FY2019 Report on the Research Trust Fund (RTF)

Background

Outlined in Series 48, 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 draft annual report for FY2019 activities within the Research Trust Fund for review, comment, and approval. The FY2019 report is the eleventh in a series of annual reports provided by staff since the program's inception in 2008.

RTF Activities through August 2017

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 rule designates the Vice Chancellor for Science and Research as the administrator of the program, under the general direction of the Chancellor and the Commission. The final rules are available at

https://www.wvhepc.org/resources/rulesandpolicies_files/Series%2048%20%284-16-09%29.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 institutional Boards of Governors' were received from both West Virginia University and Marshall University. Both institutional plans are on file at 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. 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 WV 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 on September 7, 2012 – one institution was awarded. A final award was made on May 6, 2013

The institutions who received awards from the RTF for State Colleges and Universities 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.

Marshall University and West Virginia University reports for FY2019 are attached.



Marshall University Research Endowment Plan Annual Report FY 2019

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

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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, 2019, the Marshall University Bucks for Brains Endowments totaled \$38.2MM, with \$2.45 MM of endowment proceeds expended over the life of the program. FY 19 expenditures totaled \$560,720. Earnings to date have amounted to \$9.81 MM.

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 some of the endowments is included below. A comprehensive summary of the endowments is included in previous versions of this report.

<u>pNaKtide alleviates genetic and phenotypic attributes of atherosclerosis</u>: This study addresses the effect of novel drug, pNaKtide, a peptide derived from α1 Na/K-ATPase, has on atherosclerosis. Obesity induced oxidant stress plays a key role in the development of atherosclerosis, both experimentally and clinically. We previously reported that the α1

subunit of Na/K-ATPase serves as a receptor for both reactive oxygen species (ROS) and cardiotonic steroids (CTS) and can act as a feed-forward amplifier of ROS. We have specifically shown that this pathway is critical to the pathophysiology of several experimental models of disease including obesity/metabolic syndrome and atherosclerosis. We and others have also observed that the adipocyte itself is an important source of oxidant stress in models with obesity/metabolic syndrome and that mediators directly tied to the cellular phenotype of these adipocytes play a causal role in the atherosclerosis associated with obesity/metabolic syndrome. These observations suggest that adipocytes could play a central role in the development and progression of atherosclerosis. We determined that adipocytes create systemic oxidant stress through the Na/K-ATPase feed-forward oxidant amplification loop in atherosclerosis and serve as a therapeutic target for this condition. In one set of experiments, we determined the role of Na/K-ATPase signaling in adipose tissue in the C57BL/6 and ApoE-/- mice. In another set of experiments, western diet was employed to amplify Na/K-ATPase/ROS amplification loop activated by elevated levels of CTS inducing further ROS production. Adipose, aortic and systemic outcomes were assessed using morphological, physiological and biochemical methods that are well established in the lab.

Effect of hepatocyte specific pNaKtide expression on NASH and liver fibrosis using lentiviral constructs: Mice with hepatocyte-specific targeting of pNaKtide provide a unique opportunity to advance our understanding of the pathophysiology of NAFLD and associated metabolic dysfunction. We have the lenti-Alb-eGFP-pNaKtide vector and its control Lenti-Alb-eGFP for in vivo studies which has been constructed (Cyagen Biosciences, CA, US) to achieve pNaKtide expression specifically in the liver. This mode of intervention is utilized to obtain pNaKtide expression for an extended period of time. We expect Na/K-ATPase-Src signaling cascade will be activated in mice fed a western diet, which will precipitate a pro-inflammatory setting, increase TGs and FFA levels and will induce insulin resistance. This will be accompanied by fatty liver infiltration and a decline in liver function. However, with lentiviral injections, we expect that pNaKtide targeted specifically to hepatocytes will suppress Na/K-ATPase-Src/ROS amplification loop and will attenuate ROS, IR, hepatic steatosis and fibrosis.

Role of pNaKtide in ameliorating renal failure: pNaKtide was also tested in mouse models with renal failure (C57Bl/6 mice fed standard chow vs western diet and ApoE KO mice fed standard chow vs western diet) to see if pNaKtide could ameliorate glomerulosclerosis and interstitial fibrosis and improve urine production, GFR/cystatin-C. ApoE KO mice on western diet showed increased interstitial fibrosis, decreased urine production and decreased GFR which was improved with pNaKtide.

Altered modification and signaling of anti-oxidants in human adipocytes:

Recent studies of the anti-oxidants in obese mice have demonstrated that it can be targeted to decrease obesity and doing so alters the expression of oxidative and adipogenic markers. Given the importance of the adipocyte redox state in the development and maintenance of obesity, we are interested in elucidating the full role of this Na/K-ATPase pump in adipocytes and the pathogenesis of obesity, as this has never been studied in humans. Given the close relationship between the Na/K-ATPase and

ROS, and the close relationship between ROS and obesity, it is our hope that determining all components of the signaling pathway may highlight novel molecular mechanisms to combat obesity and its related comorbidities. Goals of this project are to (a)understand the role of the Na/K-ATPase in the pathogenesis of obesity in humans, (b)isolate, quantify, and characterize modifications to the Na/K-ATPase in human adipocytes in obese vs control patients, (c) study inflammatory markers, oxidative stress markers, and adipogenic markers associated with the Na/K-ATPase in obese vs control patients, (d) identify signaling cascades and their changes, that stem from the Na/K-ATPase modifications in obese vs control patients. This is the next step in bridging the gap in our extensive animal model studies to human studies.

Effect of tobacco flavors on addiction susceptibility: Nicotine addiction is the underlying cause of all tobacco-related diseases and disorders. The multitude of tobacco flavors available to increasingly popular electronic cigarettes may exacerbate nicotine addiction and increase risk for tobacco related diseases and disorders. Creating and authenticating a biomarker for tobacco flavors that can exacerbate nicotine addiction will contribute greatly to tobacco control research and future FDA tobacco regulations. This work aims to create a biomarker system that will facilitate the identification of tobacco flavors that pose a risk to addiction.

We have determined that menthol enhances addiction by binding to specific receptors in the brain. This leads to enhanced activity of dopamine neurons in the mesolimbic pathway of addiction. We have also determined that another tobacco flavor increases addictive behavior by altering the same neurons and cell types that menthol.

<u>Disruptions in astrocyte-driven synaptic development in Neonatal Abstinence Syndrome (NAS):</u> Multiple stages of central nervous system development are highly regulated by astrocytes, the most abundant glial cell type in the brain. Going forward, understanding the complex relationships between astrocytes, neurons, and the synaptic connections between neurons will be key to forging new therapies for brain disorders characterized by aberrant network connectivity, including autism, schizophrenia, and addiction. Current work focuses on potential disruptions in astrocyte-driven synaptic development in Neonatal Abstinence Syndrome (NAS). This condition, in which newborns suffer from withdrawal after being born to mothers who abused opioids during pregnancy, has seen a significant increase in incidence in West Virginia and Central Appalachia in recent years. This project will focus on developing a mouse model for NAS in order to investigate short- and long-term consequences of prenatal opioid exposure on astrocyte and neuron development.

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:

T. **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.

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

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.

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

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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).

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:

- 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.

Annual Report

from

West Virginia University¹

August 15, 2019

¹ Address questions and requests for additional information regarding WVU's Strategic Research Plan and the 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 2020.

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.

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.
- 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, 2019 the following results have been achieved:

- FY19 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, 2019 is \$44,167,306.
- FY20 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 FY20 are \$1,796,344.

- FY19 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, 2019 is \$39,353,502.
- FY20 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 FY20 are \$1,420,391.
- 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, 2018 and 2017 for the WVU Foundation has been forwarded, under separate cover, to the Policy Commission through Director Jan Taylor. 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 again received classification as West Virginia's only R1 Doctoral Research University by the Carnegie Classification of Institutions of Higher Learning in 2019. Only 129 other universities in the United States received this highest ranking in the Carnegie Classification. This ranking evidences WVU's reputation as one of the leading U.S. Research Universities.

This is further supported by the fact that in FY 2019, WVU faculty secured \$172 million in externally sponsored grants and contracts.

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 West Virginia Forward effort 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.

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. The recent investment to found the WVU Startup Engine by John Chambers will facilitate the conversion of research and innovation supported by the RTF into economic impact.

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 FY20.

In FY19, \$11,617,533 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 FY20, \$13,796,683 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, \$2,985,076 will come from interest earned on both the private endowments and that from the matching state endowments established from the Research Trust Fund; \$10,811,607 will come from unspent funds from the previous year. The significant amount of interest dollars reflects the positive impact of the stock market and the fact that all endowments are fully funded. 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.

Annual Report through Fiscal Year 2019

						В	Budget through	Ехр	penses through	Balance	through				
Fund ID	Fund Description	Budget Division	Unit	F	/19 Spend		FY19 Spend		CLS-2019	FY	19		FY20 Spend	Bal	ance Forward
	Frederick P. Jr. & Joan C.														
R085	Stamp Cancer Research	Cancer Center(CAN)	Cancer Center (CAN)	Ś	17,528.34	\$	120,015.40	ς	87,142.18	\$	32,873.22	Ś	15,322.17	\$	48,195.39
11003	Starrip Carreer Research	Carreer Center (Critt)	Carreer Certice (Critis)	7	17,320.31	Υ	120,013.10	7	07,112.10	Υ	32,073.22	7	13,322.17	Υ	10,133.33
	Norma Mae Huggins Cancer														
R095	Research Endowment	Cancer Center(CAN)	Cancer Center (CAN)	\$	79,492.32	\$	341,114.29	\$	247,746.82	\$	93,367.47	\$	91,990.34	\$	185,357.81
	Walter H. Moran Jr. General														
R100	Surgery Resident Research	Medicine(MED)	Medicine (MED)	\$	(30,487.10)	\$	105,268.49	\$	498.50	\$ 1	04,769.99	\$	18,940.83	\$	123,710.82
2400	Schoepp Neuroscience			_		_	0=04=46		24 757 44			_	. ===		47.004.00
R103	Research Student Support	Medicine(MED)	Medicine (MED)	\$	6,247.01	\$	37,047.16	\$	24,765.44	\$	12,281.72	\$	4,722.48	\$	17,004.20
		Engineering & Mineral	Engineering & Mineral Resources												
R106	Verizon WV for Biometrics	Resources(EMR)	(EMR)	\$	29,534.79	¢	194,079.02	ć	166,490.79	Ċ	27,588.23	ċ	21,980.42	¢	49,568.65
K100	Raymond Brooks Vanscoy	nesources(Livin)	(LIVIII)	٧	29,334.79	ڔ	134,073.02	ڔ	100,430.73	Ų.	27,300.23	۲	21,360.42	٦	49,308.03
	Cancer Research														
R107	Endowment	Cancer Center(CAN)	Cancer Center (CAN)	\$	18,677.19	\$	88,308.04	\$	54,251.24	\$	34,056.80	\$	17,319.65	\$	51,376.45
		,	Engineering &							•	,	i i	,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Allen S. Pack Endowment	Engineering & Mineral	Mineral Resources												
R108	for Mining Engineering	Resources(EMR)	(EMR)	\$	5,945.27	\$	33,493.19	\$	22,197.72	\$	11,295.47	\$	4,379.67	\$	15,675.14
	L. Zane Shuck Laboratory		Engineering &												
	Endowment in	Engineering & Mineral	Mineral Resources												
R109	Nanobiotechnology	Resources(EMR)	(EMR)	\$	11,774.61	\$	74,356.87	\$	38,688.81	\$	35,668.06	\$	8,753.03	\$	44,421.09
	Alpha Natural Resources		Engineering &												
	Endowment for Energy	Engineering & Mineral								_					
R110	Research	Resources(EMR)	(EMR)	\$	35,011.11	\$	169,411.18	\$	52,479.27	\$ 1	16,931.91	\$	25,926.14	\$	142,858.05
	Alan Susman Cortico-Basal														
D442	Ganglionic Degeneration	A 4 11 1 (A 45D)		_	42.257.04	۸.	70.475.05	٠			70 475 05	,	0.420.24		00 204 26
R113	Research	Medicine(MED)	Medicine (MED)	\$	12,257.91	\$	79,175.95	\$	-	\$	79,175.95	\$	9,128.31	\$	88,304.26
	Blaine S. West Endowment	Fraincering Q Mineral	Engineering &												
R114	for Civil and Environmental		Mineral Resources	Ś	12 242 26	Ļ	07 ENE NO	ب	96 121 40	ċ	1,465.49	خ	0.196.50	ċ	10 651 00
N114	Engineering	Resources(EMR) Health Sciences -	(EMR) Health Sciences -	Ş	12,343.36	Ş	87,596.98	Ş	86,131.49	ş	1,405.49	ş	9,186.50	Ş	10,651.99
	William J. Maier, Jr. Chair of		Charleston Division												
R115	Research	Division(MCC)	(MCC)	\$	116,396.16	Ś	603,544.82	Ś	131,321.58	\$ 4	72,223.24	\$	86,103.44	Ś	558,326.68
	Branson-Maddrell Endowed			_	110,000.10	7	000,011102	~		7 7	, T	7	23,203.14	Υ	333,323.03
	Professorship in														
R116	Orthodontics	Dentistry(DEN)	Dentistry (DEN)	\$	52,614.42	\$	279,020.91	\$	170,859.39	\$ 1	08,161.52	\$	38,959.57	\$	147,121.09

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Fund Description Budget Division Copyright Engineering & Mineral Resources Engineering & Engineering & Mineral Resources Engineering & Mineral Resources Engineering & Mineral Resources Engineering & Mineral Resources Engineering & Engineering & Mineral Resources Engineering & Engin								D	.		0-1-					
George B. Benerit Dean's Research Opportunity Engineering & Mineral Resources Reso	Fund ID	Fund Description	Budget Division	Unit	FY	Y19 Spend	t	•	EX		ваіа	_		FY20 Spend	Ba	lance Forward
R117 Endowment Resources(EMR) EMR S 118,743.74 S 731,002.86 S 506,337.68 S 225,265.18 S 88,518.48 S 313,783.66		•				•		•						•		
E. Elizabeth Morgan Cancer R118 Research R138 Research R139 Robert Cancer Center (CAN) Cancer Center (CAN) S 3,129.08 S 19,248.57 S 11,408.28 S 7,840.29 S 2,329.34 S 10,169.63 R139 Robert R119 R0 Robert R119 R119 R0 Robert R119 R0		Research Opportunity		Mineral Resources												
R118 Research Cancer Center (CAN) Cancer Center (CAN) S 3,129.08 S 19,248.57 S 11,408.28 S 7,840.29 S 2,229.34 S 10,169.63	R117	Endowment	Resources(EMR)	(EMR)	\$	118,743.74	\$	731,602.86	\$	506,337.68	\$	225,265.18	\$	88,518.48	\$	313,783.66
R118 Research Cancer Center (CAN) Cancer Center (CAN) S 3,129.08 S 19,248.57 S 11,408.28 S 7,840.29 S 2,229.34 S 10,169.63		5 51: 1 11 14														
Badzek Family Endowment R119 for Nursing (NSG) Nursing (NSG) S 2,998.27 S 16,200.97 S 10,000.00 S 6,200.97 S 2,216.46 S 8,417.43	D110	_	Cancar Cantar(CAN)	Cancar Cantar (CANI)	۲	2 120 00	۲	10 249 57	۲	11 400 20	Ļ	7 040 20	ے	2 220 24	Ļ	10 160 63
R119 For Nursing Research Nursing (NSG) Nursing (NSG) S 2,998.27 S 16,200.97 S 10,000.00 S 6,200.97 S 2,216.46 S 8,417.43	KIIO	Research	Cancer Center(CAN)	Cancer Center (CAN)	Ş	3,129.00	Ş	19,246.57	Ş	11,406.26	ې	7,040.29	Ş	2,329.34	Ą	10,109.03
R119 For Nursing Research Nursing (NSG) Nursing (NSG) S 2,998.27 S 16,200.97 S 10,000.00 S 6,200.97 S 2,216.46 S 8,417.43		Badzek Family Endowment														
R120 Nursing faculty Research Nursing (NSG) Nursing (NSG) S 2,939.66 \$ 17,740.00 \$ 2,348.08 \$ 15,391.92 \$ 2,177.36 \$ 17,569.28 Hall - de Graaf Endowment for Women in Science & R121 Engineering Arts & Sciences (A&S) & 2,912.23 \$ 17,458.21 \$ 4,739.44 \$ 12,718.77 \$ 2,157.57 \$ 14,876.34 Fithian Family Foundation #2/Behavioral Medicine-R122 Psychiatry Medicine-R122 Psychiatry Medicine-R122 Psychiatry Medicine-R129 Psychiatry Medicine-R129 Psychiatry Medicine-R129 Psychiatry Medicine-R129 Professorship/Nursing Nursing(NSG) Nursing (NSG) \$ 40,985.52 \$ 229,615.13 \$ 78,843.98 \$ 15,0771.15 \$ 30,302.21 \$ 181,073.36 \$ 12,352.00 \$ 8,590.78 \$ 20,942.98 \$ 15,0771.15 \$ 30,302.21 \$ 181,073.36 \$ 12,352.00 \$	R119	•	Nursing(NSG)	Nursing (NSG)	\$	2,998.27	\$	16,200.97	\$	10,000.00	\$	6,200.97	\$	2,216.46	\$	8,417.43
R120 Nursing Faculty Research Hall - de Graaf Endowment for Women in Science & R121 Engineering Arts & Sciences (A&S) Arts & Sciences (A&S) S 2,912.23 S 17,458.21 S 4,739.44 S 12,718.77 S 2,157.57 S 14,876.34 Fithian Family Foundation #2/Pehavioral Medicine-B122 Psychiatry Medicine (MED) Medicine (MED) Medicine (MED) S 11,636.76 S 62,116.51 S 49,764.31 S 12,352.20 S 8,590.78 S 20,942.98 Practice Research Partology and Audiology Research Pathology and Audiology Research Pathology and Audiology Research Pathology and Audiology Research Pathology and Medicine (MED) Engineering & Mineral Resources & Engineering & Mineral Resources & Engineering & Mineral Resources & Resources (EMR) Engineering & Mineral Mineral Resources & Engineering & Engineering & Mineral Resources & Engineering & Engineering & Engineering & Engineering & Mineral Resources & Engineering & Mineral Resources (EMR) S 8,797.11 S 44,495.12 S 38,163.59 S 6,331.53 S 6,515.10 S 12,846.63 S 12,846.6																
Hall - de Graaf Endowment for Women in Science & R121 Engineering																
for Women in Science & Engineering	R120		Nursing(NSG)	Nursing (NSG)	\$	2,939.66	\$	17,740.00	\$	2,348.08	\$	15,391.92	\$	2,177.36	\$	17,569.28
R121 Engineering Arts & Sciences (A&S) Arts & Sciences (A&S) \$ 2,912.23 \$ 17,458.21 \$ 4,739.44 \$ 12,718.77 \$ 2,157.57 \$ 14,876.34																
Fithian Family Foundation #2/Behavioral Medicine Medicine (MED) Medicine (MED) \$ 11,636.76 \$ 62,116.51 \$ 49,764.31 \$ 12,352.20 \$ 8,590.78 \$ 20,942.98	D4.24		Anto 0 Colono (A 0 C)	A (A.Q.C.)	<u>,</u>	2 04 2 22	,	47.450.24	ب ا	4 720 44	ć	42 740 77	۾ ا	2 4 5 7 5 7	<u>,</u>	44.076.24
#2/Behavioral Medicine- R122 Psychiatry Medicine- R124 Psychiatry Medicine-	K121		Arts & Sciences(A&S)	Arts & Sciences (A&S)	\$	2,912.23	\$	17,458.21	\$	4,/39.44	\$	12,/18.//	\$	2,157.57	\$	14,876.34
R122 Psychiatry Medicine (MED) Medicine (MED) \$ 11,636.76 \$ 62,116.51 \$ 49,764.31 \$ 12,352.20 \$ 8,590.78 \$ 20,942.98		· ·														
WVUH Evidence Based Practice Research Professorship/Nursing Nursing(NSG) Nursing (NSG) \$ 40,985.52 \$ 229,615.13 \$ 78,843.98 \$ 150,771.15 \$ 30,302.21 \$ 181,073.36 \$ 67ace C. Clements Speech Puthology and Audiology Human Resources & Education(HRE) \$ 5,538.51 \$ 31,036.57 \$ 19,173.64 \$ 11,862.93 \$ 4,120.99 \$ 15,983.92 \$ 150,771.15 \$ 30,302.21 \$ 181,073.36 \$ 181,073.36 \$ 11,862.93 \$ 4,120.99 \$ 15,983.92 \$ 150,771.15 \$ 30,302.21 \$ 181,073.36 \$ 181,073.36 \$ 11,862.93 \$ 4,120.99 \$ 15,983.92 \$ 15	R122		Medicine(MED)	Medicine (MED)	Ś	11.636.76	Ś	62.116.51	Ś	49.764.31	Ś	12.352.20	Ś	8.590.78	Ś	20.942.98
Practice Research Professorship/Nursing Professo					т		T	52,22552	-	,	т		Ť	5,5555	T	
Grace C. Clements Speech																
Pathology and Audiology Research Research Education (HRE) Education (HRE) \$ 5,538.51 \$ 31,036.57 \$ 19,173.64 \$ 11,862.93 \$ 4,120.99 \$ 15,983.92	R123	Professorship/Nursing	Nursing(NSG)	Nursing (NSG)	\$	40,985.52	\$	229,615.13	\$	78,843.98	\$	150,771.15	\$	30,302.21	\$	181,073.36
R124 Research Education(HRE) Education (HRE) \$ 5,538.51 \$ 31,036.57 \$ 19,173.64 \$ 11,862.93 \$ 4,120.99 \$ 15,983.92		Grace C. Clements Speech														
Virginia Oil and Gas Research Endowment for R125 PNGE Engineering & Mineral Resources Resources(EMR) (EMR) \$ 6,904.59 \$ 38,140.40 \$ 20,416.81 \$ 17,723.59 \$ 5,087.93 \$ 22,811.52		0,														
Research Endowment for R125 PNGE Resources (EMR) Mineral Resources (EMR) \$ 6,904.59 \$ 38,140.40 \$ 20,416.81 \$ 17,723.59 \$ 5,087.93 \$ 22,811.52	R124		Education(HRE)	, ,	\$	5,538.51	\$	31,036.57	\$	19,173.64	\$	11,862.93	\$	4,120.99	\$	15,983.92
R125 PNGE Resources(EMR) (EMR) \$ 6,904.59 \$ 38,140.40 \$ 20,416.81 \$ 17,723.59 \$ 5,087.93 \$ 22,811.52 R126 Engineering & Mineral Resources (EMR) S 7,732.41 \$ 31,946.04 \$ 14,513.11 \$ 17,432.93 \$ 4,223.25 \$ 21,656.18 R127 Research for PNGE Resources (EMR) Cancer Center (CAN) Cancer Center (CAN) S 17,080.54 \$ 90,358.14 \$ 47,632.37 \$ 42,725.77 \$ 12,610.13 \$ 55,335.90 Martha Gaines & Russell Wehrle Pediatric Research Qualifying - Biological, Charleston Division Charleston Division Cancer Center (CAN) Ca			Fundamento - O Malancas													
Michael Baker Corporation R126 Engineering & Mineral Engineering &	D125				ċ	6 004 50	خ	29 140 40	خ	20 416 81	ċ	17 722 50	خ	5 097 02	ċ	22 811 52
Michael Baker Corporation R126 Engineering & Mineral Resources (EMR)	KIZS	PNGE	nesources(EIVIN)	•	Ş	0,904.59	Ş	36,140.40	Ş	20,410.81	Ş	17,725.59	Ş	5,067.95	Ş	22,011.52
R126 Endowment/CEE Resources(EMR) (EMR) \$ 8,797.11 \$ 44,495.12 \$ 38,163.59 \$ 6,331.53 \$ 6,515.10 \$ 12,846.63		Michael Baker Corporation	Engineering & Mineral													
Darrell & Diane Williams Resources (EMR) Mineral Resources (EMR) S 5,732.41 S 31,946.04 S 14,513.11 S 17,432.93 S 4,223.25 S 21,656.18 R128 Preservati Cancer Research Cancer Center (CAN) Cancer Center (CAN) S 17,080.54 S 90,358.14 S 47,632.37 S 42,725.77 S 12,610.13 S 55,335.90 Martha Gaines & Russell Wehrle Pediatric Research Qualifying - Biological, Charleston Division Charleston Division Cancer Center (CAN) Charleston Division Charleston Division Cancer Center (CAN) Ca	R126				\$	8,797.11	\$	44,495.12	\$	38,163.59	\$	6,331.53	\$	6,515.10	\$	12,846.63
R127 Research for PNGE Resources(EMR) (EMR) \$ 5,732.41 \$ 31,946.04 \$ 14,513.11 \$ 17,432.93 \$ 4,223.25 \$ 21,656.18 R128 Preservati Cancer Research Cancer Center (CAN) \$ 17,080.54 \$ 90,358.14 \$ 47,632.37 \$ 42,725.77 \$ 12,610.13 \$ 55,335.90 Martha Gaines & Russell Wehrle Pediatric Research Qualifying - Biological, Charleston Division		,	, ,	Engineering &		·		·		·		<u> </u>		·		,
R128 Preservati Cancer Research Cancer Center(CAN) Cancer Center (CAN) \$ 17,080.54 \$ 90,358.14 \$ 47,632.37 \$ 42,725.77 \$ 12,610.13 \$ 55,335.90 Martha Gaines & Russell Wehrle Pediatric Research Qualifying - Biological, Charleston Division		Darrell & Diane Williams	Engineering & Mineral	Mineral Resources												
Martha Gaines & Russell Wehrle Pediatric Research Qualifying - Biological, Charleston Division	R127	Research for PNGE	Resources(EMR)	(EMR)	\$	5,732.41	\$	31,946.04	\$	14,513.11	\$	17,432.93	\$	4,223.25	\$	21,656.18
Martha Gaines & Russell Wehrle Pediatric Research Qualifying - Biological, Charleston Division																
Martha Gaines & Russell Wehrle Pediatric Research Qualifying - Biological, Charleston Division	D130	Drosomunti Conser Deses and	Concer Conten(CANI)	Concor Cortex (CAN)	ے ا	17 000 54	۲	00.350.44	ے	47 (22 27	Ļ	42 725 77	_ ا	12 (40 42	Ļ	EE 33E 00
Wehrle Pediatric Research Qualifying - Biological, Charleston Division	K178		cancer center(CAN)	` '	>	17,080.54	Ş	90,358.14	Ş	47,032.37	\$	42,/25.//	Ş	12,610.13	Ş	55,335.90
			Qualifying - Riological													
	R129	Endowment	Biotech & Biomedical	(MCC)	\$	5,817.66	\$	29.883.79	\$	8,300.82	\$	21,582.97	Ś	4.293.69	\$	25,876.66

Fund ID	Fund Description	Budget Division	Unit	F	Y19 Spend		udget through FY19 Spend	Ехр	enses through CLS-2019	ا	Balance through FY19		FY20 Spend	Ba	alance Forward
D4 2 0	E. Jane Martin Research	Name in PARCO	Name in a (NGC)	÷	2.046.42	۲.	45.002.27	,	1 000 00	بر	44.002.27	<u> </u>	2 477 24	۸ .	47.060.40
130	Doctoral Fund	Nursing(NSG)	Nursing (NSG)	\$	2,946.42	\$	15,883.27	\$	1,000.00	\$	14,883.27	\$	2,177.21	\$	17,060.48
	John T. & June R. Chambers														
131	Chair of Oncology Research	Cancer Center(CAN)	Cancer Center (CAN)	\$	85,803.93	\$	433,670.06	\$	507,280.48	\$	(73,610.42)	\$	63,170.99	\$	(10,439.43)
	Christopher Cline Chair in														
R132	Orthopedic Surgery	Medicine(MED)	Medicine (MED)	\$	233,836.22	\$	1,252,352.96	\$	798,409.53	\$	453,943.43	\$	172,852.40	\$	626,795.83
R133	Mabel C. Phares Leukemia Research Endowment	Cancer Center(CAN)	Cancer Center (CAN)	Ś	40,651.33	\$	282,926.22	Ś	195,608.82	Ś	87,317.40	Ś	29,885.26	\$	117,202.66
			Engineering &	т	,	,		т		7	51,521116	7		7	
5404	Gary and Lisa Christopher	Qualifying -	Mineral Resources		44.000.00	_	50.005.11	_	22.225.54	_	22.272.22	_	40.474.67	_	
R134	Graduate Fellowship WV United Health System	Interdisciplinary	(EMR)	\$	14,268.69	\$	63,906.41	\$	30,826.61	\$	33,079.80	Ş	10,471.67	\$	43,551.47
	Evidence-Based Nursing														
R135	Practice Res.	Nursing(NSG)	Nursing (NSG)	\$	4,908.00	\$	24,796.84	\$	15,102.16	\$	9,694.68	\$	3,614.45	\$	13,309.13
	Mike Ross Family Pediatric Diabetes Research	Qualifying - Biological,													
136	Endowment	Biotech & Biomedical	Medicine (MED)	\$	47,145.86	\$	245,109.55	\$	17,443.16	\$	227,666.39	\$	34,835.07	\$	262,501.46
R137	Van Wyk Cancer Research Endowment	Cancer Center(CAN)	Cancer Center (CAN)	ċ	2,914.76	ċ	14,303.94	ċ	8,234.21	خ	6,069.73	ċ	2,155.74	\$	8,225.47
.137	Liidowineiit	Cancer Center(CAN)	Cancer Center (CAN)	Ų	2,314.70	۲	14,303.94	٧	0,234.21	۲	0,003.73	٦	2,133.74	٧	0,223.47
	Robert T. Bruhn Physics														
R138	Research Endowment Women in Science and	Arts & Sciences(A&S)	Arts & Sciences (A&S)	\$	6,093.51	\$	35,448.91	\$	-	\$	35,448.91	\$	4,475.46	\$	39,924.37
	Engineering Giving Circle	Qualifying -													
R139	Endowment	Interdisciplinary	Arts & Sciences (A&S)	\$	2,934.86	\$	15,631.29	\$	3,364.67	\$	12,266.62	\$	2,165.65	\$	14,432.27
	Jarrett Family Decearch														
R140	Jarrett Family Research Endowment for Dentistry	Dentistry (DEN)	Dentistry (DEN)	\$	11,628.97	\$	62,521.98	\$	18,584.26	\$	43,937.72	\$	8,553.48	\$	52,491.20
	Donald R. & Linda E.		, , ,	-			,			Ė	•		<u> </u>		,
111	Holcomb Research	Qualifying - Biological,	Dontistmy (DEN)	۲	11 450 77	ے	F2 117 20	۲	F 220 42	ب	46 706 00	۲	9.406.34	۲	EE 202 20
141	Endowment Dentistry Arch Coal Inc. Endowment	Biotech & Biomedical	Dentistry (DEN) Engineering &	\$	11,458.77	Ş	52,117.38	Ş	5,320.42	\$	46,796.96	>	8,406.34	\$	55,203.30
	for Mine Health & Safety	Engineering & Mineral	Mineral Resources												
R142	Research	Resources (EMR)	(EMR)	\$	31,003.45	\$	149,915.52	\$	48,712.18	\$	101,203.34	\$	23,364.20	\$	124,567.54

						В	udget through	Ехр	enses through		Balance through					
Fund ID	Fund Description	Budget Division	Unit	F	Y19 Spend		FY19 Spend		CLS-2019		FY19		FY20 Spend	Ва	lance Forward	
R143	Shaw Pathology Research	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$	5,901.62	\$	32,211.93	\$	7,950.00	\$	24,261.93	\$	4,362.50	\$	28,624.43	
	O/		, ,		,		,		,	Ė	,		,		•	
R144	Dr. Mohindar S. Seehra Research Award	Arts & Sciences (A&S)	Arts & Sciences (A&S)	\$	2,927.72	\$	18,320.69	\$	1,264.00	\$	17,056.69	\$	2,157.88	\$	19,214.57	split between MAP and Financial Aid
D1 45	Oleg D. & Valentina P. Jefimenko Library Resources	Library (LID)	Library (LID)	ć	15 006 00	۲	112 200 21	ć	112 200 27	,	0.04	۲	15 000 12	ć	15 000 10	
R145	#2	Library (LIB)	Library (LIB)	\$	15,906.99	\$	112,299.31	>	112,299.27	\$	0.04	\$	15,696.12	\$	15,696.16	
R146	Frank and Susan Klatskin Cerminara Endowment	Qualifying - Interdisciplinary	Engineering & Mineral Resources (EMR)	\$	5,849.18	\$	25,488.47	\$	19,639.41	\$	5,849.06	\$	4,737.77	\$	10,586.83	
R147	Nesselroad Family Glaucoma Research	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$	8,195.76	\$	39,254.57	\$	10,779.47	\$	28,475.10	\$	6,206.55	\$	34,681.65	
R148	Salvatore and Josephine Cilento Research Enhancement	Qualifying - Interdisciplinary	Engineering & Mineral Resources (EMR)	\$	4,461.26	\$	18,955.02	\$	11,212.00	\$	7,743.02	\$	-	\$	7,743.02	split between MAP and Financial Aid
R149	Statler Research Endowment	Engineering & Mineral Resources (EMR)	Engineering & Mineral Resources (EMR)	\$	1,153,700.17	\$	5,281,743.78	\$	1,885,441.53	\$	3,396,302.25	\$	849,469.69	\$	4,245,771.94	
R150	WVU School of Medicine Research Endowment	Qualifying - Biological, Biotech & Biomedical	Medicine (MED)	\$	43,167.98	\$	225,353.97	\$	-	\$	225,353.97	\$	31,998.10	\$	257,352.07	
V813	Quad/Graphics Chair in Internal Medicine, Eastern Division	Health Science East(HSE)	Health Science East (HSE)	\$	115,566.29	\$	690,977.50	\$	130,630.77	\$	560,346.73	\$	85,383.79	\$	645,730.52	
V815	James H. Walker Chair of Pediatric Cardiology	Medicine(MED)	Medicine (MED)	\$	39,414.36	\$	276,907.35	\$	270,359.52	\$	6,547.83	\$	34,329.23	\$	40,877.06	
V824	James A. Kent Endowment for Biomedical Engineering	Engineering & Mineral Resources(EMR)	Engineering & Mineral Resources (EMR)	\$	20,634.35	\$	125,881.42	\$	95,328.94	\$	30,552.48	\$	15,445.32	\$	45,997.80	
	Osborn Professorship in Hematological Malignancies Research	Cancer Center(CAN)	Cancer Center (CAN)	\$	74,708.84		488,191.46	\$	401,272.25		86,919.21				142,588.09	
V829	BrickStreet Neurology Fellowship	Medicine(MED)	Medicine (MED)	\$	11,703.83		68,705.63	\$	-	\$	68,705.63		8,671.21		77,376.84	

Fund ID	Fund Description	Pudget Division	Unit	E-	Y19 Spend		udget through FY19 Spend	Ex	penses through CLS-2019	ı	Balance through FY19		FY20 Spend	Da	llance Forward	
Fullu ID	Robert E. Murray	Budget Division	Engineering &	F	113 Speliu		F119 Spellu		CL3-2019		L113		F120 Spellu	Do	nance Forward	
	Chairmanship Mining	Engineering & Mineral														
V830		Resources(EMR)	(EMR)	\$	117,600.19	\$	726,793.81	\$	447,542.75	\$	279,251.06	\$	87,374.18	\$	366,625.24	includes F3V830W
	0 0 1	,	Engineering &		,	ļ .	,	Ė	,	Ė	•	Ė	,		•	
	Rita Radcliff-Deppe & Brian	Engineering & Mineral														
V833	Deppe Fellowship Award	Resources(EMR)	(EMR)	\$	4,920.67	\$	27,584.00	\$	3,179.97	\$	24,404.03	\$	3,775.14	\$	28,179.17	
	Energy Materials Science &		Engineering &													
	Engineering Facilities	Engineering & Mineral														
V835	Support	Resources(EMR)	(EMR)	\$	_	\$	760.00	\$	_	\$	760.00	\$	-	\$	760.00	All financial aid - nothing in MAP
	Oleg D. and Valentina P.															
V841	Jefimenko Library Resources	Library(LIB)	Library (LIB)	\$	23,464.03	\$	139,508.47	\$	139,508.47	\$	-	\$	17,422.85	\$	17,422.85	
	Oleg D. and Valentina P.															
	Jefimenko Physics					_		_		_		_		_		
V842	Fellowship	Arts & Sciences(A&S)	Arts & Sciences (A&S)	\$	4,396.64	Ş	31,666.01	Ş	9,612.26	Ş	22,053.75	Ş	4,338.24	Ş	26,391.99	split between MAP and Financial Aid
	Bowlby Wood Science															
V044	Graduate Research	Agriculture &	Agriculture &	۲	62 242 42	,	245 040 24	۲	211 004 62	ے ا	104 722 50	۲,	46 600 06	۲.	151 422 45	
V844	Fellowship	Forestry(AGR)	Forestry (AGR)	\$	62,243.42	Ş	315,818.21	\$	211,084.62	Ş	104,733.59	Ş	46,698.86	Ş	151,432.45	
	James P. Boland, M.D.	Qualifying Diological	Health Sciences -													
V850	Department of Surgery Endowed Research	Qualifying - Biological, Biotech & Biomedical	Charleston Division (MCC)	\$	32,716.65	خ	183,412.36	ć	_	Ś	183,412.36	خ	28,165.21	ċ	211,577.57	
V830	WVU Ruby Scholars	Biotecii & Biomedicai	(IVICC)	۲	32,710.03	٦	163,412.30	٧	_	٦	165,412.50	ې	28,103.21	۲	211,377.37	
	Graduate Research		Academic Affairs													
V854	Fellowships	Academic Affairs(AAR)		Ś	607,423.23	\$	3,580,256.02	Ś	2,011,994.56	s	1,568,261.46	Ś	458,277.63	Ś	2,026,539.09	split between MAP and Financial Aid
100.	Robert E. Pyle Chemical	110000111071110110(70111)	Engineering &	7	007,120.20	Ť	3,333,233.02	7	2,011,0000	7	2,000,202.10	7	100,277100	Ψ	2,020,000.00	
	Engineering Graduate	Engineering & Mineral														
V858	Fellowship	Resources(EMR)	(EMR)	\$	5,917.73	\$	35,954.37	\$	23,711.65	\$	12,242.72	\$	4,406.37	\$	16,649.09	
	James & Ruby Romano Civil		Engineering &				•		•		·		·		·	
	& Environmental	Engineering & Mineral	Mineral Resources													
V859	Engineering End.	Resources(EMR)	(EMR)	\$	41,251.48	\$	251,279.63	\$	263,502.30	\$	(12,222.67)	\$	30,701.53	\$	18,478.86	
	Robert & Stephany Ruffolo															
	Pharmacy Graduate															
V880	Fellowship	Pharmacy(PHR)	Pharmacy (PHR)	\$	5,761.12	\$	24,538.35	\$	8,000.00	\$	16,538.35	\$	4,245.67	\$	20,784.02	
			Engineering &													
1	James and Betty Hall	Qualifying -	Mineral Resources													
V882	Fellowship	Interdisciplinary	(EMR)	\$	11,674.29	\$	52,989.93	\$	41,397.94	\$	11,591.99	\$	8,597.77	\$	20,189.76	split between MAP and Financial Aid
	Stuart M. & Joyce N.															
	Robbins Distinguished	Qualifying - Biological,				١.				l .				 		
V886	Prof/Epidemiology	Biotech & Biomedical	Center (HSC)	\$	115,619.13	\$	551,947.77	\$	261,823.03	\$	290,124.74	\$	85,322.25	\$	375,446.99	

Annual Report through Fiscal Year 2019

					E	Budget through	Ехр	enses through	В	Balance through			
Fund ID	Fund Description	Budget Division	Unit	FY19 Spend		FY19 Spend		CLS-2019		FY19	FY20 Spend	Ва	alance Forward
	Academy of Chemical		Engineering &										
	Engineers Graduate	Engineering & Mineral	Mineral Resources										
V887	Fellowship	Resources(EMR)	(EMR)	\$ 18,477.40	\$	85,762.68	\$	26,194.45	\$	59,568.23	\$ 14,281.29	\$	73,849.52
		Qualifying - Biological,											
V892	J.F. Brick Chair in Neurology		Medicine (MED)	\$ 174,436.10	\$	937,832.54	\$	684,245.56	\$	253,586.98	\$ 128,300.38	\$	381,887.36
			Engineering &										
	Jack and Marietta	Qualifying - Biological,	Mineral Resources										
V894	Mullenger Fellowship	Biotech & Biomedical	(EMR)	\$ 3,076.47	\$	14,397.71	\$	3,179.97	\$	11,217.74	\$ 2,676.60	\$	13,894.34
	Research Trust Fund												
	Jefimenko Professorship in	Qualifying -											
V900	Physics	Interdisciplinary	Arts & Sciences (A&S)	\$ 35,632.10	\$	156,357.99	\$	116,185.56	\$	40,172.43	\$ 20,545.40	\$	60,717.83
			·	·		·		·		·	•		·
	Cyber Physical System	WVU Institute of	WVU Institute of										
W762		Technology	Technology	\$ -	\$	19,999.78	\$	22,174.32	\$	(2,174.54)	\$ -	\$	(2,174.54)
		O,				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		, , ,			,
			Sub-Totals	\$ 3,862,895.24	\$	20,762,009.67	\$:	10,763,616.41	\$	9,998,393.26	\$ 2,951,240.15	\$	12,949,633.41
	Financia	I Aid Accounts											
			Engineering &										
	Wells Fargo Energy Group		Mineral Resources										
Z232	Scholarship	Financial Aid(FAD)	(EMR)	\$ 10,487.38	\$	60,787.23	\$	14,500.00	\$	46,287.23	\$ -	\$	46,287.23
	Benjamin James Galford												
Z238	Research Scholarship	Financial Aid(FAD)	Arts & Sciences (A&S)	\$ 11,564.01	\$	56,677.07	\$	54,340.00	\$	2,337.07	\$ -	\$	2,337.07
	Carl Del Signore Foundation		Academic Affairs										
Z245	Graduate Fellowship	Financial Aid(FAD)	(AAR)	\$ 5,794.52	\$	33,437.81	\$	15,500.00	\$	17,937.81	\$ -	\$	17,937.81
	George M. & Mary Freda												
	Vance Medical Scholarship-												
Z247	Fellowship	Financial Aid(FAD)	Cancer Center (CAN)	\$ 44,111.30	\$	306,863.11	\$	287,961.08	\$	18,902.03	\$ 32,829.73	\$	51,731.76
	William S. Clapper		Engineering &										
	Mechanical & Aerospace		Mineral Resources										
Z277	Engineering Scholarship	Financial Aid(FAD)	(EMR)	\$ 5,942.84	\$	36,957.82	\$	28,738.00	\$	8,219.82	\$ -	\$	8,219.82
			Engineering &										
	Everette C. Dubbe Research		Mineral Resources										

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Fund ID	Fund Description	Budget Division	Unit	F	Y19 Spend		udget through FY19 Spend	•	enses through CLS-2019	t	Balance through FY19		FY20 Spend	Ba	alance Forward
	Oleg D. and Valentina P.				-						-				
	Jefimenko Physics	Qualifying -													
2282	Scholarship	Interdisciplinary	Financial Aid (FAD)	\$	3,282.10	\$	22,819.31	\$	22,000.00	\$	819.31	\$	-	\$	819.31
	James Bergen and Randy		Engineering &												
	Monteith Anderson Scholarship in MAE	Financial Aid(FAD)	Mineral Resources (EMR)	\$	2,889.42	\$	15,371.96	ċ	10,075.00	ć	5,296.96	ċ	_	\$	5,296.96
2320	Scholarship in MAE	Filialiciai Alu(FAD)	Engineering &	Ş	2,009.42	Ş	15,571.90	Ą	10,075.00	Ą	3,290.90	Ş		Ş	3,290.90
			Mineral Resources												
Z329	Morton Scholarship	Financial Aid(FAD)	(EMR)	\$	13,210.29	\$	66,109.83	\$	39,500.00	\$	26,609.83	\$	-	\$	26,609.83
7000	David VanDorn Sutton	5: ' A: /5A5)	5	_	46 400 40		242.002.66				242.002.66			_	242.002.66
Z333	Scholarship William "Bill" Closser	Financial Aid(FAD)	Financial Aid (FAD)	\$	46,198.10	\$	243,092.66	\$	-	\$	243,092.66	\$	-	\$	243,092.66
	Memorial Electrical	Qualifying -													
	Engineering Sch.	Interdisciplinary	Financial Aid (FAD)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Z339	Morrissey-Ropp Scholarship	Financial Aid(FAD)	Arts & Sciences (A&S)	\$	8,569.51	\$	43,217.25	\$	45,151.00	\$	(1,933.75)	\$	-	\$	(1,933.75)
	Martha Hopkins Hashinger		Engineering & Mineral Resources												
Z341	Scholarship	Financial Aid(FAD)	(EMR)	\$	3,181.70	\$	16,625.04	\$	10,980.00	Ś	5,645.04	\$	_	\$	5,645.04
		,	Engineering &				-,		7,					Ė	-,-
	Research Trust Fund Taylor	Qualifying -	Mineral Resources												
2364	Endowment	Interdisciplinary	(EMR)	\$	3,604.62	\$	14,297.93	\$	1,050.00	\$	13,247.93	\$	1,006.36	\$	14,254.29
	Mitchell-Morey Family	Qualifying -													
7365	Endowed Scholarship	Interdisciplinary	Financial Aid (FAD)	Ś	3,373.49	\$	12,535.94	\$	_	\$	12,535.94	\$	_	\$	12,535.94
2505	Zindowed Scholarship	mer discipinal y	Timanetary lia (1715)	Υ	3,373.13	Υ	12,555.51	Y		7	12,333.31	Υ		7	12,333.31
	Statler Research Scholars	Qualifying -													
Z368	Program	Interdisciplinary	Financial Aid (FAD)	\$	113,972.98	\$	396,870.50	\$	259,986.00	\$	136,884.50	\$	-	\$	136,884.50
	William E. & Bonniegail														
7272	Kucan Coleman Research Scholarship	To Do Dotorminod	Financial Aid (FAD)	Ś	1,144.53	Ļ	7,337.80	۲	11,336.00	۲	(3,998.20)	Ļ	_	۲	(2,000,20)
13/2	ocholal Ship	To Be Determined	Financial Aid (FAD)	Ş	1,144.53	Ş	7,337.80	Ş	11,330.00	Ş	(3,998.20)	Ş	-	\$	(3,998.20)
	Bettie D. Gallaher Research	Qualifying -													
Z375	Fellowship	Interdisciplinary	Financial Aid (FAD)	\$	48,135.66	\$	267,847.68	\$	-	\$	267,847.68	\$	-	\$	267,847.68
			Sub-Totals	Ś	337,138.83	Ġ	1,667,131.44	Ġ	853,917.08	¢	813,214.36	Ś	33,836.09	¢	847,050.45
			Jub-10tais	ب	337,130.03	ų	1,007,131.44	ŗ	000,317.00	Ą	013,214.30	ų	33,030.03	ب	077,030.43

Fund ID	Fund Description	Budget Division	Unit	FY19 Spend	Budget through FY19 Spend	Expenses through CLS-2019	Balance through FY19	FY20 Spend	Balance Forward
			Combined Totals	\$ 4,200,034.07	\$ 22,429,141.11	\$ 11,617,533.49	\$ 10,811,607.62	\$ 2,985,076.24	\$ 13,796,683.86