

## **Legislative Oversight Commission on Education Accountability** **October 15, 2023**

- **Research Challenge Fund Annual Report** **1**  
(§18B-1B-12)  
Juliana Serafin, Ph.D., Senior Director Division of Science and Research
- **Research Trust Fund Annual Report** **13**  
(§18B-18A-12)  
Juliana Serafin, Ph.D., Senior Director Division of Science and Research





**Report to the Legislative Oversight Commission  
on Education Accountability**

**Research Challenge Fund Annual Report  
(§18B-1B-12)**



**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, 2023

**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 2023, the Research Challenge Fund supported the following grants:

- **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).

FY 2023 marked the end of state funding for three Research Challenge Grants that began in 2018:

- 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).

The measurable return on investment for the state's appropriation to this fund is significant. The state investment of \$1.3 million in each of these three programs has led to follow-on funding in the amount of \$89 million: \$17.3 million, \$38.6 million, and \$33.1 million, respectively for the projects list above. This follow-on funding is the result of submitting new proposals to federal agencies that awarded the grants based on the work funded by the RCG award.

These three projects are preparing final reports for the STaR Division and were featured in a 2022 edition of the *Neuron* magazine, which can be accessed here: [https://wvresearch.org/wp-content/uploads/2022/06/Neuron\\_Vol18Issue1\\_Digital.pdf](https://wvresearch.org/wp-content/uploads/2022/06/Neuron_Vol18Issue1_Digital.pdf)

For the new grant period of 2023-2027, a competition for funding attracted 18 proposals. Three new projects were selected for RCG funding:

- 1) Data Driven Autonomous Experiments for Energy Sciences Principles of Machine Learning (WVU and Marshall University),
- 2) Metal-embedded Carbon-based Catalytic Membranes for Co-production of Ammonia and Ethylene (WVU, Marshall University, Bluefield State University, and Concord University),
- 3) Synergistic Conversion of Captured CO<sub>2</sub> and Green H<sub>2</sub> to Value-added Products for a Decarbonized Economy (WVU, Concord University, and West Virginia State University).

A factor in the funding decision was the level of research and education collaboration between our universities, which is important when applying for National Science Foundation EPSCoR funding. All three projects involve expanding knowledge in energy-related sciences.

- **Summer/Semester Undergraduate Research Experience (SURE)** awards are used for undergraduate research stipends to fully or partially support approximately 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 were extended to 2023.) These awards help undergraduates develop much-needed research/laboratory skills and support their undergraduate work in STEM fields. These awards have now ended, and STaR Division is taking applications for the 2024-2026 SURE grants, which will be announced later this year.
- **Science, Technology, Engineering and Mathematics (STEM) Fellows** grants are for STEM doctoral (Ph.D.) 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. New awards to Marshall University (\$952,000) and WVU (\$1,390,000) for 2022-2026 started in FY23.
- **Technical Assistance** provides external expert review services to help STEM faculty develop competitive proposals for funding from federal agencies. In FY23, ~50 proposals from individual faculty, or from collaborations between faculty at multiple higher education institutions were reviewed by the service. Feedback for researchers on the proposals is crucial for making them nationally competitive. Year to date, \$10.3 million has been funded for the proposals reviewed in FY23. Special review services were also provided for the RII Track-1 EPSCoR proposal for \$20 million from the National Science Foundation, which was successfully funded. (\$150,000)
- **Opportunity Fund** provides small, one-time awards (Approximately \$5000 each except for VEX Robotics proposals, which are for smaller amounts) to assist research faculty/students and for STEM programing. Total funding per year is about \$40,000. In FY23, 17 proposals were funded. The 2023 Undergraduate Research Day at the Capitol, and the Marshall University Research and Creativity Symposium events were supported by Opportunity awards. Awards also went to Glenville State University, Marshall

University, Fairmont State University and West Virginia State University. Community awards went to 11 middle and high school teams from West Virginia that participated in the International VEX Robotics competition in Dallas TX in March 2023.

- **Innovation Grants** provide one-time awards for equipment, supplies and minor renovations of laboratory spaces for undergraduate education and research. The two FY23 awards went to West Liberty University (\$26,000) and WVU Institute of Technology (\$20,000).

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 a primary way to achieve this goal. It is especially impressive that the state's \$3.9 million seed funding for the three previous Research Challenge Grants resulted in a return on investment of \$89 million in independent funding from federal and private corporations. STEM Fellows, SURE, Innovation and Opportunity grants are crucial to filling the STEM Talent Pipeline in West Virginia. External Review Services and the collaborations created between researchers at our universities by these grants were critical to obtaining the \$20 million EPSCoR RII Track-1 grant from the National Science Foundation in Neuroscience.

Attachments: Press releases for the new Research Challenge Grants and the RII Track-1 Grant.

**For immediate release:** February 10, 2023

**Contact:**

Angela Sundstrom  
STaR Division: Science, Technology & Research  
West Virginia Higher Education Policy Commission  
304-558-4128  
[angela.sundstrom@wvresearch.org](mailto:angela.sundstrom@wvresearch.org)

NEWS RELEASE

## **Faculty awarded over \$3.9 million for the creation of university-based research centers in West Virginia**

CHARLESTON, W.Va. – Over \$3.9 million in state funding will foster economic development and workforce advancement by supporting the creation of university-based research centers in West Virginia.

[STaR Division: Science, Technology & Research \(STaR\)](#) at the West Virginia Higher Education Policy Commission awarded three Research Challenge Grants (RCGs) worth approximately \$1.3 million each to directly support research conducted by students and faculty at West Virginia higher education institutions. Research teams are comprised of faculty from Bluefield State University, Concord University, Marshall University, West Virginia University and West Virginia State University. The awards were announced on Friday, February 10 at the Culture Center on the West Virginia State Capitol complex.

“We are excited to be able to fund these three excellent research projects with Research Challenge Grants for 2023-27 cycle,” said **Dr. Juliana Serafin, senior director of STaR**. “We look forward to the growth in research enterprise and economic development that will result from this investment by the state of West Virginia.”

Research Challenge Grants are supported by the Research Challenge Fund, established by the West Virginia Legislature in 2004 to build research capacity and competitiveness at the state’s colleges and universities. The fund is managed by STaR.

“These awards give researchers, especially students, the opportunity to collaborate with those at other institutions in the state and develop partnerships that will make their funding proposals more competitive,” Serafin said.

The RCGs promote statewide research collaboration among higher education institutions, an important factor when competing for federal funding, particularly from the National Science Foundation. Broadening the participation of first-generation college students and other underrepresented groups is also crucial.

“We are thrilled today to be able to present new state-funded research grants to faculty representing several of our universities that will create new opportunities for our students to collaborate with each other, with those at other universities and with outstanding faculty who are



pushing them toward trailblazing discoveries,” said **Dr. Sarah Armstrong Tucker, West Virginia’s Chancellor of Higher Education.**

Past Research Challenge Grant winners emphasized how the state-funded grants provided clout when seeking further support with federal agencies and industry donors. Awardees from the 2017-2022 cycle transformed their initial \$1.3 million investments into more than \$59 million in combined follow-on funding to continue their research projects.

### **Research Challenge Grant Awards**

**Drs. Xin Li, V’yacheslav Akkerman, Lian Li, Wenyan Li, Bin Liu and Aldo Romero** of West Virginia University and **Drs. Xiaojuan (Judy) Fan and Huong Nguyen** of Marshall University were awarded \$1,315,000 over five years for “Data Driven Autonomous Experiments for Energy Sciences Principles of Machine Learning.”

“The new Research Challenge Grant project connects artificial intelligence (AI) researchers with energy science researchers to explore the emerging frontiers of ML-based autonomous experiments for material discovery and energy systems,” said Xin Li, project principal investigator. “It will provide an excellent opportunity for STEM students to engage with cutting-edge research that can impact our state’s future.”

The team plans to work on expanding convergence research at the intersection of artificial intelligence/machine learning and energy sciences by developing a class of novel physics-informed surrogate models.

**Drs. Oishi Sanyal, Madelyn Ball, Jianli (John) Hu, Yuhe Tian, and Carrie White** of West Virginia University; **Drs. Rosalynn Quiñones-Fernández and Roozbeh (Ross) Salary** of Marshall University; **Dr. Tesfaye Belay** of Bluefield State University; and **Dr. Rodney Tigaa** of Concord University were awarded \$1,300,000 over five years for “Metal-Embedded Carbon-based Catalytic Membranes for Co-production of Ammonia and Ethylene.”

“Receiving the Research Challenge Grant allows our team to pursue a high-risk but impactful research direction and obtain preliminary data prior to applying for external federal grants,” said Sanyal, project principal investigator. “Along with research, this grant involves a strong education component which will be used to train the next generation of STEM workforce across four West Virginia-based institutions. Funds like these are critical to support students from all backgrounds, including underserved and underrepresented communities, and train them in cutting-edge technologies. The state of West Virginia will clearly benefit from such a trained workforce as they will contribute to research, entrepreneurship and future manufacturing.”

The team plans to develop a novel dual-layered catalytic hollow fiber membrane for co-production of ethylene and ammonia from natural gas in microwave-enhanced reactions.

**Drs. Cosmin Dumitrescu, V’yacheslav Akkerman, Omid Askari, Jianli (John) Hu, Bingyun Li, Earl Scime and Xueyan Song** of West Virginia University; **Dr. Rodney Tigaa** of Concord University; and **Dr. Eyas Mahmoud** of West Virginia State University were awarded \$1,300,000

over five years for “Synergistic Conversion of Captured CO<sub>2</sub> and Green H<sub>2</sub> to Value-Added Products for a Decarbonized Economy.”

“The project objective is to develop process-intensified modular technologies that will convert captured carbon dioxide and green hydrogen to green ethylene and green ammonia,” said Dumitrescu, project principal investigator. “The production of green ethylene is an opportunity to revive West Virginia’s polymer industry, while green ammonia is an efficient, decarbonized and low emissions alternative to electrification for hard-to-electrify industries.”

The team plans to advance current science and technologies to promote local utilization of captured carbon dioxide and the production of green hydrogen in West Virginia residential, commercial, and industrial sectors.

“With the help of the Research Challenge Grant funding, the project will create an interdisciplinary STEM team dedicated to supporting underrepresented communities and the necessary infrastructure to grow project activities into a vibrant, self-sustaining research and development nucleus,” Dumitrescu said.

Follow STaR Division: Science, Technology & Research on [Facebook](#), [Twitter](#), [Instagram](#), and [YouTube](#).

###

**For immediate release:** May 8, 2023

**Contact:**

Angela Sundstrom  
STaR Division: Science, Technology & Research  
West Virginia Higher Education Policy Commission  
304-558-4128 x5  
[angela.sundstrom@wvresearch.org](mailto:angela.sundstrom@wvresearch.org)

NEWS RELEASE

## **West Virginia awarded \$20 million in scientific research funding from National Science Foundation**

**West Virginia has received more than \$105 million in EPSCoR funding and co-funding since 2001**

CHARLESTON, W.Va. – West Virginia has been awarded a highly competitive, five-year \$20 million grant from the National Science Foundation's (NSF) Established Program to Stimulate Competitive Research (EPSCoR) that will boost academic scientific research and upgrade infrastructure at West Virginia University (WVU), Marshall University (MU), West Virginia State University (WVSU) and Shepherd University. EPSCoR is facilitated by the West Virginia Higher Education Policy Commission's Division of Science, Technology & Research (STaR).

This funding establishes the WV Network for Functional Neuroscience and Transcriptomics (WV-NFNT), a statewide collaboration of neuroscientists and bioinformaticists working to position West Virginia as a center for impactful neuroscience research.

"I'm thrilled to see that West Virginia has been awarded such important funding, and it's further proof that we're leading the way in education, innovation, science, and technology," **Gov. Jim Justice said**. "This will provide a significant boost to the research programs at our state's leading universities and is a testament to the hard work and dedication of the West Virginia Higher Education Policy Commission. We look forward to the positive impact this grant will have on our state's academic and scientific community and economy."

"West Virginia's universities continue to make our state and country proud with innovative scientific research projects, and I'm thrilled the National Science Foundation is investing \$20 million over five years to establish the West Virginia Network for Functional Neuroscience and Transcriptomics (WV-NFNT)," **said U.S. Senator Joe Manchin**. "I was proud to support this historic investment, which will allow our hardworking students, faculty and staff to continue to make groundbreaking strides in neuroscience and related research. This shows that given the right tools, West Virginia's researchers can compete with anyone in the country. I look forward to seeing the positive impacts of this funding for decades to come and, as a member of the Senate Appropriations Committee, I will continue advocating for resources to boost scientific research opportunities across the Mountain State."

"West Virginia has been a leader in neuroscience capabilities and research for years, and it's

important that our higher education institutions have the resources and tools they need to continue that leadership into the future, especially when they are able to collaborate as they are in this effort. I have been a steadfast supporter of ESPCoR programs, as they give our students and professionals unprecedented opportunities to advance scientific progress right here in West Virginia. I will continue to advocate on behalf of our institutions in West Virginia, and work to provide the resources they need to develop innovative solutions that impact our state, country, and world,” **U.S. Senator Shelley Moore Capito said.**

Project leadership includes:

- *Principal Investigator:* Dr. Juliana Serafin, senior director of science and research at the West Virginia Higher Education Policy Commission
- *Co-Principal Investigator:* Dr. Suzanne Strait, associate director of science and research at the West Virginia Higher Education Policy Commission
- *Co-Principal Investigator:* Dr. Randy Nelson, chair and professor of the WVU Department of Neuroscience at West Virginia University
- *Co-Principal Investigator:* Dr. Nadja Spitzer, associate professor of biological sciences at Marshall University
- *Co-Principal Investigator:* Dr. Umesh Reddy, professor of genetics and genomics at West Virginia State University

“Neuroscience researchers and STEM education leaders in West Virginia are honored by NSF’s selection of the WV-NFNT project for funding,” said **Dr. Serafin**. “We are looking forward to significant growth in neuroscience and related STEM fields during the grant period.”

West Virginia has now received more than \$105 million from NSF EPSCoR as funding or co-funding over the past 22 years, according to Dr. Sarah Armstrong Tucker, West Virginia’s Chancellor of Higher Education.

“Together with our research and university partners, West Virginia has made great progress in positioning our state as a leader in scientific research,” said **Chancellor Tucker**. “We are tremendously grateful to the NSF and to Senators Manchin and Capito for their support, and for their continuing faith in West Virginia’s faculty and student researchers. With this funding, we have the opportunity to take neuroscience and related research to new levels of discovery – which could impact real lives and our economic future in tremendous ways.”

“For the United States to remain the global leader in science, engineering and technology, we must energize talent in every region and every state in our nation. Through EPSCoR, NSF catalyzes the development of research capabilities across the country, creating sustainable scientific infrastructure and communities of innovation,” said **NSF Director Sethuraman Panchanathan**. “This year’s EPSCoR awards will serve individual states and the country as a whole with critical research on wildfire management, climate change resilience, biomanufacturing and advanced biomedical devices, and data science in the service of all disciplines.”

### ***Project Background***

Neuroscience and data science were identified as areas of existing strength with high potential for growth in the [West Virginia Science & Technology Plan](#), published in 2021. The WV-NFNT will foster collaborations among neuroscientists and bioinformaticists from the four universities while positioning the state as a center for one of the most impactful neuroscience research areas – circuit and synaptic plasticity, the study of changes in neurons and the

connections between them as the result of developmental or environmental changes. The WV-NFNT will expand the capability and diversity of those working in the fields of neuroscience and data science by implementing specific education and workforce development activities to engage students, especially those who are rural, first-generation college students, and other underrepresented groups.

### ***NSF EPSCoR Background***

The National Science Foundation's Established Program to Stimulate Competitive Research (EPSCoR) enhances the research competitiveness of targeted jurisdictions - whether state, territory or commonwealth - by strengthening science, technology, engineering and mathematics (STEM) capacity and capability through investments, from talent development to local infrastructure. EPSCoR envisions its jurisdictions as recognized contributors to the national and global STEM research enterprise. West Virginia's most recent EPSCoR-funded Track-1 project was awarded in 2015 and wrapped up this year.

Follow STaR Division: Science, Technology & Research on [Facebook](#), [Twitter](#), [Instagram](#), and [YouTube](#).

###





**Report to the Legislative Oversight Commission  
on Education Accountability**

**Research Trust Fund Annual Report  
(§18B-18A-12)**





**MEMORANDUM**

**TO:** Legislative Oversight Commission on Education Accountability (LOCEA)

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

**DATE:** September 7, 2023

**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 FY23:**

As of June 30, 2023, the Marshall University RTF endowments total \$38 million, with \$7.8 million of endowment proceeds expended over the life of the program. Earnings to date are \$14 million. The amount spent in FY23 was \$940,074. 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 FY23, \$35

million was spent from both private and matching state accounts. In FY24, \$5.6 million will be available. The current market value for all the private RTF endowments is \$60 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 FY23 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 FY23 are attached.



**Marshall University  
Research Endowment Plan Annual Report  
2022-2023**

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, 2023, the Marshall University Bucks for Brains Endowments totaled \$ 37,832,609, with \$ 7,786,829 of endowment proceeds expended over the life of the program. Earnings to date have amounted to \$ 14,724,718.

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
FY23	\$940,074

## **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.

During fiscal year 2023, Marshall University focused its research and service activities in six major areas:

1. Cybersecurity & Forensic Science
2. Population Health
  - a. Addiction/Recovery
  - b. Obesity/Digestive Health
  - c. Gerontology/Healthy Aging
  - d. Rural/Behavioral Health
  - e. Neuro-Divergent/ Autism
3. Advanced Manufacturing
4. Advanced Energy
5. Aviation/ Advanced Air Mobility
6. Entrepreneurship/Economic Dev.

Bucks for Brains funds were used to:

- modernize and expand our animal resource facility, adding significant new research infrastructure for work in neuroscience and addiction.
- add a major research instrument, an Olympus FV-3000 microscope, to support these activities
- initiate a competitive geriatrics research project pilot program
- support MIIR efforts as well as the efforts of Dr. Tim Hewett in Orthopaedics.
- continue the operations of the Maier Institute for Dementia Studies, including a project focusing on the effects of the ketone diet on the progression of cognitive impairment.
- engage the services of InterMed labs, to identify and progress clinical research innovations emerging from the work of our clinical faculty

## 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 23, these researchers continue 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 legislation<sup>1</sup>. 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.

---

<sup>1</sup>

- 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”<sup>2</sup>.

“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”.<sup>3</sup> “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”.<sup>4</sup>

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:

---

<sup>2</sup> 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).

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

<sup>4</sup> 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 University<sup>1</sup>

September 6, 2023

---

<sup>1</sup> Address questions and requests for additional information regarding WVU's Research Trust Fund initiative to Vice President for Research, Dr. Fred King, West Virginia University ([fred.king@mail.wvu.edu](mailto: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, 2023 the following results have been achieved:

- **FY23 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, 2023 is \$60,419,300.
- **FY24 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 FY24 are \$2,178,432.

- **FY23 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, 2023 is \$42,381,059.

- **FY24 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 FY24 are \$3,464,866.

- **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, 2022 and 2021 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 21<sup>st</sup> 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 2022, WVU research expenditures reached \$214 million employing over 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 FY24.

In FY23, \$22,765,510 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 FY24, \$17,751,736 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, \$5,643,299 will come from interest earned on both the private endowments and that from the matching state endowments established from the Research Trust Fund; \$12,108,437 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	FY23 Spend	Budget through FY23 Spend	Expenses through CLS-2023	Balance through FY23	FY24 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	\$ 20,401.42	\$ 181,894.24	\$ 147,857.01	\$ 34,037.23	\$ 26,335.67	\$ 60,372.90
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	\$ 162,201.86	\$ 807,424.50	\$ 446,893.00	\$ 360,531.50	\$ 190,750.34	\$ 551,281.84
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	\$ 20,031.69	\$ 179,381.68	\$ 40,006.55	\$ 139,375.13	\$ 22,837.72	\$ 162,212.85
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	\$ 5,620.50	\$ 54,828.70	\$ 30,189.45	\$ 24,639.25	\$ 8,037.67	\$ 32,676.92
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	\$ 26,366.23	\$ 277,349.92	\$ 166,490.79	\$ 110,859.13	\$ 38,241.69	\$ 149,100.82
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	\$ 22,621.51	\$ 160,134.79	\$ 121,039.76	\$ 39,095.03	\$ 29,347.68	\$ 68,442.71
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	\$ 5,308.21	\$ 50,005.66	\$ 31,298.73	\$ 18,706.93	\$ 7,785.87	\$ 26,492.80
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	\$ 10,506.12	\$ 107,508.59	\$ 52,825.99	\$ 54,682.60	\$ 15,252.92	\$ 69,935.52
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	\$ 31,180.83	\$ 267,481.37	\$ 182,680.95	\$ 84,800.42	\$ 45,420.45	\$ 130,220.87
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	\$ 10,945.81	\$ 113,761.29	\$ 26,662.90	\$ 87,098.39	\$ 15,867.87	\$ 102,966.26
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	\$ 11,019.32	\$ 122,398.64	\$ 124,240.16	\$ (1,841.52)	\$ 15,982.57	\$ 14,141.05
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	\$ 103,610.12	\$ 929,153.15	\$ 185,048.16	\$ 744,104.99	\$ 151,058.71	\$ 895,163.70
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	\$ 46,853.74	\$ 426,372.51	\$ 375,323.14	\$ 51,049.37	\$ 68,251.52	\$ 119,300.89
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	\$ 106,082.52	\$ 1,067,067.86	\$ 708,761.41	\$ 358,306.45	\$ 153,641.13	\$ 511,947.58
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	\$ 2,794.00	\$ 28,073.94	\$ 22,838.95	\$ 5,234.99	\$ 4,051.71	\$ 9,286.70
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	\$ 2,667.62	\$ 24,576.03	\$ 14,760.00	\$ 9,816.03	\$ 3,891.48	\$ 13,707.51
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	\$ 2,618.21	\$ 25,979.26	\$ 9,660.35	\$ 16,318.91	\$ 3,812.92	\$ 20,131.83
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	\$ 2,594.82	\$ 25,624.03	\$ 25,758.84	\$ (134.81)	\$ 3,778.52	\$ 3,643.71
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	\$ 10,345.38	\$ 94,561.57	\$ 49,764.31	\$ 44,797.26	\$ 15,108.96	\$ 59,906.22
R123	WVUHV 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	\$ 36,458.86	\$ 344,076.22	\$ 234,280.35	\$ 109,795.87	\$ 53,175.55	\$ 162,971.42
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	\$ 4,958.38	\$ 46,526.56	\$ 28,427.02	\$ 18,099.54	\$ 7,188.05	\$ 25,287.59
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	\$ 6,142.69	\$ 57,209.29	\$ 20,416.81	\$ 36,792.48	\$ 8,983.28	\$ 45,775.76
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	\$ 7,833.31	\$ 69,125.02	\$ 57,204.41	\$ 11,920.61	\$ 11,409.08	\$ 23,329.69
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	\$ 5,100.16	\$ 47,780.42	\$ 14,513.11	\$ 33,267.31	\$ 7,460.14	\$ 40,727.45
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	\$ 15,219.34	\$ 137,719.47	\$ 115,418.11	\$ 22,301.36	\$ 22,225.33	\$ 44,526.69
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	\$ 5,171.39	\$ 46,097.64	\$ 8,300.82	\$ 37,796.82	\$ 7,554.32	\$ 45,351.14
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	\$ 2,619.31	\$ 24,097.13	\$ 1,000.00	\$ 23,097.13	\$ 3,822.00	\$ 26,919.13

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	FY23 Spend	Budget through FY23 Spend	Expenses through CLS-2023	Balance through FY23	FY24 Spend	Balance Forward
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	\$ -	\$ 67,238.19	\$ 76,315.73	\$ 704,207.55	\$ 650,567.96	\$ 53,639.59	\$ 111,696.83	\$ 165,336.42
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	\$ 208,003.81	\$ 1,905,326.84	\$ 1,706,165.83	\$ 199,161.01	\$ 303,428.21	\$ 502,589.22
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	\$ 36,093.29	\$ 394,633.10	\$ 212,753.29	\$ 181,879.81	\$ 52,880.97	\$ 234,760.78
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	\$ 12,667.66	\$ 102,770.49	\$ 57,801.22	\$ 44,969.27	\$ 18,601.39	\$ 63,570.66
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	\$ 4,364.07	\$ 38,331.08	\$ 19,204.83	\$ 19,126.25	\$ 6,385.57	\$ 25,511.82
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	\$ 41,907.12	\$ 376,526.15	\$ 32,663.16	\$ 343,862.99	\$ 61,149.74	\$ 405,012.73
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	\$ 2,594.30	\$ 22,455.64	\$ 8,234.21	\$ 14,221.43	\$ 3,782.21	\$ 18,003.64
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	\$ 5,311.86	\$ 54,446.33	\$ -	\$ 54,446.33	\$ 7,753.92	\$ 62,200.25
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	\$ 2,609.70	\$ 23,730.88	\$ 3,364.67	\$ 20,366.21	\$ 3,811.59	\$ 24,177.80
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	\$ 10,327.18	\$ 93,955.74	\$ 34,126.59	\$ 59,829.15	\$ 15,124.49	\$ 74,953.64
R141	Donald R. & Unda 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	\$ 10,168.08	\$ 83,290.68	\$ 106,327.26	\$ (23,036.58)	\$ 14,935.51	\$ (8,101.07)
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	\$ 27,853.43	\$ 237,800.64	\$ 92,794.11	\$ 145,006.53	\$ 39,945.16	\$ 184,951.69
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	\$ 5,246.60	\$ 48,670.86	\$ 8,437.01	\$ 40,233.85	\$ 7,652.68	\$ 47,886.53
R144	Dr. Mohindar S. Sehra 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	\$ 2,553.37	\$ 27,536.12	\$ 1,264.00	\$ 26,272.12	\$ 3,716.52	\$ 29,988.64
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	\$ 16,259.87	\$ 174,980.65	\$ 168,409.57	\$ 6,571.08	\$ 17,755.55	\$ 24,326.63
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	\$ 5,626.85	\$ 43,741.34	\$ 19,639.41	\$ 24,101.93	\$ 7,667.24	\$ 31,769.17
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	\$ 7,438.89	\$ 62,762.47	\$ 10,779.47	\$ 51,983.00	\$ 10,779.80	\$ 62,762.80
R148	Salvatore and Josephine Ciento 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	\$ 4,586.91	\$ 30,930.74	\$ 11,212.00	\$ 19,718.74	\$ 6,599.30	\$ 26,318.04
R149	Statter 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	\$ 1,025,697.62	\$ 8,462,730.45	\$ 5,922,883.14	\$ 2,539,847.31	\$ 1,500,966.32	\$ 4,040,813.63
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	\$ 38,549.18	\$ 346,585.96	\$ -	\$ 346,585.96	\$ 56,136.66	\$ 402,722.62
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	\$ 102,952.14	\$ 1,011,296.07	\$ 524,281.35	\$ 487,014.72	\$ 150,227.00	\$ 637,241.72
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	\$ 48,682.20	\$ 395,623.15	\$ 658,367.98	\$ (262,744.83)	\$ 67,005.84	\$ (195,738.99)
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	\$ 18,464.41	\$ 184,443.38	\$ 142,904.08	\$ 41,539.30	\$ 26,645.85	\$ 68,185.15
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	\$ -	\$ 59,044.73	\$ 66,730.71	\$ 727,471.14	\$ 734,125.07	\$ (6,653.93)	\$ 96,683.32	\$ 90,029.39
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	\$ 10,425.29	\$ 101,503.42	\$ -	\$ 101,503.42	\$ 15,179.88	\$ 116,683.30
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	\$ 104,902.38	\$ 1,057,654.38	\$ 658,379.96	\$ 399,274.42	\$ 152,372.18	\$ 551,646.60
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	\$ 4,457.13	\$ 41,834.71	\$ 36,911.14	\$ 4,923.57	\$ 6,291.36	\$ 11,214.93

split between MAP and Financial Aid

split between MAP and Financial Aid

split between MAP and Financial Aid

includes F3V830W

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	FY23 Spend	Budget through FY23 Spend	Expenses through CLS-2023	Balance through FY23	FY24 Spend	Balance Forward
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	\$ 20,925.55	\$ 205,479.88	\$ 200,492.36	\$ 4,987.52	\$ 30,410.51	\$ 35,398.03
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	\$ 4,505.64	\$ 48,738.19	\$ 7,430.85	\$ 41,307.34	\$ 4,920.50	\$ 46,227.84
V844	Bowby 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	\$ 55,746.91	\$ 492,905.25	\$ 250,673.73	\$ 242,231.52	\$ 80,281.60	\$ 322,513.12
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	\$ 44,653.69	\$ 315,107.70	\$ -	\$ 315,107.70	\$ 58,132.62	\$ 373,240.32
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	\$ 543,586.17	\$ 5,544,191.45	\$ 3,603,658.49	\$ 1,940,532.96	\$ 776,548.55	\$ 2,717,081.51
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	\$ 5,284.08	\$ 52,650.13	\$ 23,711.65	\$ 28,938.48	\$ 7,660.17	\$ 36,598.65
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	\$ 36,827.16	\$ 367,590.10	\$ 263,502.30	\$ 104,087.80	\$ 53,413.50	\$ 157,501.30
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	\$ 5,084.15	\$ 41,404.76	\$ 8,000.00	\$ 33,404.76	\$ 7,420.83	\$ 40,825.59
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	\$ 10,373.37	\$ 85,138.49	\$ 51,055.91	\$ 34,082.58	\$ 15,174.93	\$ 49,257.51
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	\$ 102,921.15	\$ 871,789.20	\$ 707,368.49	\$ 164,420.71	\$ 150,324.20	\$ 314,744.91
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	\$ 16,794.97	\$ 139,753.42	\$ 48,955.46	\$ 90,797.96	\$ 23,550.10	\$ 114,348.06
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	\$ 154,910.89	\$ 1,417,446.04	\$ 1,058,024.79	\$ 359,421.25	\$ 226,870.75	\$ 586,292.00
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	\$ 2,958.09	\$ 24,730.40	\$ 8,630.88	\$ 16,099.52	\$ 3,704.43	\$ 19,803.95
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	\$ 28,562.13	\$ 228,781.60	\$ 213,276.57	\$ 15,505.03	\$ 50,431.81	\$ 65,936.84
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	\$ (1,168,703.68)	\$ 3,179,040.92	\$ 3,621,197.08	\$ 32,327,915.81	\$ 21,530,214.19	\$ 10,797,701.62	\$ 5,195,292.74	\$ 15,992,994.36
Financial Aid Accounts																			
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	\$ 9,161.29	\$ 85,865.64	\$ 14,500.00	\$ 71,365.64	\$ 13,791.44	\$ 85,157.08
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	\$ 12,161.16	\$ 90,466.52	\$ 91,388.00	\$ (921.48)	\$ 16,606.86	\$ 15,685.38
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	\$ 5,388.95	\$ 47,836.08	\$ 29,500.00	\$ 18,336.08	\$ 7,739.76	\$ 26,075.84
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	\$ 39,380.21	\$ 431,235.93	\$ 401,245.95	\$ 29,989.98	\$ 57,116.86	\$ 87,106.84
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	\$ 5,218.41	\$ 51,478.22	\$ 28,738.00	\$ 22,740.22	\$ 7,794.68	\$ 30,534.90
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	\$ 10,209.96	\$ 94,615.05	\$ 75,198.00	\$ 19,417.05	\$ 15,334.96	\$ 34,752.01
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	\$ 3,362.82	\$ 32,323.40	\$ 35,550.00	\$ (3,226.60)	\$ 4,039.71	\$ 813.11
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	\$ 2,532.79	\$ 22,432.13	\$ 10,075.00	\$ 12,357.13	\$ 3,796.52	\$ 16,153.65
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	\$ 18,662.66	\$ 117,381.20	\$ 39,500.00	\$ 77,881.20	\$ 25,422.89	\$ 103,304.09

All financial aid - nothing in MAP

split between MAP and Financial Aid

split between MAP and Financial Aid

split between MAP and Financial Aid

split between MAP and Financial Aid

split between MAP and Financial Aid

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	FY23 Spend	Budget through FY23 Spend	Expenses through CLS-2023	Balance through FY23	FY24 Spend	Balance Forward
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	\$ 40,319.12	\$ 353,638.47	\$ -	\$ 353,638.47	\$ 60,788.82	\$ 414,427.29
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	\$ 7,475.03	\$ 63,710.32	\$ 66,151.00	\$ (2,440.68)	\$ 11,277.50	\$ 8,836.82
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	\$ 2,783.58	\$ 24,241.62	\$ 10,980.00	\$ 13,261.62	\$ 4,178.80	\$ 17,440.42
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	\$ 4,986.51	\$ 26,982.97	\$ 1,050.00	\$ 25,932.97	\$ 6,789.71	\$ 32,722.68
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	\$ 3,504.64	\$ 21,816.95	\$ -	\$ 21,816.95	\$ 6,302.30	\$ 28,119.25
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	\$ 99,414.49	\$ 667,161.82	\$ 415,576.00	\$ 251,585.82	\$ 150,162.01	\$ 401,747.83
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	\$ 1,169.22	\$ 10,716.42	\$ 15,844.00	\$ (5,127.58)	\$ 1,404.45	\$ (3,723.13)
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	\$ 47,541.14	\$ 404,128.65	\$ -	\$ 404,128.65	\$ 55,459.14	\$ 459,587.79
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	\$ 313,271.98	\$ 2,546,031.39	\$ 1,235,295.95	\$ 1,310,735.44	\$ 448,006.41	\$ 1,758,741.85
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	\$ (1,185,492.54)	\$ 3,457,408.90	\$ 3,934,469.06	\$ 34,873,947.20	\$ 22,765,510.14	\$ 12,108,437.06	\$ 5,643,299.15	\$ 17,751,736.21

split between MAP and Financial Aid