments include five generic types of gifts: 12 chairs and professorships, 12 undergraduate scholarships, 14 graduate fellowships, 2 graduate or undergraduate fellowships, 43 broad-based research support funds, and 2 library endowments.

Compliance with Legislative Rule for Research Trust Fund

Three specific reporting requirements are identified in Series 48 (§ 133-48-14), the Research Trust Fund Program.

1. *14.1. By August 15, 2009, and annually thereafter, each participating institution shall provide an annual report to the Commission that includes a full accounting of the trust funds, endowment proceeds, and adherence to the objectives established by the research plan.*
2. *14.2. Each participating institution shall detail in its annual report to the Commission the total amount of qualified donations received, the investment earnings realized and any anticipated expenditures of the research endowment proceeds in its annual operating budget.*

The data in APPENIDX A summarize much of the information requested by the Legislative Rule.

Through June 30, 2022 the following results have been achieved:

- **FY22 Market Value for all the Private RTF Endowments**
The market value of Directed Research Endowments established with private gifts invested in the Research Trust Fund Program of the WVU Foundation Endowment for fiscal year ending June 30, 2022 is \$62,773,361.
- **FY23 Spend Available for the Private RTF Endowments**
The available proceeds from Directed Research Endowments established with private gifts invested in the Research Trust Fund Program of the WVU Foundation Endowment for FY23 are \$1,971,020.

- **FY22 Market Value for all the State RTF Endowments**

The market value of Directed Research Endowments established with trust distributions (state funds) to the Research Trust Fund Program of the WVU Foundation Endowment for fiscal year ending June 30, 2022 is \$41,863,289.

- **FY23 Spend Available for the State RTF Endowments**

The available proceeds from Directed Research Endowments established with trust distributions to the Research Trust Fund Program of the WVU Foundation Endowment for FY22 are \$1,963,449.

- **NOTE:** During the period from March 08, 2008 to June 30, 2012, the WVU Foundation received 19 distributions from the Research Trust Fund totaling \$35,000,000; these dollars provided the matching funds for 1210 qualified gifts (donations and pledges) to Directed Research Endowments established under the Research Trust Fund.

3. 14.4. *Each participating institution's research corporation and/or foundation shall provide the Commission with an audited financial statement annually. These statements shall be treated as confidential.*

A copy of the audited financial statements for years ending June 30, 2021 and 2020 for the WVU Foundation has been forwarded, under separate cover, to the Policy Commission. Because of timing of submission of this report relative to the receipt of the audited financial statement, the audited financial statement of the WVU Foundation, Inc. will always be a year in arrears.

Impact of the Research Trust Fund

Vice President for Research Fred King remarked previously that: “The Research Trust Fund is not only an investment in our university, it is an investment in the future of our state. We know that research and innovation are the key economic drivers as we move forward in the 21st Century and compete in a global economy. The ideas generated and the students educated through the endowments establish under the Research Trust Fund initiative provide a basis for West Virginia’s future prosperity. We are thankful to the donors and the West Virginia legislature for their confidence in our ability to deliver the innovation and education essential to the state’s economic future.”

To place Vice President King’s remarks in a more specific context, WVU continues to be classified as West Virginia’s only R1 Doctoral Research University by the Carnegie Classification of Institutions of Higher Learning. Only 146 other universities in the United States received this highest ranking in the Carnegie Classification in 2021. It is worth noting that data from 2020 show that in terms of GDP, WV with WVU as its R1

university ranks ahead of the four similar rural states (AK, SD, VT, and WY) that do not have a university that is R1. This ranking also evidences WVU's reputation as one of the leading U.S. Research Universities. This is supported by the fact that in FY 2021, WVU research expenditures neared \$200 million employing approximately 1800 FTE in our research enterprise.

WVU is committed to using its RTF resources to improve the quality of life for all West Virginians. These efforts are interwoven with the statewide efforts that Marshall University, West Virginia University, and the Department of Commerce are engaged in to diversify and grow the economy of the State of West Virginia through efforts such as ASCEND WV.

President Gordon Gee continues to make the point that WVU's prominence in research is critical to reshaping West Virginia's economy for a brighter future. Three pillars undergird this transformation of the state: education, healthcare, and broad-based prosperity. The institution's research investments, the research funds generated by our faculty, and the support provided by the Research Trust fund set the foundation on which these pillars rest.

Business Plan

In addition to the legislatively mandated reporting requirements, the Higher Education Policy Commission requires a business plan for each research area. APPENDIX A reflects the anticipated use of the money available to spend in FY22.

In FY22, \$19,739,422 of Research Trust Fund dollars, both that from private accounts and matching state accounts, was spent on research – for scholarships, fellowships, prominent scholars, and in support of ongoing research initiatives.

For FY23, \$15,072,473 will be available. This number includes the proceeds from each private endowment and its equivalent state matching endowment plus any unspent money from the preceding year. Of this amount, \$3,934,469 will come from interest earned on both the private endowments and that from the matching state endowments established from the Research Trust Fund; \$11,138,004 will come from unspent funds from the previous year. All funds for each endowment are distributed according to the intent of the respective endowment.

WVU looks forward to the significant and sustained impact that programs supported by the Research Trust Fund will have on addressing some of the state's and the nation's most important issues in education, energy, health care and security. As President Gee notes the real importance of research lies in its purpose and impact!

Fund ID	Fund Description	Budget Division	Unit	FY14 & Prior Budgets	FY15 Spend	FY16 Spend	FY 17 Spend	FY 18 Spend	FY19 Spend	FY20 Spend	FY21 Spend	FY21 Public Spend Return	FY22 Spend	Budget through FY22 Spend	Expenses through CLS-2022	Balance through FY22	FY23 Spend	Balance Forward
R085	Frederick P. Jr. & Joan C. Stamp Cancer Research	Cancer Center(CAN)	Cancer Center (CAN)	\$ 46,473.97	\$ 14,615.22	\$ 14,670.34	\$ 13,236.92	\$ 13,490.61	\$ 17,528.34	\$ 15,322.17	\$ 14,857.40	\$ (4,707.75)	\$ 16,005.60	\$ 161,492.82	\$ 117,434.16	\$ 44,058.66	\$ 20,401.42	\$ 64,460.08
R095	Norma Mae Huggins Cancer Research Endowment	Cancer Center(CAN)	Cancer Center (CAN)	\$ 67,059.85	\$ 42,369.96	\$ 45,353.50	\$ 48,251.48	\$ 58,587.18	\$ 79,492.32	\$ 91,990.34	\$ 87,046.97	\$ (12,925.06)	\$ 137,996.10	\$ 645,222.64	\$ 433,555.03	\$ 211,667.61	\$ 162,201.86	\$ 373,869.47
R100	Walter H. Moran Jr. General Surgery Resident Research	Medicine(MED)	Medicine (MED)	\$ 65,191.73	\$ 19,117.84	\$ 19,462.15	\$ 13,538.57	\$ 18,445.30	\$ (30,487.10)	\$ 18,940.83	\$ 17,508.70	\$ (1,125.07)	\$ 18,757.04	\$ 159,349.99	\$ 29,447.45	\$ 129,902.54	\$ 20,031.69	\$ 149,934.23
R103	Schoepp Neuroscience Research Student Support	Medicine(MED)	Medicine (MED)	\$ 10,878.56	\$ 5,189.25	\$ 5,202.38	\$ 4,714.40	\$ 4,815.56	\$ 6,247.01	\$ 4,722.48	\$ 4,712.59	\$ (2,248.77)	\$ 4,974.74	\$ 49,208.20	\$ 26,175.28	\$ 23,032.92	\$ 5,620.50	\$ 28,653.42
R106	Verizon WV for Biometrics	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 71,717.52	\$ 24,152.12	\$ 24,206.86	\$ 21,958.34	\$ 22,509.39	\$ 29,534.79	\$ 21,980.42	\$ 22,842.99	\$ (11,240.93)	\$ 23,322.19	\$ 250,983.69	\$ 166,490.79	\$ 84,492.90	\$ 26,366.23	\$ 110,859.13
R107	Raymond Brooks Vanscoy Cancer Research Endowment	Cancer Center(CAN)	Cancer Center (CAN)	\$ 16,798.83	\$ 11,224.59	\$ 13,395.08	\$ 13,360.13	\$ 14,852.22	\$ 18,677.19	\$ 17,319.65	\$ 17,076.91	\$ (3,685.48)	\$ 18,494.16	\$ 137,513.28	\$ 117,698.07	\$ 19,815.21	\$ 22,621.51	\$ 42,436.72
R108	Allen S. Pack Endowment for Mining Engineering	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 8,700.43	\$ 5,261.21	\$ 4,801.56	\$ 4,357.40	\$ 4,427.32	\$ 5,945.27	\$ 4,379.67	\$ 4,492.57	\$ (2,256.13)	\$ 4,588.15	\$ 44,697.45	\$ 31,298.73	\$ 13,398.72	\$ 5,308.21	\$ 18,706.93
R109	L. Zane Shuck Laboratory Endowment in Nanobiotechnology	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 25,615.53	\$ 9,617.61	\$ 9,639.17	\$ 8,745.05	\$ 8,964.90	\$ 11,774.61	\$ 8,753.03	\$ 9,098.77	\$ (4,496.39)	\$ 9,290.19	\$ 97,002.47	\$ 52,825.99	\$ 44,176.48	\$ 10,506.12	\$ 54,682.60
R110	Alpha Natural Resources Endowment for Energy Research	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 31,993.78	\$ 24,966.44	\$ 25,004.06	\$ 25,906.10	\$ 26,529.69	\$ 35,011.11	\$ 25,926.14	\$ 26,941.09	\$ (13,490.94)	\$ 27,513.07	\$ 236,300.54	\$ 52,479.27	\$ 183,821.27	\$ 31,180.83	\$ 215,002.10
R113	Alan Susman Cortico-Basal Ganglionic Degeneration Research	Medicine(MED)	Medicine (MED)	\$ 28,368.37	\$ 10,030.64	\$ 10,053.43	\$ 9,118.43	\$ 9,347.17	\$ 12,257.91	\$ 9,128.31	\$ 9,484.84	\$ (4,657.12)	\$ 9,683.50	\$ 102,815.48	\$ 25,393.22	\$ 77,422.26	\$ 10,945.81	\$ 88,368.07
R114	Blaine S. West Endowment for Civil and Environmental Engineering	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 36,458.45	\$ 10,094.28	\$ 10,117.10	\$ 9,176.55	\$ 9,407.24	\$ 12,343.36	\$ 9,186.50	\$ 9,546.82	\$ (4,698.08)	\$ 9,747.10	\$ 111,379.32	\$ 124,240.16	\$ (12,860.84)	\$ 11,019.32	\$ (1,841.52)
R115	William J. Maier, Jr. Chair of Research	Health Sciences - Charleston Division(MCC)	Health Sciences - Charleston Division (MCC)	\$ 123,571.88	\$ 94,611.05	\$ 94,815.79	\$ 86,044.07	\$ 88,105.87	\$ 116,396.16	\$ 86,103.44	\$ 89,480.45	\$ (44,970.59)	\$ 91,384.91	\$ 825,543.03	\$ 185,048.16	\$ 640,494.87	\$ 103,610.12	\$ 744,104.99
R116	Branson-Maddrell Endowed Professorship in Orthodontics	Dentistry(DEN)	Dentistry (DEN)	\$ 61,907.83	\$ 42,811.27	\$ 42,904.37	\$ 38,931.69	\$ 39,851.33	\$ 52,614.42	\$ 38,959.57	\$ 40,467.95	\$ (20,256.52)	\$ 41,326.86	\$ 379,518.77	\$ 353,628.67	\$ 25,890.10	\$ 46,853.74	\$ 72,743.84
R117	George B. Bennett Dean's Research Opportunity Endowment	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 239,051.11	\$ 97,264.66	\$ 97,489.29	\$ 88,423.19	\$ 90,630.87	\$ 118,743.74	\$ 88,518.48	\$ 91,953.53	\$ (44,963.71)	\$ 93,874.18	\$ 960,985.34	\$ 678,163.21	\$ 282,822.13	\$ 106,082.52	\$ 388,904.65
R118	E. Elizabeth Morgan Cancer Research	Cancer Center(CAN)	Cancer Center (CAN)	\$ 6,282.37	\$ 2,560.30	\$ 2,565.61	\$ 2,326.38	\$ 2,384.83	\$ 3,129.08	\$ 2,329.34	\$ 2,420.79	\$ (1,190.32)	\$ 2,471.56	\$ 25,279.94	\$ 22,369.18	\$ 2,910.76	\$ 2,794.00	\$ 5,704.76
R119	Badzek Family Endowment for Nursing Research	Nursing(NSG)	Nursing (NSG)	\$ 3,827.00	\$ 2,457.40	\$ 2,440.34	\$ 2,215.10	\$ 2,262.86	\$ 2,998.27	\$ 2,216.46	\$ 2,298.67	\$ (1,155.29)	\$ 2,347.60	\$ 21,908.41	\$ 10,000.00	\$ 11,908.41	\$ 2,667.62	\$ 14,576.03
R120	Ruth and Robert Kuhn Nursing Faculty Research	Nursing(NSG)	Nursing (NSG)	\$ 5,603.97	\$ 2,392.23	\$ 2,397.44	\$ 2,175.76	\$ 2,230.94	\$ 2,939.66	\$ 2,177.36	\$ 2,265.10	\$ (1,134.61)	\$ 2,313.20	\$ 23,361.05	\$ 9,660.35	\$ 13,700.70	\$ 2,618.21	\$ 16,318.91
R121	Hall - de Graaf Endowment for Women in Science & Engineering	Arts & Sciences(A&S)	Arts & Sciences (A&S)	\$ 5,431.22	\$ 2,371.38	\$ 2,376.58	\$ 2,156.12	\$ 2,210.68	\$ 2,912.23	\$ 2,157.57	\$ 2,244.93	\$ (1,124.09)	\$ 2,292.59	\$ 23,029.21	\$ 14,731.31	\$ 8,297.90	\$ 2,594.82	\$ 10,892.72
R122	Fithian Family Foundation #2/Behavioral Medicine- Psychiatry	Medicine(MED)	Medicine (MED)	\$ 14,225.36	\$ 9,439.44	\$ 9,459.59	\$ 8,585.80	\$ 8,769.56	\$ 11,636.76	\$ 8,590.78	\$ 8,908.46	\$ (4,498.24)	\$ 9,098.68	\$ 84,216.19	\$ 49,764.31	\$ 34,451.88	\$ 10,345.38	\$ 44,797.26
R123	WVUH Evidence Based Practice Research Professorship/Nursing	Nursing(NSG)	Nursing (NSG)	\$ 60,772.63	\$ 33,299.12	\$ 33,370.70	\$ 30,284.25	\$ 30,902.91	\$ 40,985.52	\$ 30,302.21	\$ 31,388.96	\$ (15,745.08)	\$ 32,056.14	\$ 307,617.36	\$ 152,542.17	\$ 155,075.19	\$ 36,458.86	\$ 191,534.05
R124	Grace C. Clements Speech Pathology and Audiology Research	Human Resources & Education(HRE)	Human Resources & Education (HRE)	\$ 8,110.06	\$ 4,521.25	\$ 4,533.84	\$ 4,112.76	\$ 4,220.15	\$ 5,538.51	\$ 4,120.99	\$ 4,146.77	\$ (2,108.68)	\$ 4,372.53	\$ 41,568.18	\$ 24,268.14	\$ 17,300.04	\$ 4,958.38	\$ 22,258.42
R125	Virginia Oil and Gas Research Endowment for PNGE	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 9,748.91	\$ 5,590.62	\$ 5,602.27	\$ 5,085.52	\$ 5,208.49	\$ 6,904.59	\$ 5,087.93	\$ 5,130.31	\$ (2,698.25)	\$ 5,406.21	\$ 51,066.60	\$ 20,416.81	\$ 30,649.79	\$ 6,142.69	\$ 36,792.48
R126	Michael Baker Corporation Endowment/CEE	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 8,202.22	\$ 7,158.89	\$ 7,174.30	\$ 6,509.98	\$ 6,652.62	\$ 8,797.11	\$ 6,515.10	\$ 6,755.90	\$ (3,373.46)	\$ 6,899.05	\$ 61,291.71	\$ 57,204.41	\$ 4,087.30	\$ 7,833.31	\$ 11,920.61
R127	Darrell & Diane Williams Research for PNGE	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 8,371.61	\$ 4,640.94	\$ 4,650.47	\$ 4,220.87	\$ 4,329.74	\$ 5,732.41	\$ 4,223.25	\$ 4,265.01	\$ (2,248.22)	\$ 4,494.18	\$ 42,680.26	\$ 14,513.11	\$ 28,167.15	\$ 5,102.16	\$ 33,267.31

Fund ID	Fund Description	Budget Division	Unit	FY14 & Prior Budgets	FY15 Spend	FY16 Spend	FY 17 Spend	FY 18 Spend	FY19 Spend	FY20 Spend	FY21 Spend	FY21 Public Spend Return	FY22 Spend	Budget through FY22 Spend	Expenses through CLS-2022	Balance through FY22	FY23 Spend	Balance Forward
R128	Preservati Cancer Research	Cancer Center(CAN)	Cancer Center (CAN)	\$ 19,935.35	\$ 13,854.66	\$ 13,884.13	\$ 12,601.71	\$ 13,001.75	\$ 17,080.54	\$ 12,610.13	\$ 12,783.44	\$ (6,722.51)	\$ 13,470.93	\$ 122,500.13	\$ 78,255.58	\$ 44,244.55	\$ 15,219.34	\$ 59,463.89
R129	Martha Gaines & Russell Wehrle Pediatric Research Endowment	Qualifying - Biological, Biotech & Biomedical	Health Sciences - Charleston Division (MCC)	\$ 5,947.51	\$ 4,717.99	\$ 4,727.80	\$ 4,291.33	\$ 4,381.50	\$ 5,817.66	\$ 4,293.69	\$ 4,451.43	\$ (2,249.19)	\$ 4,546.53	\$ 40,926.25	\$ 8,300.82	\$ 32,625.43	\$ 5,171.39	\$ 37,796.82
R130	E. Jane Martin Research Doctoral Fund	Nursing(NSG)	Nursing (NSG)	\$ 3,765.27	\$ 2,390.73	\$ 2,396.28	\$ 2,174.38	\$ 2,210.19	\$ 2,946.42	\$ 2,177.21	\$ 2,247.37	\$ (1,125.10)	\$ 2,295.07	\$ 21,477.82	\$ 1,000.00	\$ 20,477.82	\$ 2,619.31	\$ 23,097.13
R131	John T. & June R. Chambers Chair of Oncology Research	Cancer Center(CAN)	Cancer Center (CAN)	\$ 80,991.71	\$ 69,410.20	\$ 69,553.32	\$ 63,140.72	\$ 64,770.18	\$ 85,803.93	\$ 63,170.99	\$ 63,812.58	\$ (33,723.23)	\$ 67,238.19	\$ 594,168.59	\$ 620,556.20	\$ (26,387.61)	\$ 76,315.73	\$ 49,928.12
R132	Christopher Cline Chair in Orthopedic Surgery	Medicine(MED)	Medicine (MED)	\$ 289,105.65	\$ 189,944.30	\$ 190,352.53	\$ 172,750.08	\$ 176,364.18	\$ 233,836.22	\$ 172,852.40	\$ 179,137.32	\$ (89,967.84)	\$ 182,948.19	\$ 1,697,323.03	\$ 1,503,324.34	\$ 193,998.69	\$ 208,003.81	\$ 402,002.50
R133	Mabel C. Phares Leukemia Research Endowment	Cancer Center(CAN)	Cancer Center (CAN)	\$ 116,260.95	\$ 32,843.74	\$ 32,910.92	\$ 29,878.51	\$ 30,380.77	\$ 40,651.33	\$ 29,885.26	\$ 29,935.99	\$ (15,753.22)	\$ 31,545.56	\$ 358,539.81	\$ 212,048.74	\$ 146,491.07	\$ 36,093.29	\$ 182,584.36
R134	Gary and Lisa Christopher Graduate Fellowship	Qualifying - Interdisciplinary	Engineering & Mineral Resources (EMR)	\$ 8,005.75	\$ 10,354.22	\$ 11,475.29	\$ 9,094.01	\$ 10,708.45	\$ 14,268.69	\$ 10,471.67	\$ 10,556.53	\$ (5,622.24)	\$ 10,790.46	\$ 90,102.83	\$ 57,801.22	\$ 32,301.61	\$ 12,667.66	\$ 44,969.27
R135	WV United Health System Evidence-Based Nursing Practice Res.	Nursing(NSG)	Nursing (NSG)	\$ 4,634.98	\$ 3,970.86	\$ 3,979.63	\$ 3,612.89	\$ 3,690.48	\$ 4,908.00	\$ 3,614.45	\$ 3,635.95	\$ (1,911.74)	\$ 3,831.51	\$ 33,967.01	\$ 18,086.46	\$ 15,880.55	\$ 4,364.07	\$ 20,244.62
R136	Mike Ross Family Pediatric Diabetes Research Endowment	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$ 51,100.53	\$ 38,283.26	\$ 38,364.96	\$ 34,818.16	\$ 35,396.78	\$ 47,145.86	\$ 34,835.07	\$ 35,956.16	\$ (18,001.16)	\$ 36,719.41	\$ 334,619.03	\$ 32,663.16	\$ 301,955.87	\$ 41,907.12	\$ 343,862.99
R137	Van Wyk Cancer Research Endowment	Cancer Center(CAN)	Cancer Center (CAN)	\$ 2,286.82	\$ 2,369.11	\$ 2,374.00	\$ 2,154.47	\$ 2,204.78	\$ 2,914.76	\$ 2,155.74	\$ 2,239.19	\$ (1,124.34)	\$ 2,286.81	\$ 19,861.34	\$ 8,234.21	\$ 11,627.13	\$ 2,594.30	\$ 14,221.43
R138	Robert T. Bruhn Physics Research Endowment	Arts & Sciences(A&S)	Arts & Sciences (A&S)	\$ 10,479.88	\$ 4,920.12	\$ 4,929.72	\$ 4,474.98	\$ 4,550.70	\$ 6,093.51	\$ 4,475.46	\$ 4,484.63	-	\$ 4,725.47	\$ 49,134.47	\$ -	\$ 49,134.47	\$ 5,311.86	\$ 54,446.33
R139	Women in Science and Engineering Giving Circle Endowment	Qualifying - Interdisciplinary	Arts & Sciences (A&S)	\$ 3,568.78	\$ 2,379.04	\$ 2,384.07	\$ 2,164.17	\$ 2,200.37	\$ 2,934.86	\$ 2,165.65	\$ 2,166.14	\$ (1,125.07)	\$ 2,283.17	\$ 21,121.18	\$ 3,364.67	\$ 17,756.51	\$ 2,609.70	\$ 20,366.21
R140	Jarrett Family Research Endowment for Dentistry	Dentistry (DEN)	Dentistry (DEN)	\$ 14,827.90	\$ 9,399.93	\$ 9,419.64	\$ 8,551.08	\$ 8,694.46	\$ 11,628.97	\$ 8,553.48	\$ 8,566.26	\$ (4,500.29)	\$ 8,487.13	\$ 83,628.56	\$ 24,728.25	\$ 58,900.31	\$ 10,327.18	\$ 69,227.49
R141	Donald R. & Linda E. Holcomb Research Endowment Dentistry	Qualifying - Biological, Biotech & Biomedical	Dentistry (DEN)	\$ 6,393.24	\$ 9,184.74	\$ 9,203.22	\$ 7,301.36	\$ 8,576.05	\$ 11,458.77	\$ 8,406.34	\$ 8,455.23	\$ (4,498.81)	\$ 8,642.46	\$ 73,122.60	\$ 48,611.07	\$ 24,511.53	\$ 10,168.08	\$ 34,679.61
R142	Arch Coal Inc. Endowment for Mine Health & Safety Research	Engineering & Mineral Resources (EMR)	Engineering & Mineral Resources (EMR)	\$ 24,922.03	\$ 23,403.84	\$ 23,458.56	\$ 23,328.89	\$ 23,798.75	\$ 31,003.45	\$ 23,364.20	\$ 23,310.45	\$ (11,245.51)	\$ 24,602.55	\$ 209,947.21	\$ 89,291.85	\$ 120,655.36	\$ 27,853.43	\$ 148,508.79
R143	Shaw Pathology Research	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$ 7,919.37	\$ 4,793.89	\$ 4,804.60	\$ 4,360.15	\$ 4,432.30	\$ 5,901.62	\$ 4,362.50	\$ 4,502.25	\$ (2,250.14)	\$ 4,597.72	\$ 43,424.26	\$ 8,437.01	\$ 34,987.25	\$ 5,246.60	\$ 40,233.85
R144	Dr. Mohindar S. Seehra Research Award	Arts & Sciences (A&S)	Arts & Sciences (A&S)	\$ 6,289.66	\$ 2,373.05	\$ 2,377.86	\$ 2,158.19	\$ 2,194.21	\$ 2,927.72	\$ 2,157.88	\$ 2,228.30	-	\$ 2,275.88	\$ 24,982.75	\$ 1,264.00	\$ 23,718.75	\$ 2,553.37	\$ 26,272.12
R145	Oleg D. & Valentina P. Jefimenko Library Resources #2	Library (LIB)	Library (LIB)	\$ 30,671.04	\$ 17,249.19	\$ 17,384.71	\$ 15,500.33	\$ 15,587.05	\$ 15,906.99	\$ 15,696.12	\$ 15,311.93	-	\$ 15,413.42	\$ 158,720.78	\$ 158,720.74	\$ 0.04	\$ 16,259.87	\$ 16,259.91
R146	Frank and Susan Klatskin Cerminara Endowment	Qualifying - Interdisciplinary	Engineering & Mineral Resources (EMR)	\$ 3,065.12	\$ 3,274.79	\$ 4,479.59	\$ 4,261.72	\$ 4,558.07	\$ 5,849.18	\$ 4,737.77	\$ 4,646.14	\$ (1,799.15)	\$ 5,041.26	\$ 38,114.49	\$ 19,639.41	\$ 18,475.08	\$ 5,626.85	\$ 24,101.93
R147	Nesselroad Family Glaucoma Research	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$ 5,412.79	\$ 6,672.77	\$ 6,689.51	\$ 6,070.02	\$ 6,213.72	\$ 8,195.76	\$ 6,206.55	\$ 6,437.99	\$ (3,147.99)	\$ 6,572.46	\$ 55,323.58	\$ 10,779.47	\$ 44,544.11	\$ 7,438.89	\$ 51,983.00
R148	Salvatore and Josephine Cilito Research Enhancement	Qualifying - Interdisciplinary	Engineering & Mineral Resources (EMR)	\$ 2,902.67	\$ 2,353.89	\$ 3,027.26	\$ 2,962.41	\$ 3,247.53	\$ 4,461.26	\$ -	\$ 3,565.71	-	\$ 3,823.10	\$ 26,343.83	\$ 11,212.00	\$ 15,131.83	\$ 4,586.91	\$ 19,718.74
R149	Statler Research Endowment	Engineering & Mineral Resources (EMR)	Engineering & Mineral Resources (EMR)	\$ 774,902.92	\$ 746,644.80	\$ 889,621.40	\$ 849,119.16	\$ 867,755.33	\$ 1,153,700.17	\$ 849,469.69	\$ 854,830.75	\$ (449,805.38)	\$ 900,793.99	\$ 7,437,032.83	\$ 4,511,487.53	\$ 2,925,545.30	\$ 1,025,697.62	\$ 3,951,242.92
R150	WVU School of Medicine Research Endowment	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$ 47,014.17	\$ 35,152.13	\$ 35,229.84	\$ 31,967.01	\$ 32,822.84	\$ 43,167.98	\$ 31,998.10	\$ 33,325.46	\$ (16,673.30)	\$ 34,032.55	\$ 308,036.78	\$ -	\$ 308,036.78	\$ 38,549.18	\$ 346,585.96
V813	Quad/Graphics Chair in Internal Medicine, Eastern Division	Health Science East(HSE)	Health Science East (HSE)	\$ 214,733.08	\$ 93,816.58	\$ 94,017.22	\$ 85,327.11	\$ 87,517.22	\$ 115,566.29	\$ 85,383.79	\$ 86,150.10	\$ (44,963.71)	\$ 90,796.25	\$ 908,343.93	\$ 429,048.06	\$ 479,295.87	\$ 102,952.14	\$ 582,248.01

Fund ID	Fund Description	Budget Division	Unit	FY14 & Prior Budgets	FY15 Spend	FY16 Spend	FY 17 Spend	FY 18 Spend	FY19 Spend	FY20 Spend	FY21 Spend	FY21 Public Spend Return	FY22 Spend	Budget through FY22 Spend	Expenses through CLS-2022	Balance through FY22	FY23 Spend	Balance Forward
V815	James H. Walker Chair of Pediatric Cardiology	Medicine(MED)	Medicine (MED)	\$ 138,428.65	\$ 25,275.66	\$ 25,324.91	\$ 20,131.10	\$ 28,332.67	\$ 39,414.36	\$ 34,329.23	\$ 12,550.63	\$ (12,550.63)	\$ 35,704.37	\$ 346,940.95	\$ 487,661.18	\$ (140,720.23)	\$ 48,682.20	\$ (92,038.03)
V824	James A. Kent Endowment for Biomedical Engineering	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 40,051.96	\$ 16,972.40	\$ 17,013.02	\$ 15,425.90	\$ 15,783.79	\$ 20,634.35	\$ 15,445.32	\$ 16,005.90	\$ (7,689.91)	\$ 16,336.24	\$ 165,978.97	\$ 139,096.42	\$ 26,882.55	\$ 18,464.41	\$ 45,346.96
V828	Osborn Professorship in Hematological Malignancies Research	Cancer Center(CAN)	Cancer Center (CAN)	\$ 178,442.27	\$ 61,145.60	\$ 61,285.68	\$ 55,609.42	\$ 56,999.65	\$ 74,708.84	\$ 55,668.88	\$ 57,835.36	\$ (28,327.14)	\$ 59,044.73	\$ 632,413.29	\$ 588,446.67	\$ 43,966.62	\$ 66,730.71	\$ 110,697.33
V829	BrickStreet Neurology Fellowship	Medicine(MED)	Medicine (MED)	\$ 20,396.56	\$ 9,527.34	\$ 9,548.39	\$ 8,663.68	\$ 8,865.83	\$ 11,703.83	\$ 8,671.21	\$ 9,003.87	\$ (4,497.28)	\$ 9,194.70	\$ 91,078.13	\$ -	\$ 91,078.13	\$ 10,425.29	\$ 101,503.42
V830	Robert E. Murray Chairmanship Mining Engineering Department	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 240,201.67	\$ 96,005.33	\$ 96,221.00	\$ 87,293.35	\$ 89,472.27	\$ 117,600.19	\$ 87,374.18	\$ 90,817.86	\$ (44,964.87)	\$ 92,731.02	\$ 952,752.00	\$ 583,704.36	\$ 369,047.64	\$ 104,902.38	\$ 473,950.02
V833	Rita Radcliff-Deppe & Brian Deppe Fellowship Award	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 6,748.16	\$ 4,148.99	\$ 4,160.55	\$ 3,766.35	\$ 3,839.28	\$ 4,920.67	\$ 3,775.14	\$ 3,743.89	\$ (1,681.60)	\$ 3,956.15	\$ 37,377.58	\$ 6,539.22	\$ 30,838.36	\$ 4,457.13	\$ 35,295.49
V835	Energy Materials Science & Engineering Facilities Support	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 760.00	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 760.00	\$ -	\$ 760.00	\$ -	\$ 760.00
V841	Oleg D. and Valentina P. Jefimenko Library Resources	Library(LIB)	Library (LIB)	\$ 42,458.06	\$ 19,144.41	\$ 19,187.14	\$ 17,407.54	\$ 17,847.29	\$ 23,464.03	\$ 17,422.85	\$ 18,116.72	\$ (8,992.74)	\$ 18,499.03	\$ 184,554.33	\$ 184,232.49	\$ 321.84	\$ 20,925.55	\$ 21,247.39
V842	Oleg D. and Valentina P. Jefimenko Physics Fellowship	Arts & Sciences(A&S)	Arts & Sciences (A&S)	\$ 9,113.71	\$ 4,757.38	\$ 4,805.21	\$ 4,284.70	\$ 4,308.37	\$ 4,396.64	\$ 4,338.24	\$ 3,967.86	\$ -	\$ 4,260.44	\$ 44,232.55	\$ 7,430.85	\$ 36,801.70	\$ 4,505.64	\$ 41,307.34
V844	Bowlby Wood Science Graduate Research Fellowship	Agriculture & Forestry(AGR)	Agriculture & Forestry (AGR)	\$ 57,583.95	\$ 50,990.88	\$ 51,119.64	\$ 46,434.62	\$ 47,445.70	\$ 62,243.42	\$ 46,698.86	\$ 48,305.89	\$ (22,960.22)	\$ 49,295.60	\$ 437,158.34	\$ 250,673.73	\$ 186,484.61	\$ 55,746.91	\$ 242,231.52
V850	James P. Boland, M.D. Department of Surgery Endowed Research	Qualifying - Biological, Biotech & Biomedical	Health Sciences - Charleston Division (MCC)	\$ 34,613.93	\$ 29,786.99	\$ 30,385.23	\$ 27,758.17	\$ 28,151.39	\$ 32,716.65	\$ 28,165.21	\$ 26,882.23	\$ (6,479.95)	\$ 38,474.16	\$ 270,454.01	\$ -	\$ 270,454.01	\$ 44,653.69	\$ 315,107.70
V854	WVU Ruby Scholars Graduate Research Fellowships	Academic Affairs(AAR)	Academic Affairs (AAR)	\$ 1,077,020.30	\$ 489,473.38	\$ 492,539.15	\$ 449,760.40	\$ 464,039.56	\$ 607,423.23	\$ 458,277.63	\$ 474,804.89	\$ -	\$ 487,266.74	\$ 5,000,605.28	\$ 3,540,534.64	\$ 1,460,070.64	\$ 543,586.17	\$ 2,003,656.81
V858	Robert E. Pyle Chemical Engineering Graduate Fellowship	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 11,425.62	\$ 4,842.02	\$ 4,853.66	\$ 4,402.54	\$ 4,512.80	\$ 5,917.73	\$ 4,406.37	\$ 4,578.80	\$ (2,248.19)	\$ 4,674.70	\$ 47,366.05	\$ 23,711.65	\$ 23,654.40	\$ 5,284.08	\$ 28,938.48
V859	James & Ruby Romano Civil & Environmental Engineering End.	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 80,376.15	\$ 33,733.16	\$ 33,810.18	\$ 30,669.17	\$ 31,439.49	\$ 41,251.48	\$ 30,701.53	\$ 31,906.20	\$ (15,699.93)	\$ 32,575.51	\$ 330,762.94	\$ 263,502.30	\$ 67,260.64	\$ 36,827.16	\$ 104,087.80
V880	Robert & Stephany Ruffolo Pharmacy Graduate Fellowship	Pharmacy(PHR)	Pharmacy (PHR)	\$ 3,291.97	\$ 2,224.80	\$ 4,674.51	\$ 4,243.42	\$ 4,342.53	\$ 5,761.12	\$ 4,245.67	\$ 4,277.59	\$ (1,248.68)	\$ 4,507.68	\$ 36,320.61	\$ 8,000.00	\$ 28,320.61	\$ 5,084.15	\$ 33,404.76
V882	James and Betty Hall Fellowship	Qualifying - Interdisciplinary	Engineering & Mineral Resources (EMR)	\$ 5,063.97	\$ 9,449.02	\$ 9,468.96	\$ 8,595.04	\$ 8,738.65	\$ 11,674.29	\$ 8,597.77	\$ 8,606.92	\$ (4,500.29)	\$ 9,070.79	\$ 74,765.12	\$ 45,605.00	\$ 29,160.12	\$ 10,373.37	\$ 39,533.49
V886	Stuart M. & Joyce N. Robbins Distinguished Prof/Epidemiology	Qualifying - Biological, Biotech & Biomedical	Health Sciences Center (HSC)	\$ 76,041.30	\$ 93,751.72	\$ 93,949.93	\$ 85,273.22	\$ 87,312.47	\$ 115,619.13	\$ 85,322.25	\$ 85,968.57	\$ (44,971.57)	\$ 90,601.03	\$ 768,868.05	\$ 591,542.34	\$ 177,325.71	\$ 102,921.15	\$ 280,246.86
V887	Academy of Chemical Engineers Graduate Fellowship	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$ 10,184.78	\$ 13,614.86	\$ 14,815.60	\$ 14,154.56	\$ 14,515.48	\$ 18,477.40	\$ 14,281.29	\$ 14,130.77	\$ (6,155.42)	\$ 14,939.13	\$ 122,958.45	\$ 35,835.23	\$ 87,123.22	\$ 16,794.97	\$ 103,918.19
V892	J.F. Brick Chair in Neurology	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$ 222,418.50	\$ 140,998.90	\$ 141,289.29	\$ 128,267.85	\$ 130,421.90	\$ 174,436.10	\$ 128,300.38	\$ 128,496.65	\$ (67,504.34)	\$ 135,409.92	\$ 1,262,535.15	\$ 957,611.40	\$ 304,923.75	\$ 154,910.89	\$ 459,834.64
V894	Jack and Marietta Mullenger Fellowship	Qualifying - Biological, Biotech & Biomedical	Engineering & Mineral Resources (EMR)	\$ 752.86	\$ 2,266.03	\$ 2,957.19	\$ 2,655.54	\$ 2,689.62	\$ 3,076.47	\$ 2,676.60	\$ 2,546.84	\$ (562.14)	\$ 2,713.30	\$ 21,772.31	\$ 3,179.97	\$ 18,592.34	\$ 2,958.09	\$ 21,550.43
V900	Research Trust Fund Jefimenko Professorship in Physics	Qualifying - Interdisciplinary	Arts & Sciences (A&S)	\$ 33,458.84	\$ 22,560.43	\$ 22,485.17	\$ 20,812.86	\$ 21,408.59	\$ 35,632.10	\$ 20,545.40	\$ 22,510.45	\$ (22,510.45)	\$ 23,316.08	\$ 200,219.47	\$ 181,144.73	\$ 19,074.74	\$ 28,562.13	\$ 47,636.87
W762	Cyber Physical System Center	WVU Institute of Technology	WVU Institute of Technology	\$ 19,999.78	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,999.78	\$ 22,174.32	\$ (2,174.54)	\$ -	\$ (2,174.54)
			Sub-Totals	\$ 5,008,333.35	\$ 2,946,184.84	\$ 3,108,626.69	\$ 2,871,107.13	\$ 2,964,862.42	\$ 3,862,895.24	\$ 2,951,240.15	\$ 2,983,131.67	\$ (1,230,754.05)	\$ 3,179,040.92	\$ 28,644,668.36	\$ 18,546,829.27	\$ 10,097,839.09	\$ 3,621,197.08	\$ 13,719,036.17
Financial Aid Accounts																		

Fund ID	Fund Description	Budget Division	Unit	FY14 & Prior Budgets	FY15 Spend	FY16 Spend	FY 17 Spend	FY 18 Spend	FY19 Spend	FY20 Spend	FY21 Spend	FY21 Public Spend Return	FY22 Spend	Budget through FY22 Spend	Expenses through CLS-2022	Balance through FY22	FY23 Spend	Balance Forward
Z232	Wells Fargo Energy Group Scholarship	Financial Aid(FAD)	Engineering & Mineral Resources (EMR)	\$ 17,695.37	\$ 8,495.53	\$ 8,513.57	\$ 7,727.16	\$ 7,868.22	\$ 10,487.38	\$ -	\$ 7,749.60	\$ -	\$ 8,167.52	\$ 76,704.35	\$ 14,500.00	\$ 62,204.35	\$ 9,161.29	\$ 71,365.64
Z238	Benjamin James Galford Research Scholarship	Financial Aid(FAD)	Arts & Sciences (A&S)	\$ 12,431.87	\$ 7,440.33	\$ 8,204.83	\$ 8,090.52	\$ 8,945.51	\$ 11,564.01	\$ -	\$ 10,464.24	\$ -	\$ 11,164.05	\$ 78,305.36	\$ 85,438.00	\$ (7,132.64)	\$ 12,161.16	\$ 5,028.52
Z245	Carl Del Signore Foundation Graduate Fellowship	Financial Aid(FAD)	Academic Affairs (AAR)	\$ 9,551.14	\$ 4,706.32	\$ 4,716.92	\$ 4,280.70	\$ 4,388.21	\$ 5,794.52	\$ -	\$ 4,457.11	\$ -	\$ 4,552.21	\$ 42,447.13	\$ 29,500.00	\$ 12,947.13	\$ 5,388.95	\$ 18,336.08
Z247	George M. & Mary Freda Vance Medical Scholarship-Fellowship	Financial Aid(FAD)	Cancer Center (CAN)	\$ 124,110.05	\$ 36,072.40	\$ 36,154.43	\$ 32,795.97	\$ 33,618.96	\$ 44,111.30	\$ 32,829.73	\$ 34,118.01	\$ (16,788.86)	\$ 34,833.73	\$ 391,855.72	\$ 400,071.63	\$ (8,215.91)	\$ 39,380.21	\$ 31,164.30
Z277	William S. Clapper Mechanical & Aerospace Engineering Scholarship	Financial Aid(FAD)	Engineering & Mineral Resources (EMR)	\$ 12,300.26	\$ 4,869.60	\$ 4,880.85	\$ 4,426.98	\$ 4,537.29	\$ 5,942.84	\$ -	\$ 4,602.96	\$ -	\$ 4,699.03	\$ 46,259.81	\$ 28,738.00	\$ 17,521.81	\$ 5,218.41	\$ 22,740.22
Z279	Everette C. Dubbe Research Scholarship	Financial Aid(FAD)	Engineering & Mineral Resources (EMR)	\$ 18,139.76	\$ 9,492.32	\$ 9,512.98	\$ 8,632.95	\$ 8,828.11	\$ 11,676.38	\$ -	\$ 8,966.00	\$ -	\$ 9,156.59	\$ 84,405.09	\$ 75,198.00	\$ 9,207.09	\$ 10,209.96	\$ 19,417.05
Z282	Oleg D. and Valentina P. Jefimenko Physics Scholarship	Qualifying - Interdisciplinary	Financial Aid (FAD)	\$ 5,984.63	\$ 3,548.99	\$ 3,588.22	\$ 3,198.72	\$ 3,216.65	\$ 3,282.10	\$ -	\$ 2,961.45	\$ -	\$ 3,179.82	\$ 28,960.58	\$ 32,150.00	\$ (3,189.42)	\$ 3,362.82	\$ 173.40
Z326	James Bergen and Randy Monteith Anderson Scholarship in MAE	Financial Aid(FAD)	Engineering & Mineral Resources (EMR)	\$ 3,415.52	\$ 2,355.38	\$ 2,361.01	\$ 2,142.04	\$ 2,208.59	\$ 2,889.42	\$ -	\$ 2,239.93	\$ -	\$ 2,287.45	\$ 19,899.34	\$ 10,075.00	\$ 9,824.34	\$ 2,532.79	\$ 12,357.13
Z329	Morton Scholarship	Financial Aid(FAD)	Engineering & Mineral Resources (EMR)	\$ 13,533.28	\$ 9,318.01	\$ 9,339.13	\$ 10,217.87	\$ 10,491.25	\$ 13,210.29	\$ -	\$ 16,186.35	\$ -	\$ 16,422.36	\$ 98,718.54	\$ 39,500.00	\$ 59,218.54	\$ 18,662.66	\$ 77,881.20
Z333	David VanDorn Sutton Scholarship	Financial Aid(FAD)	Financial Aid (FAD)	\$ 53,456.18	\$ 37,343.05	\$ 37,419.69	\$ 33,971.00	\$ 34,704.64	\$ 46,198.10	\$ -	\$ 34,195.06	\$ -	\$ 36,031.63	\$ 313,319.35	\$ -	\$ 313,319.35	\$ 40,319.12	\$ 353,638.47
Z337	William "Bill" Closser Memorial Electrical Engineering Sch.	Qualifying - Interdisciplinary	Financial Aid (FAD)	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Z339	Morrissey-Ropp Scholarship	Financial Aid(FAD)	Arts & Sciences (A&S)	\$ 8,061.77	\$ 6,921.31	\$ 6,935.55	\$ 6,296.26	\$ 6,432.85	\$ 8,569.51	\$ -	\$ 6,339.01	\$ -	\$ 6,679.03	\$ 56,235.29	\$ 57,151.00	\$ (915.71)	\$ 7,475.03	\$ 6,559.32
Z341	Martha Hopkins Hashinger Scholarship	Financial Aid(FAD)	Engineering & Mineral Resources (EMR)	\$ 3,563.52	\$ 2,568.93	\$ 2,578.74	\$ 2,344.51	\$ 2,387.64	\$ 3,181.70	\$ -	\$ 2,352.69	\$ -	\$ 2,480.31	\$ 21,458.04	\$ 10,980.00	\$ 10,478.04	\$ 2,783.58	\$ 13,261.62
Z364	Research Trust Fund Taylor Endowment	Qualifying - Interdisciplinary	Engineering & Mineral Resources (EMR)	\$ 163.34	\$ 2,436.67	\$ 2,859.35	\$ 2,587.07	\$ 2,646.88	\$ 3,604.62	\$ 1,006.36	\$ 3,014.52	\$ -	\$ 3,677.65	\$ 21,996.46	\$ 1,050.00	\$ 20,946.46	\$ 4,986.51	\$ 25,932.97
Z365	Mitchell-Morey Family Endowed Scholarship	Qualifying - Interdisciplinary	Financial Aid (FAD)	\$ 2,011.72		\$ 2,548.16	\$ 2,035.62	\$ 2,566.95	\$ 3,373.49	\$ -	\$ 2,802.19	\$ -	\$ 2,974.18	\$ 18,312.31	\$ -	\$ 18,312.31	\$ 3,504.64	\$ 21,816.95
Z368	Statler Research Scholars Program	Qualifying - Interdisciplinary	Financial Aid (FAD)	\$ 35,792.33	\$ 44,437.66	\$ 44,289.43	\$ 72,656.53	\$ 85,721.57	\$ 113,972.98	\$ -	\$ 84,502.68	\$ -	\$ 86,374.15	\$ 567,747.33	\$ 393,576.00	\$ 174,171.33	\$ 99,414.49	\$ 273,585.82
Z372	William E. & Bonniegail Kucan Coleman Research Scholarship	To Be Determined	Financial Aid (FAD)	\$ 1,459.93	\$ 1,243.55	\$ 1,252.19	\$ 1,115.61	\$ 1,121.99	\$ 1,144.53	\$ -	\$ 1,101.05	\$ -	\$ 1,108.35	\$ 9,547.20	\$ 14,666.00	\$ (5,118.80)	\$ 1,169.22	\$ (3,949.58)
Z375	Bettie D. Gallaher Research Fellowship	Qualifying - Interdisciplinary	Financial Aid (FAD)	\$ 37,570.07	\$ 44,862.48	\$ 48,341.57	\$ 44,276.53	\$ 44,661.37	\$ 48,135.66	\$ -	\$ 44,159.91	\$ -	\$ 44,579.92	\$ 356,587.51	\$ -	\$ 356,587.51	\$ 47,541.14	\$ 404,128.65
Sub-Totals				\$ 359,240.74	\$ 226,112.53	\$ 233,496.62	\$ 246,796.04	\$ 264,346.68	\$ 337,138.83	\$ 33,836.09	\$ 270,212.76	\$ (16,788.86)	\$ 278,367.98	\$ 2,232,759.41	\$ 1,192,593.63	\$ 1,040,165.78	\$ 313,271.98	\$ 1,353,437.76
Combined Totals				\$ 5,367,574.09	\$ 3,172,297.37	\$ 3,342,123.31	\$ 3,117,903.17	\$ 3,229,209.10	\$ 4,200,034.07	\$ 2,985,076.24	\$ 3,253,344.43	\$ (1,247,542.91)	\$ 3,457,408.90	\$ 30,877,427.77	\$ 19,739,422.90	\$ 11,138,004.87	\$ 3,934,469.06	\$ 15,072,473.93

**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Vision 2025: West Virginia Science and Technology Plan

INSTITUTIONS: All

RECOMMENDED RESOLUTION: Information item

STAFF MEMBER: Juliana Serafin

BACKGROUND:

West Virginia Code §18B-18B-2 requires the West Virginia Science and Research Council (SRC) to annually report to the Legislative Oversight Commission on Education Accountability progress in implementing its strategic state plan, as well as any updates to the plan. The strategic plan, “Vision 2025: West Virginia Science and Technology Plan,” which was developed with the input of more than 60 stakeholders from industry, higher education, and state government, was revised in 2021. The strategic plan was developed with an eye toward attracting future federal research funding and new high-tech industries to West Virginia.

To achieve that critical goal, Vision 2025: West Virginia Science & Technology Plan, prioritizes four science and technology platforms for the state, based on research strengths and workforce needs: Life Sciences, Computer and Data Science, Advanced Manufacturing and Advanced Energy. Life Science and Computer/Data Science were chosen for the state’s EPSCoR Research Infrastructure Improvement proposal, a \$20 million federal National Science Foundation grant submitted by the state in August 2022.

The plan covers five focus areas: STEM Talent Pipeline, Research Enterprise, Innovation & Entrepreneurship, High-Tech Companies and Stakeholder Alignment. The plan sets Vision, Goals, Actions and Metrics for each focus area. It also analyzes trends that affect technology and workforce in the state and includes a SWOT analysis for the four science and technology platforms.

The full version of the plan can be accessed here: <https://wvresearch.org/wp-content/uploads/2021/09/Vision2025WestVirginiaScienceTechnologyPlan.pdf>

MEMORANDUM

TO: Legislative Oversight Commission on Education Accountability (LOCEA)

FROM: Dr. Juliana Serafin, Senior Director Division of Science and Research, HEPC

DATE: July 1, 2022

RE: Vision 2025: Science & Technology Strategic Plan Annual Report

West Virginia Code §18B-18B-2 requires the West Virginia Science and Research Council (SRC) report to the Legislative Oversight Commission on Education Accountability annually on progress in implementing its state science & technology strategic plan, as well as any updates to the plan. In last year's report LOCEA was provided with a completely revised strategic plan, **Vision 2025: West Virginia Science and Technology Plan**, which was created with input from more than 60 stakeholders from industry, higher education, and state government.

The strategic plan was developed with an eye toward attracting future federal research funding and new high-tech industries to West Virginia. Through the plan, over the next five years, we have an incredible opportunity to attract more external investments that will allow new sectors to take root right here at home.

The plan prioritizes four science and technology platforms for the state, based on our research strengths and workforce needs: **Life Sciences, Computer and Data Science, Advanced Manufacturing and Advanced Energy**. Life Science and Computer/Data Science were chosen for the state's RII Track-1 EPSCoR Research Infrastructure Improvement proposal, a \$20 million federal National Science Foundation grant which will be submitted in August 2022.

The new plan has specific goals in five focus areas: **STEM Talent Pipeline, Research Enterprise, Innovation & Entrepreneurship, High-Tech Companies and Stakeholder Alignment**. The plan sets Vision, Goals, Actions and Metrics for each focus area. It also analyzes trends that affect technology and workforce in the state and includes a SWOT analysis for the four science and technology platforms

Focus Area One: STEM Talent Pipeline

Vision: The vision is for West Virginia students to become interested in high-tech career pathways and actively pursue STEM degrees. Ultimately, companies will locate in West Virginia because of the availability of STEM talent in the state.

The goals are to increase two- and four-year STEM degree enrollment and conferral, and to increase research opportunities and internships for students with the support of federal grants and the state-funded Research Challenge Fund.

Actions include expanding K-12 STEM opportunities, partnering with organizations in the state to help prepare and retain STEM students, and partnering with companies and federal labs to increase the number of available internships.

FY 22 Results and Recommendations for Focus Area One:

Although physical sciences and engineering degree enrollment continue to decline with the overall decline in the number of students enrolled in public college institutions, the biological and biomedical science enrollment is not seeing the same declines and is much more stable.

<https://www.wvhepc.edu/resources/data-and-publication-center/data-center-enrollment/>

We expect STEM enrollment and retention to be positively impacted when a new NSF EPSCoR RII Track-1 grant is obtained. The 2021 proposal was declined, but a new proposal is being submitted in August 2022, and will focus on neuroscience, which will leverage existing trends in biological/biomedical sciences.

Focus Area Two: Research Enterprise

Vision: The vision for the research enterprise is that West Virginia will be recognized for its academic research in the four target platforms (Life Sciences, Computer and Data Science, Advanced Manufacturing and Advanced Energy), and that industry will seek technical expertise and collaborations with academic researchers.

Goals are to increase the number of STEM doctoral degrees conferred at West Virginia's universities, and to increase research expenditures in the four target platforms. Actions include increasing funding for the Research Challenge Fund, securing federal research capacity-building grants, increasing federal grants and contracts in the four target platforms, and identifying critical lab and facility needs and assessing funding mechanisms to fulfill those needs.

FY 22 Results and Recommendations for Focus Area Two:

The largest impact on the research enterprise in WV can be made by increasing the amount of state funds for the Research Challenge Grants which are funded through the Research Challenge Fund. These grants are extraordinarily successful in obtaining follow-on funds for research from federal agencies. The attachment at the end of this report explains more about these grants and funding. The creation of a specific Research Challenge Grant for collaboration with primarily undergraduate serving institutions would be especially helpful in bringing research funding expertise from the larger institutions to smaller ones in WV.

The Research Challenge Fund continues to fund STEM doctoral students at WVU and Marshall through the STEM Fellows program. This award was renewed in 2021 and will be in place from 2022 to 2026.

We expect that a new NSF EPSCoR RII Track-1 grant will significantly assist research growth at the higher education institutions in the state. The 2021 proposal was not funded, but a new proposal is being submitted in August 2022, and will focus on neuroscience. The grant is for \$20 million over 5 years.

Focus Area Three: Innovation and Entrepreneurship

Vision: The vision for Focus Area Three is that successful startups in West Virginia will attract more Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) funding

and venture capital to increase operations.

Goals include increasing industry-university research and development activity, including patents and invention disclosures, and SBIR/STTR awards. Actions include piloting an R&D voucher program, supporting the FAST program (Federal and State Technology Partnership Program to help West Virginia companies apply for SBIR/STTR funding and providing the SBIR/STTR match) and increasing the Entrepreneurship and Innovation Investment Fund. This Department of Economic Development-managed Fund supports entrepreneurship, creation of business startups, improvements in workforce participation, and attracting individuals to relocate to West Virginia.

FY 22 Results and Recommendations for Focus Area Three:

In 2021, the following SBIR/STTR awards were made with assistance from TechConnect WV's FAST project and the state Entrepreneurship and Innovation Investment Fund (EIIF):

- 5 WV companies received Phase 0 matching awards,
- 5 received Phase I matching awards, and
- 4 received Phase II matching awards from the fund.

The number of companies participating could be increased by adding more state match funding in the EIIF and the creation of a R&D Voucher program.

Focus Area Four: High-Tech Companies

Vision: The vision is to make West Virginia home to high-tech companies and industries and to grow business R&D and innovation activities.

Goals include attracting R&D-oriented federal operations; ensuring that infrastructure, facilities, and specialized equipment are available to high-tech companies; and working with the West Virginia Department of Economic Development (DED) on recruitment of high-tech companies. Actions include supporting programs to move federal anchors to the state, leveraging R&D vouchers, and collaborating for high-tech company recruitment.

FY 22 Results and Recommendations for Focus Area Four:

The WV Regional Technology Park (WVRTP), the I-17 High Technology Park, and the Department of Economic Development continue to actively participate in *Opportunity Move*, the collaborative effort to relocate federal agencies to West Virginia. The group meets monthly, has engaged consultants, and has created many points of contact in the past year.

NOAA's Science on a Sphere project at the WV Regional Technology Park will open in the fall of 2022, bringing innovative STEM-based education tools to middle and high school students as well as the community. While this is anticipated to help with the STEM Talent Pipeline, it will also serve as a centerpiece of the Tech Park and hopefully attract other companies. The WVRTP has planned and will host a "red carpet" tour of the park for high tech company executives in the fall.

Focus Area Five: Stakeholders

Vision: The vision is that industry-academic-government stakeholders agree on the importance of science and technology in the state economy and collaborate on plan goals and actions.

Goals include establishing strong communications between stakeholders and working together to overcome challenges. Actions include conducting meetings for industry, academics, legislators, and executive branch stakeholders that identify two to three collaborative projects each year and reporting on the outcomes of the plan.

FY 22 Results and Recommendations for Focus Area Five:

New federal funding opportunities, including the Building a Better America guide to the Bipartisan Infrastructure Law and the creation of the NSF's Regional Innovations Engine program (NSF's Engines) have brought the state's key stakeholders in research and economic development together over the past year for multiple meetings to discuss funding opportunities. Concept papers for the NSF Engines program were submitted on June 30, 2022.

Conclusion

The revised **Vision 2025** presents an opportunity for significant development of science and technology in West Virginia. The Division of Science & Research announced the plan in July 2021 and is developing additional outreach methods and communications including in-person, social media, and public events.

A full copy of **Vision 2025** may be accessed here: <https://westvirginiaresearch.org/vision-2025-west-virginia-science-technology-plan>

(Attachment follows)

RESEARCH CHALLENGE GRANTS

How state funding encourages **job creation** and **private investment**

Research Challenge Grants offer return on investment

\$11.6 million

Localized Gas Utilization

External follow-on funding after initial award of \$1.3 million over five years

Jianli (John) Hu, Ph.D.

Research Challenge Grant recipient,
Localized Gas Utilization

"The RCG integrates **collaborations** wherein science & engineering faculty can engage with law, finance and geology to come up with **innovative solutions** to energy and environmental issues in West Virginia. The project has generated specific impacts on the advancement and realization of smart goals in The West Virginia Science and Technology Strategic Plan. The research activities result in a continuing stream of intellectual properties, federal grants and industrial investment to sustain the scientific advancements in energy research. With the help of the RCG, an interdisciplinary team has trained 25 PhD/MS students, 10 BS students and 4 postdocs."



\$24.3 million

Center for Cognitive Computing

External follow-on funding after initial award of \$1.3 million over five years

"The RCG grant has allowed me to extend WVU research activities on several critical national security topics as well as collaborating with state commercial and industrial companies. I have been able to advance **state-of-the-art machine learning** on biometrics and face recognition for national security. Due to this RCG, my research group **secured two large grants** and received two consecutive year supplemental grants. The RCG grant has also helped me collaborate on several projects with small businesses."



Nasser Nasrabadi, Ph.D.

Research Challenge Grant recipient,
Center for Cognitive Computing

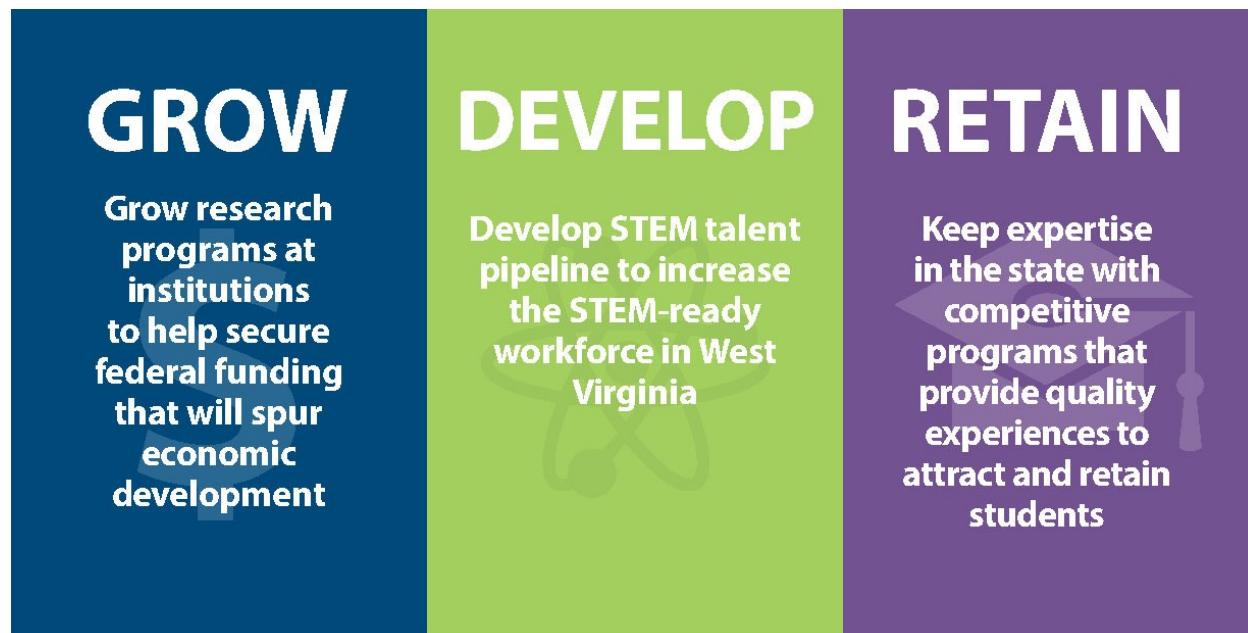
"The Vaccine Development Center (VDC) has acquired \$26 million in extramural support from private and federal sources of funding. The VDC has **supported seven faculty-lead projects** over the past four years which has allowed labs to become more competitive for extramural support. Furthermore, the projects have resulted in **publications in high-tier journals**, illuminating research that is occurring in West Virginia. The VDC **partnerships have enabled three potentially lifesaving vaccines** to be moved into human clinical trials."

Heath Damron, Ph.D.

Research Challenge Grant recipient,
Vaccine Development Center



Research Challenge Grants (RCGs) are awarded every five years. RCGs support the creation of university-based research centers that can foster economic development and workforce advancement in alignment with the goals listed in the state Science & Technology Plan (S&T Plan). All three current projects were awarded \$1.3 million over five years. They have made excellent use of state funding by leveraging the initial investment into further funding from federal sources, supporting scores of graduate students and postdoctoral fellows, and producing hundreds of publications on important research. Increased funding of the Research Challenge Fund would be used for additional RCGs that have been very successful at garnering follow-on funding.



How further investment in the Research Challenge Fund would *positively impact* West Virginia

SUMMER UNDERGRADUATE RESEARCH EXPERIENCES

The Summer Undergraduate Research Experiences (SURE) program provides stipends to **fully or partially support research for 100 undergraduate students annually**. Marshall University, Shepherd University, West Liberty University, West Virginia University, West Virginia State University, and West Virginia Wesleyan College host these students. The sum of six awards is \$300,000 per year, for three years from 2020-2022.

INSTRUMENTATION & INNOVATION GRANTS

Instrumentation Grants provide \$20,000 to purchase **modern instruments for advanced undergraduate laboratories**. Innovation Grants provide one-time awards of about \$40,000 each for **equipment, supplies and minor renovations of laboratory spaces for undergraduate education and research**.

An external, expert peer review service is provided for STEM faculty. This allows them to develop competitive proposals for funding from federal agencies. Last year, 32 faculty proposals were reviewed, 1 large scale proposal to the National Science Foundation (NSF) was reviewed multiple times, and 50 proposals were reviewed for 9 competitions for about \$150,000. Administration and cost share to NSF EPSCoR RII grant was also provided at \$255,000.

STEM FELLOWS

STEM Fellows offers **funding for doctoral (Ph.D.) students studying science, technology, engineering and mathematics (STEM)** at Marshall University (MU) and West Virginia University (WVU). This grant provides **significant support** to both schools for their research programs and **helps maintain their respective research classifications**. The total for five years will be \$800,000 to MU and \$1,675,000 to WVU.

OPPORTUNITY FUND

The Opportunity Fund provides **small, one-time awards** less than \$5,000 each to assist faculty and STEM programs with expenses related to development of proposals for federal funding, and for summer student programs. Total funding per year is \$40,000.

Learn more at wvresearch.org or call us at **304.558.4128**



Science,
Technology
& Research



**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Approval of Presidential Search Procedure

INSTITUTION: West Liberty University

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission approves the Presidential Search Procedure adopted by the West Liberty University Board of Governors.

STAFF MEMBER: Kristin Boggs

BACKGROUND:

Pursuant to Series 5, Legislative Rule, *Guidelines for Governing Boards in Employing and Evaluating Presidents* (the Rule), an institutional governing board must adopt a search procedure consistent with the Rule governing its search for a new president. The Commission must approve the search procedure prior to its implementation.

During the meeting, the Commission will receive an overview of the presidential search procedure as adopted by the West Liberty University Board of Governors on September 13, 2022 and for which it seeks Commission approval.



WEST LIBERTY UNIVERSITY

Board of Governors Chair
208 University Drive
West Liberty, WV 26074

Richard A. Lucas
(304) 232-2001
rlucas@mymainstreetbank.bank

September 15, 2022

Dr. Sarah Armstrong Tucker, Chancellor
West Virginia Higher Education Policy Commission
1018 Kanawha Boulevard, East, Suite 1700
Charleston, WV 25301

Dear Chancellor Tucker:

In accordance with Title 133 Legislative Rule, Series 5, Guidelines for Governing Board in Employing and Evaluating Presidents: Section 2.2, Upon the occurrence of a vacancy in the position of President at one of the institutions set out in Section 2.1, the governing board of the institution shall undertake a search for a new President.

The governing board shall adopt a procedure, consistent with this rule, governing the search. The West Liberty University Board of Governors adopted the attached procedure for approval by the West Virginia Higher Education Policy Commission.

Should we elect to do so, the governing board would also like to include the possibility of an outside search firm or consultant to handle the presidential search.

Sincerely,

Richard A. Lucas, Chair
West Liberty University Board of Governors

RAL/mae

Attachment

WEST LIBERTY UNIVERSITY PRESIDENTIAL SEARCH PROCESS

- Search Committee established, which includes representatives from the faculty, students, staff, and other constituencies of the institution (September 2022)
- Initial Search Committee meeting (September 2022)
- Elect Chair and Vice Chair of Search Committee (September 2022)
- Solicit input as to the best characteristics and qualities of the president from the institution's constituencies (faculty, staff, students)
- Approve advertisement/position statement incorporating qualities and characteristics sought in the new president, along with the timeline (September 2022)
- Advertisement will run for at least 30 days in *Chronicle of Higher Education* online edition, on HigherEdJobs.com. (October 2022)
- Search Committee reviews applications on BambooHR applicant tracking system (November 2022)
- Deadline to receive nominations (October 2022)
- Deadline to receive applications (October 2022)
- Search Committee meets to narrow the candidate pool to approximately 8 to 10 candidates (full-day meeting) (November 2022)
- Search Committee hold preliminary interviews of candidates via Skype on WLU's campus or at the Highlands Center (two full-day meetings). Based on preliminary interviews, narrow the pool to the top 3 to 5 candidates to invite for on-campus interviews (November 14-21, 2022)
- Once the finalists are selected, conduct background checks on each candidate prior to their on-campus interviews
- Search Committee holds on-campus interviews. Each candidate will spend a day and a half on campus (start and end date may change depending on number of candidates selected) (December, 2022)
 - Meet with Search Committee
 - Campus Tour
 - Breakfast Meeting with Deans
 - Meet with Cabinet
 - Open Meeting
 - Lunch with Community Representatives
 - Meet with Staff
 - Meet with Faculty
 - Meet with Students
 - Meet with President
- Search Committee, with input from the above-listed constituencies, meets to select finalists January 2023)
- Board of Governors interviews finalists for president. Higher Education Policy Commission provided opportunity to interview final candidates (January 2023)
- Establish salary and terms of compensation for new president (January 2023)
- Possible on-campus announcement of new president (January 2023)
- New president takes office (January 2023)

**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Approval of Doctor of Information Technology

INSTITUTION: Alderson Broaddus University

RECOMMENDED RESOLUTION: *Resolved, That the West Virginia Higher Education Policy Commission approves Alderson Broaddus University to begin offering doctorate degree programs with the implementation of the Doctor of Information Technology, effective January 2023. This approval expires two years from the date of Commission approval if the program is not fully implemented at that time.*

STAFF MEMBER: Randall Brumfield

BACKGROUND:

West Virginia Higher Education Policy Commission, Series 20, Legislative Rule, Initial Authorization of Degree-Granting Institutions, Section 6, Authorization to Operate, Section 6.10 reads:

“Institutions wishing to exceed or change their approved programmatic mission must receive approval from the Commission to offer each program that exceeds the level of academic degrees that the institution is authorized to grant.”

Alderson Broaddus University (ABU) plans to offer a Doctor of Information Technology (DIT) as an online degree from its campus in Phillippi beginning January 2023. This would be the first terminal degree to be offered by the institution, as it is currently authorized to confer a Master’s Degree as its highest level of academic credential.

The purpose of the degree is to prepare aspiring information technology leaders to make critical decisions that support organizational and business goals, to effectively evaluate the broader context of ethical and societal implications of such decisions, and to develop the professional research necessary to address contemporary issues in the field. The degree consists of a minimum of 60 semester hours of graduate coursework, which includes courses such as cybersecurity, risk management, data structures and algorithms, forensics, and leadership and governance. An option is provided to students to complete either a practicum or research methods course.

Bureau of Labor Statistics estimates 31% growth for information security analysts, 22%

for software/application developers, and 15% for computer and information research analysts between 2019-2029. This program will help address these needs while assisting the state towards providing practitioner-learning at the doctoral level. The first year of implementation is projected to enroll 25 students, expanding to 75 by 2024-25.

The institution currently offers an academic pathway to the degree through its Associate of Science in Cybersecurity, Bachelor of Science in Cybersecurity, and a Master of Science in Information Technology Administration. Within the state a similar degree offered is the Doctor of Philosophy in Information Technology offered by West Virginia University; however, that program focuses on teaching and research rather than practitioner-oriented preparation to be provided through Alderson Broaddus University.

The DIT is to be administered by the College of Adult and Distance Education, with seven full-time and adjunct faculty members with terminal degrees in the field scheduled to teach in the program. As the program is delivered through online modality no additional physical resources are needed at this time. The institution currently maintains the online instructional delivery infrastructure necessary, including library resources.

In October 2021, peer reviewers assigned by the Higher Learning Commission (HLC) with expertise in the discipline conducted a review of the program and curriculum and recommended approval. In January 2022, the HLC Institutional Actions Committee supported the recommendation of the peer review team.

With approval of this program, the Commission authorizes Alderson Broaddus University to confer the doctorate degree in West Virginia. Furthermore, the institution agrees to maintain academic rigor and follow best academic practices including properly credentialed faculty; relevant and stimulating curriculum; quality student support services; and valid assessment procedures. ABU is also required to seek approval by other states where it intends to deliver the program, as the institution is not approved within the State Authorized Reciprocity Agreement (SARA).

There are currently no plans by the institution for additional doctoral programs. Staff will monitor DIT program implementation and progress through the annual reauthorization process.

**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Consideration of Annual Reauthorization

INSTITUTIONS: Wheeling University

RECOMMENDED RESOLUTION: *Resolved*, That the West Virginia Higher Education Policy Commission continues provisional annual reauthorization for Wheeling University.

STAFF MEMBER: Randall Brumfield

BACKGROUND:

Series 52, Legislative Rule, Annual Reauthorization of Degree-Granting Institutions, establishes a process for the Commission to annually reauthorize degree-granting institutions in West Virginia offering baccalaureate degrees and above. Institutions are required to provide all information “necessary to assess the performance of the institution and to determine whether the institution continues to meet the minimum standards for conferring degrees.”

At its June 10, 2022 meeting, the Commission sought additional review of private institutions whose Composite Financial Index score was below 1.0. The Commission took this action to gather additional information to help ensure those institutions that appear to be underperforming financially are positioned to continue meeting the needs of students, faculty, and staff.

Wheeling University submitted financial statements, projected and actual enrollment data, and reaccreditation materials. Commission staff followed up this documentary submission with a campus visit on September 16, 2022.

Upon review of the information provided by the institution, staff recommends Wheeling University remain provisionally reauthorized. The institution has provided evidence that it is adjusting operations to ensure delivery of essential student services, however, several critical items remain in progress to be completed.

Commission staff will continue to work with Wheeling University leadership on collecting additional information prior to the Commission’s December 2022 meeting.

Reauthorization is contingent on Wheeling University’s ability to provide, without interruption, essential services such as instruction, financial aid processing, and timely delivery of student records. It is also contingent on the institution remaining accredited by the Higher Learning Commission. If the institution fails to deliver the information

requested or to provide service in these areas, the Commission may suspend authorization.

**West Virginia Higher Education Policy Commission
Meeting of October 11, 2022**

ITEM: Presentation of 2022 Champions of College Access and Success

INSTITUTIONS: All

RECOMMENDED RESOLUTION: Information Item

STAFF MEMBER: Elizabeth Manuel

BACKGROUND:

College for West Virginia (CFWV) coordinates three annual college-planning milestones to help students in West Virginia plan their pathway to education or training beyond high school. High schools that successfully participate in all three of these pathway events will be recognized as a CFWV Champion of College Access and Success.

Principals, counselors, and staff from 38 high schools across West Virginia today are being recognized for their schools' efforts to make students aware of higher education opportunities after they graduate. The "Champion of College Access and Success" recognition awards are presented to select schools that go the extra mile to help students and their families plan for college.

CFWV's three college-planning milestone events help support efforts to bridge that educational gap to ensure that West Virginia's workforce remains competitive. For high schools to be considered a Champion of College Access and Success, they must meet certain criteria and participate in the following college-planning milestone events during the school year:

1. College Application and Exploration Week
2. Free Application for Federal Student Aid (FAFSA) Completion Campaign
3. College Decision Day Event

Each of these milestones has specific components to help college-bound students in West Virginia make the transition to college. The Commission provides financial aid and college application information, training and support to high schools, as well as event-planning assistance.

The schools receiving Champion recognition are:

- Berkeley Martinsburg High School
- Berkeley Musselman High School
- Boone Scott High School
- Boone Sherman High School
- Braxton Braxton County High School
- Doddridge Doddridge County High School
- Greenbrier Greenbrier East High School
- Hampshire West Virginia Schools for the Deaf and Blind
- Harrison Bridgeport High School
- Jackson Ravenswood High School
- Jefferson Jefferson High School
- Kanawha Cross Lanes Christian School
- Kanawha George Washington High School
- Kanawha Herbert Hoover High School
- Logan Logan Senior High School
- Logan Man Senior High School
- Marshall Cameron High School
- Mason Wahama High School
- McDowell Mount View High School
- McDowell River View High School
- Mercer Princeton High School
- Mingo Mingo Central Comprehensive High School
- Morgan Paw Paw High School
- Nicholas Nicholas County High School
- Nicholas Richwood High School
- Pendleton Pendleton County Middle/High School
- Pleasants St. Marys High School
- Putnam Buffalo High School
- Putnam Hurricane High School
- Putnam Poca High School
- Putnam Winfield High School
- Raleigh Liberty High School
- Raleigh Shady Spring High School
- Roane Roane County High School
- Tucker Tucker County High School
- Tyler Tyler Consolidated High School
- Wayne Tolsia High School
- Wetzell Hundred High School