# Old Dominion University Research Foundation

To: Distribution

From: Julian F. Facenda
Executive Director

Date: November 1, 2016

Subject: Annual Report of Sponsored Program Activity - June 30, 2016

Attached please find the Annual Report of Sponsored Program Activity for the fiscal year ended June 30, 2016. This report measures sponsored program activity administered through Old Dominion University Research Foundation by the amount of actual expenditures (direct costs and indirect cost recoveries) incurred during the fiscal year. Unrecovered indirect cost is not included in this report. This report includes sponsored program activity administered by the Research Foundation for Old Dominion University and for certain independent entities affiliated with the University. Included in the report is a schedule of proposals submitted and awards funded for the fiscal year ended June 30, 2016 and the four previous fiscal years. Proposal activity is based upon the total dollar amount requested from sponsoring agencies exclusive of institutional or third party cost share amounts. Award activity reflects the dollar amount of actual funding committed during the reporting period.

The format of the report separately discloses the sponsored program activities of the core University units and the activity of affiliated units. The core University units include all of the academic departments, enterprise centers and self-supporting research positions. The affiliated units reflect sponsored programs of the Virginia Space Grant Consortium and the Tidewater Consortium for Higher Education. Activity for the Virginia Commercial Space Flight Authority is not reflected for fiscal year 2015

Some key points to note with respect to the core University activity are as follows:

- The average yearly increase for the past five fiscal periods is 2.74%.
- Sponsored program activity of $46.4 million is an 8.9% increase from fiscal year 2015.
- Expenditures in excess of $1 million by funding source for the fiscal year were:

| | |
|---|---|
| U.S. Department of Education | $ 7.5 million |
| National Science Foundation | $ 6.6 million |
| U.S. Department of Health and Human Services | $ 4.3 million |
| Virginia Department of Education | $ 4.1 million |
| U.S. Navy | $ 3.1 million |
| U.S. Department of Energy | $ 2.1 million |
| National Aeronautics and Space Administration | $ 1.2 million |
| Jefferson Science Associates, LLC (JLAB) | $ 1.2 million |
| Virginia Department of Environmental Quality | $ 1.1 million |
| Pulse Biosciences, Inc. | $ 1.0 million |

- The above rankings include agency funding passed-through from the University.

- Activity of individual faculty conducting research through University-wide enterprise centers is reflected under the faculty member's home department. The research activity of core staff assigned to an enterprise center is reflected in the center's activity. The Virginia Modeling, Analysis and Simulation Center (VMASC) and Frank Reidy Research Center for Bioelectrics core staff activities are reported under the Office of Research and Other Units.

- University departments (including SSRP's and center activity) exceeding $1 million for the fiscal year were:

| | |
|---|---|
| Center for Educational Partnerships | $ 5.2 million |
| Communication Disorders and Special Education | $ 3.7 million |
| Ocean, Earth and Atmospheric Sciences | $ 3.6 million |
| Physics | $ 3.6 million |
| Frank Reidy Center for Bioelectrics | $ 2.8 million |
| Modeling, Simulation and Visualization | $ 2.5 million |
| Electrical & Computer Engineering | $ 2.3 million |
| Chemistry and Biochemistry | $ 2.2 million |
| Virginia Modeling, Analysis and Simulation Center | $ 1.8 million |
| Biological Sciences | $ 1.7 million |
| Center for Enterprise Innovation | $ 1.7 million |
| Computer Sciences | $ 1.6 million |
| Medical Diagnostic and Translational Sciences | $ 1.4 million |
| Nursing | $ 1.4 million |
| STEM Education and Professional Studies | $ 1.3 million |
| Psychology | $ 1.3 million |

- Proposal submissions during fiscal year 2016 increased 33.98% from fiscal year 2015 to $363.9 million dollars. Awards funded during fiscal year 2016 increased 12.91% from fiscal year 2015 levels. The increase is due primarily to a $103 million NASA proposal submitted during fiscal year 2016.

The following charts graphically depict ODURF- related current fiscal year research expenditures and the trend in research activity over the past six years:

**Chart A – Research Expenditures for University Activity Excluding Affiliates**

This chart indicates percentage of total research expenditures for fiscal year 2016 for each college and other university units.

**Chart B – Total Proposals Submitted and Awards Funded Including Affiliates**

This chart indicates the change in proposal submissions from $186 million during fiscal year 2008 to $364 million dollars during fiscal year 2016. Awards funded during this same period increased from $38 million to $45 million.

Should you have any questions concerning the enclosed report please do not hesitate to contact me at 683-7210.

Chart A – Research Expenditures for University Units Excluding Affiliates

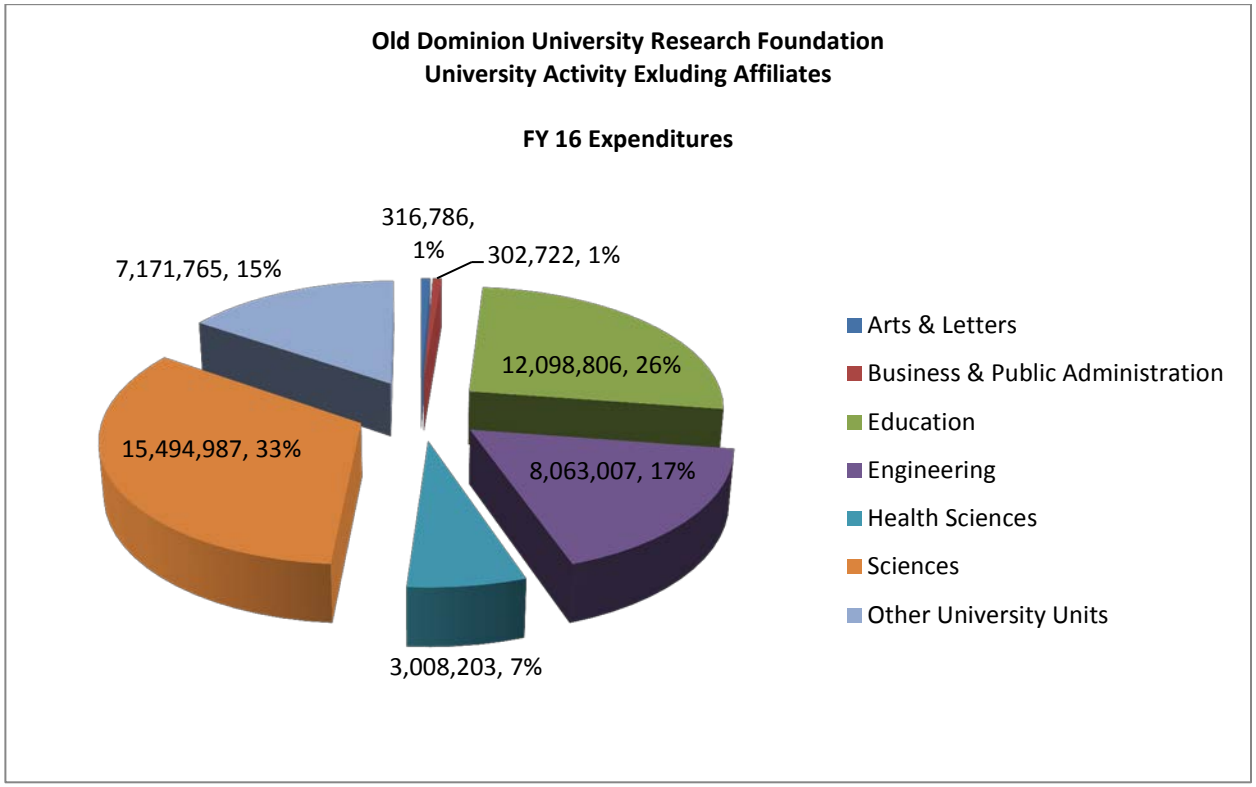
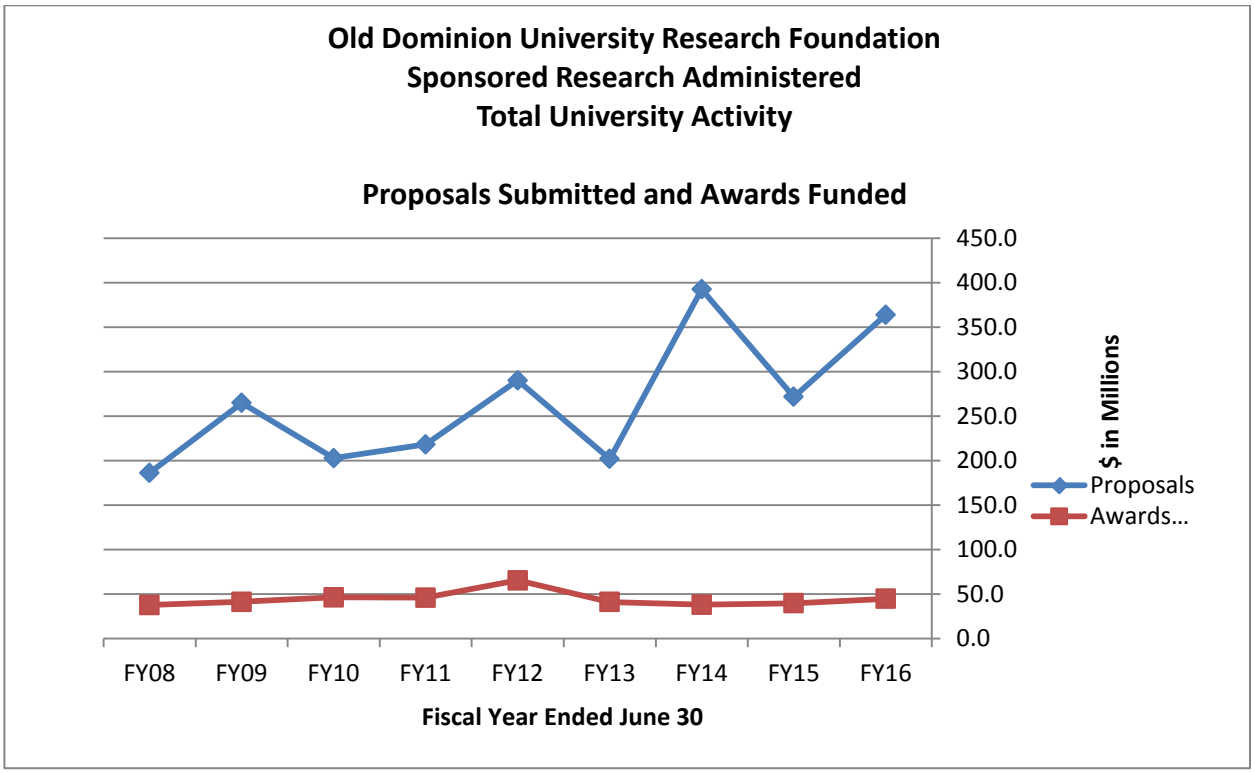



Chart B – Proposals Submitted and Awards Funded



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# OLD DOMINION UNIVERSITY RESEARCH FOUNDATION

# ANNUAL REPORT OF SPONSORED PROGRAM ACTIVITY

# FISCAL YEAR ENDED JUNE 30, 2016

## CONTENTS


**Schedule 1** - Summary of Sponsored Program Activity
Fiscal Year 2016 through Fiscal Year 2011

**Schedule 2** - Summary of Sponsored Program Activity by Major Funding
Source – Fiscal Year 2016 through Fiscal Year 2012

**Schedule 3** - Comparison of Direct Cost, Indirect Cost and Effective Indirect
Cost Rates – University Units – Fiscal Year 2016 through Fiscal Year 2014

**Schedule 4** - Sponsored Program Activity Individual Project Listing
Fiscal Year 2016

**Schedule 5** - Enterprise Centers Including Projects Reported as Activity of an
Academic Department – Fiscal Year 2016

**Schedule 6** - Sponsored Program Activity – Proposals Submitted and
Awards Funded – Fiscal Year 2016 through Fiscal Year 2012

# SCHEDULE 1

## Summary of Sponsored Program Activity

## Fiscal Year 2016 through Fiscal Year 2011

# SCHEDULE 1

## OLD DOMINION UNIVERSITY RESEARCH FOUNDATION
## SUMMARY OF SPONSORED PROGRAM ACTIVITY

(MEASURED BY EXPENDITURES INCURRED)

**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2011**

| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 11 |
|---|---|---|---|---|---|---|
| **COLLEGE OF ARTS & LETTERS** | | | | | | |
| Dean's Office | $ 2,129 | $ 14,430 | $ 30,491 | $ 26,210 | $ 23,384 | $ 22,745 |
| Communication & Theatre Arts | 33,450 | 1,868 | 6,905 | 5,366 | 48,536 | - |
| English | 50,117 | 60,229 | 81,313 | 68,275 | 65,224 | 71,219 |
| Foreign Languages/Literatures | - | 3,826 | 1,867 | - | - | - |
| History | 4,259 | 26,459 | 58,682 | 88,485 | 91,433 | 65,469 |
| International Studies | - | - | - | - | 46,027 | 4,642 |
| Political Science & Geography | 61,425 | 29,781 | 83,956 | 20,341 | 23,290 | 70,744 |
| Political Science & Geography - VMASC | - | - | - | 5,280 | 18,433 | 4,648 |
| Philosophy & Religious Studies | 3,455 | - | - | 6,000 | - | - |
| Social Science Research Center | 149,199 | 130,809 | 175,408 | 206,241 | 243,088 | 233,307 |
| Sociology & Criminal Justice | 12,752 | 13,661 | 7,384 | 25,978 | 239,320 | 257,408 |
| College Total | $ 316,786 | $ 281,063 | $ 446,006 | $ 452,176 | $ 798,735 | $ 730,182 |
| % Change from prior year | 12.71% | -36.98% | -1.36% | -43.39% | 9.39% | 14.88% |
| Average yearly increase ( decrease) | -11.32% | | | | | |
| **COLLEGE OF BUSINESS AND PUBLIC ADMINISTRATION** | | | | | | |
| Economics | 126,425 | (442) | 60,093 | 59,357 | 21,757 | 90,745 |
| Finance | 2,444 | 7,495 | - | - | 14,559 | - |
| Information Systems & Decision Sciences | 158,436 | 148,544 | - | 10,669 | 78,903 | 167,758 |
| Management | 1,293 | - | - | 9,563 | 52,626 | 17,015 |
| Marketing | 3,863 | - | - | - | 9,365 | - |
| Public Service | 10,262 | 10,404 | 22,176 | 71,133 | 6,286 | - |
| College Total | $ 302,722 | $ 166,001 | $ 82,269 | $ 150,722 | $ 183,496 | $ 275,518 |
| % Change from prior year | 82.36% | 101.78% | -45.42% | -17.86% | -33.40% | -4.83% |
| Average yearly increase ( decrease) | 1.97% | | | | | |

# SCHEDULE 1

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**SUMMARY OF SPONSORED PROGRAM ACTIVITY**

(MEASURED BY EXPENDITURES INCURRED)
**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2011**

| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 11 |
|---|---|---|---|---|---|---|
| **COLLEGE OF EDUCATION** | | | | | | |
| Dean's Office | $ 436,482 | $ 264,167 | $ 320,669 | $ 2,317,690 | $ 960,009 | $ 449,301 |
| Center for Educational Partnerships | 5,183,002 | 4,669,983 | 3,630,365 | - | - | - |
| Communication Disorders and Special Education | 3,708,022 | 3,650,009 | 3,544,135 | 3,076,659 | 3,194,382 | 3,248,813 |
| Counseling and Human Services | 72,310 | 111,934 | 124,783 | 141,942 | 215,922 | 110,907 |
| Educational Foundations and Leadership | 816,336 | 798,728 | 916,845 | 778,034 | 580,643 | 401,698 |
| Human Movement Sciences | 41,308 | 109,017 | 124,789 | 122,146 | 97,348 | 185,799 |
| STEM Education and Professional Studies | 1,320,821 | 1,848,198 | 1,730,137 | 1,213,575 | 590,967 | 321,972 |
| STEM Education and Professional Studies - VMASC | - | - | - | 6,325 | 14,641 | 30,884 |
| Teaching and Learning | 520,525 | 433,989 | 483,439 | 409,397 | 559,851 | 604,761 |
| College Total | $ 12,098,806 | $ 11,886,025 | $ 10,875,162 | $ 8,065,768 | $ 6,213,763 | $ 5,354,135 |
| % Change from prior year | 1.79% | 9.30% | 34.83% | 29.80% | 16.06% | -3.74% |
| Average yearly increase ( decrease) | 25.19% | | | | | |
| **COLLEGE OF ENGINEERING & TECHNOLOGY** | | | | | | |
| Dean's Office | $ 290,154 | $ 101,365 | $ 111,954 | $ 57,060 | $ 137,429 | $ 398,815 |
| Civil & Environmental Engineering | 890,440 | 648,563 | 510,504 | 319,429 | 485,587 | 389,651 |
| Civil & Environmental Engineering - VMASC | 47,474 | - | 47,752 | 179,147 | 43,301 | 41,764 |
| Civil & Environmental Engineering - VCERC | - | - | - | (361) | 4,300 | 12,662 |
| Electrical & Computer Engineering | 921,054 | 893,818 | 1,213,846 | 1,162,556 | 816,527 | 644,279 |
| Electrical & Computer Engineering - ARC | 591,501 | 1,189,505 | 1,055,824 | 1,135,276 | 1,157,799 | 611,638 |
| Electrical & Computer Engineering - Bioelectrics | 775,182 | 1,043,637 | 379,808 | 335,663 | 317,659 | 400,282 |
| Engineering Career Management Center | - | - | 103,513 | 8,650 | - | - |
| Engineering Management and Systems Engineering | 410,275 | 536,522 | 136,861 | 301,453 | 688,481 | 957,042 |
| Engineering Management and Systems Engineering - VMASC | - | - | - | 14,298 | 142,118 | 146,282 |
| Engineering Management and Systems Engineering - NCSOSE | 11,012 | 41,687 | 158,340 | 939,755 | 717,507 | 730,794 |
| Engineering Technology | 861,881 | 370,170 | 349,540 | 453,958 | 614,291 | 776,324 |
| Engineering Technology - ARC | - | 3,063 | 90,721 | 73,773 | 88,882 | 30,492 |
| Mechanical & Aerospace Engineering | 731,570 | 799,335 | 619,202 | 789,354 | 1,242,792 | 1,293,941 |
| Mechanical & Aerospace Engineering - ARC | 23,721 | 24,024 | 40,953 | 48,271 | 55,977 | 117,938 |
| Modeling, Simulation & Visualization | 505,132 | 398,185 | 452,114 | 226,984 | 96,850 | 51,558 |
| Modeling, Simulation & Visualization - VMASC | 2,003,612 | 3,087,263 | 2,754,598 | 2,675,870 | 3,512,089 | 5,342,248 |
| College Total | $ 8,063,007 | $ 9,137,137 | $ 8,025,530 | $ 8,730,315 | $ 10,138,082 | $ 12,112,145 |
| % Change from prior year | -11.76% | 13.85% | -8.07% | -13.89% | -16.30% | -12.47% |
| Average yearly increase ( decrease) | -6.69% | | | | | |

# SCHEDULE 1

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**SUMMARY OF SPONSORED PROGRAM ACTIVITY**

(MEASURED BY EXPENDITURES INCURRED)
**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2011**

| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 11 |
|---|---|---|---|---|---|---|
| **COLLEGE OF HEALTH SCIENCES** | | | | | | |
| Dean's Office | $ (72) | $ 25,073 | $ 5,744 | $ - | $ - | $ 1,182 |
| Community & Environmental Health | 95,308 | 99,218 | 355,423 | 452,579 | 319,145 | 297,653 |
| Dental Hygiene | 53,022 | 63,993 | 41,673 | 87,399 | 69,632 | 83,879 |
| Medical Diagnostic & Translational Sciences | 358,374 | 23,438 | 5,744 | - | - | 8,497 |
| Medical Diagnostic & Translational Sciences - Bioelectrics | 1,038,377 | 653,617 | 1,025,476 | 1,039,078 | 1,180,562 | 1,515,678 |
| Nursing | 1,362,754 | 930,615 | 646,297 | 746,212 | 523,484 | 701,203 |
| Physical Therapy | 100,441 | 199,606 | 227,299 | 155,802 | 113,829 | 69,079 |
| College Total | $ 3,008,203 | $ 1,995,560 | $ 2,307,656 | $ 2,481,070 | $ 2,206,652 | $ 2,677,171 |
| % Change from prior year | 50.74% | -13.52% | -6.99% | 12.44% | -17.58% | 26.99% |
| Average yearly increase ( decrease) | 2.47% | | | | | |
| **COLLEGE OF SCIENCES** | | | | | | |
| Dean's Office | $ 1,420 | $ 8,820 | $ 19,560 | $ 12,688 | $ 11,769 | $ 4,563 |
| Biological Sciences | 1,742,699 | 1,614,718 | 1,665,748 | 2,566,263 | 2,445,856 | 2,214,734 |
| Biological Sciences - Bioelectrics | - | - | 13,785 | 81,084 | 134,103 | 135,409 |
| Biological Sciences - VMASC | - | - | - | - | 9,575 | 86,042 |
| Biological Sciences - VCERC | - | - | - | (723) | 8,606 | 25,324 |
| Center for Coastal Physical Oceanography | 693,392 | 865,985 | 1,289,616 | 1,046,395 | 1,347,043 | 1,277,236 |
| Center for Coastal Physical Oceanography - SSRP | - | - | - | 23,417 | 72,204 | 117,335 |
| Center for Coastal Physical Oceanography - MARI | 32,915 | - | - | - | - | - |
| Chemistry and Biochemistry | 2,202,356 | 1,780,131 | 1,519,745 | 762,725 | 1,544,599 | 1,891,124 |
| Chemistry and Biochemistry - VCERC | (5,971) | 49,077 | 284,215 | 226,784 | 154,597 | 598,453 |
| Computer Science | 1,607,758 | 1,188,118 | 995,043 | 1,335,587 | 1,452,774 | 1,242,474 |
| Mathematics and Statistics | 751,636 | 684,811 | 827,479 | 707,245 | 681,077 | 539,225 |
| Ocean, Earth & Atmospheric Sciences | 3,229,908 | 2,379,550 | 3,721,649 | 3,007,643 | 3,413,924 | 2,706,297 |
| Ocean, Earth & Atmospheric Sciences - SSRP | 349,294 | 494,657 | 285,222 | 269,375 | 430,276 | 304,710 |
| Physics | 3,562,835 | 3,415,041 | 4,097,273 | 3,828,554 | 3,385,594 | 2,660,860 |
| Physics - ARC | - | - | - | - | - | 1,390 |
| Psychology | 1,326,747 | 1,292,856 | 1,536,955 | 1,301,244 | 1,265,317 | 1,133,080 |
| Psychology - Bioelectrics | - | - | - | 4,670 | 25,832 | 63,191 |
| Psychology - VMASC | - | - | - | - | 3,912 | 7,260 |
| College Total | $ 15,494,987 | $ 13,773,764 | $ 16,256,290 | $ 15,172,951 | $ 16,387,058 | $ 15,008,707 |
| % Change from prior year | 12.50% | -15.27% | 7.14% | -7.41% | 9.18% | 14.76% |
| Average yearly increase ( decrease) | 0.65% | | | | | |

# SCHEDULE 1

## OLD DOMINION UNIVERSITY RESEARCH FOUNDATION
## SUMMARY OF SPONSORED PROGRAM ACTIVITY

(MEASURED BY EXPENDITURES INCURRED)

**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2011**

| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 11 |
|---|---|---|---|---|---|---|
| **OFFICE OF RESEARCH AND OTHER UNITS** | | | | | | |
| Office of Research | $ - | $ - | $ - | $ - | $ - | $ 1,000 |
| VMASC: Virginia Modeling, Analysis & Simulation Center | 1,822,109 | 1,995,708 | 2,199,704 | 3,639,735 | 1,511,237 | 2,387,933 |
| Frank Reidy Research Center for Bioelectrics | 2,792,129 | 1,309,606 | 831,116 | 894,851 | 1,085,548 | 976,348 |
| Office of Distance Learning | - | - | - | - | - | 411,788 |
| ODU Business Gateway | 1,658,975 | 1,355,165 | 1,365,604 | 941,862 | 338,640 | 255,148 |
| Miscellaneous ODU Units | 898,552 | 744,696 | 662,388 | 665,073 | 604,562 | 677,383 |
| Total Other Units | $ 7,171,765 | $ 5,405,175 | $ 5,058,812 | $ 6,141,521 | $ 3,539,987 | $ 4,709,600 |
| % Change from prior year | 32.68% | 6.85% | -17.63% | 73.49% | -24.83% | 51.85% |
| Average yearly increase ( decrease) | 10.46% | | | | | |
| **TOTAL UNIVERSITY ACTIVITY** | $ 46,456,275 | $ 42,644,725 | $ 43,051,725 | $ 41,194,523 | $ 39,467,773 | $ 40,867,458 |
| **% CHANGE FROM PRIOR YEAR** | 8.94% | -0.95% | 4.51% | 4.38% | -3.42% | 5.84% |
| Average yearly increase ( decrease) | 2.74% | | | | | |
| **AFFILIATED ACTIVITY** | | | | | | |
| Virginia Commercial Space Flight Authority | - | 13,442,449 | 20,074,491 | 27,850,335 | 47,604,863 | 49,382,878 |
| Virginia Space Flight Academy | - | - | 21,042 | 56,576 | 82,658 | 56,354 |
| Mid-Atlantic Institute for Space & Technology | - | - | - | 2,974 | 190,374 | 256,734 |
| Association for Consortium Leadership | - | - | - | 42,193 | 39,881 | 78,187 |
| Virginia Tidewater Consortium for Higher Education | 633,094 | 567,905 | 670,218 | 878,921 | 695,035 | 759,734 |
| Virginia Space Grant Consortium | 3,369,477 | 4,136,516 | 4,683,565 | 3,952,207 | 3,884,710 | 4,327,100 |
| **TOTAL AFFILIATED ACTIVITY** | 4,002,572 | 18,146,870 | 25,449,316 | 32,783,206 | 52,497,521 | 54,860,987 |
| **GRAND TOTAL** | 50,458,847 | 60,791,595 | 68,501,041 | 73,977,729 | 91,965,294 | 95,728,445 |
| **% CHANGE FROM PRIOR YEAR** | -77.94% | -28.69% | -22.37% | -37.55% | -4.31% | 91.30% |
| Average yearly increase ( decrease) | -18.54% | | | | | |

# SCHEDULE 2

# Summary of University Activity

# Major Funding Source

# Fiscal Year 2016 through Fiscal Year 2012

# SCHEDULE 2

## OLD DOMINION UNIVERSITY RESEARCH FOUNDATION

## SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE

(MEASURED BY EXPENDITURES INCURRED)

## FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012

| FUNDING SOURCE / AGENCY | FY16 Amount | FY16 Percent of Total | FY15 Amount | FY15 Percent of Total | FY14 Amount | FY14 Percent of Total | FY13 Amount | FY13 Percent of Total | FY12 Amount | FY12 Percent of Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **FEDERAL** | | | | | | | | | | |
| U.S. Department of Education | $ 6,693,743 | 14.4% | $ 8,634,757 | 20.2% | $ 6,094,680 | 14.2% | $ 3,762,091 | 9.1% | $ 1,746,260 | 4.4% |
| National Science Foundation | 6,551,190 | 14.1% | 5,854,012 | 13.7% | 6,744,966 | 15.7% | 5,397,710 | 13.1% | 6,998,879 | 17.7% |
| U.S. Department of Health & Human Services | 4,254,422 | 9.2% | 2,980,391 | 7.0% | 3,383,887 | 7.9% | 3,660,227 | 8.9% | 3,229,603 | 8.2% |
| United States Navy | 3,063,024 | 6.6% | 3,366,028 | 7.9% | 2,351,801 | 5.5% | 2,798,204 | 6.8% | 3,426,827 | 8.7% |
| National Aeronautics & Space Administration | 1,157,102 | 2.5% | 1,293,397 | 3.0% | 1,199,132 | 2.8% | 853,368 | 2.1% | 812,371 | 2.1% |
| U.S. Department of Energy | 1,644,625 | 3.5% | - | 0.0% | 2,315,012 | 5.4% | 1,924,766 | 4.7% | 1,565,418 | 4.0% |
| Small Business Administration | 400,172 | 0.9% | 420,985 | 1.0% | 343,418 | 0.8% | 228,536 | 0.6% | 168,524 | 0.4% |
| U.S. Department of Defense - Other | 367,194 | 0.8% | 617,406 | 1.4% | 698,808 | 1.6% | 1,128,709 | 2.7% | 1,456,419 | 3.7% |
| National Institute of Standards and Technology | 349,808 | 0.4% | 251,433 | 0.6% | 41,439 | 0.1% | 17,782 | 0.0% | - | 0.0% |
| Institute of Museum and Library Services | 322,314 | 0.7% | 219,942 | 0.5% | 63,142 | 0.1% | 130,013 | 0.3% | 212,573 | 0.5% |
| United States Air Force | 261,040 | 0.6% | 35,265 | 0.1% | - | 0.0% | - | 0.0% | 100,405 | 0.3% |
| Fermi National Accelerator Lab | 251,207 | 0.6% | 351,579 | 0.8% | 68,895 | 0.2% | 125,911 | 0.3% | - | 0.0% |
| National Endowment/Humanities | 242,957 | 0.2% | 126,131 | 0.3% | 51,203 | 0.1% | - | 0.0% | - | 0.0% |
| U.S. Department of Justice | 101,136 | 0.2% | 58,648 | 0.1% | 71,733 | 0.2% | 15,798 | 0.0% | - | 0.0% |
| U.S. Environmental Protection Agency | 66,944 | 0.2% | 60,940 | 0.1% | 14,303 | 0.0% | - | 0.0% | - | 0.0% |
| National Oceanic & Atmospheric Administration | 63,088 | 0.1% | 35,092 | 0.1% | 39,532 | 0.1% | 129,298 | 0.3% | 190,789 | 0.5% |
| United States Army | 11,638 | 0.0% | 162,513 | 0.4% | 718,011 | 1.7% | 1,529,779 | 3.7% | 1,012,559 | 2.6% |
| U.S. Department of Transportation | - | 0.0% | - | 0.0% | 97,572 | 0.2% | 24,978 | 0.1% | 105,693 | 0.3% |
| U.S. Department of Homeland Security | - | 0.0% | - | 0.0% | 108,293 | 0.3% | 730,580 | 1.8% | 989,436 | 2.5% |
| Library of Congress | - | 0.0% | - | 0.0% | 17,832 | 0.0% | 273,265 | 0.7% | 375,009 | 1.0% |
| Other Federal | 322,153 | 0.7% | 209,065 | 0.5% | 113,035 | 0.3% | 178,315 | 0.4% | 289,545 | 0.7% |
| SUBTOTAL FEDERAL | $ 26,123,759 | 55.7% | $ 24,677,586 | 57.9% | $ 24,536,694 | 57.0% | $ 22,909,330 | 55.6% | $ 22,680,310 | 30.5% |

# SCHEDULE 2

## OLD DOMINION UNIVERSITY RESEARCH FOUNDATION

## SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE

(MEASURED BY EXPENDITURES INCURRED)

## FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012

| FUNDING SOURCE / AGENCY | FY16 Amount | FY16 Percent of Total | FY15 Amount | FY15 Percent of Total | FY14 Amount | FY14 Percent of Total | FY13 Amount | FY13 Percent of Total | FY12 Amount | FY12 Percent of Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **STATE & LOCAL GOVERNMENT AND AGREEMENTS WITH OTHER UNIVERSITIES** | | | | | | | | | | |
| Old Dominion University - See Note | $ 7,912,031 | 17.0% | $ 7,024,744 | 16.5% | $ 6,120,236 | 14.2% | $ 4,969,467 | 12.1% | $ 5,475,936 | 13.9% |
| Georgia Regents University | 535,479 | 0.5% | 321,166 | 0.8% | 272,968 | 0.6% | - | 0.0% | - | 0.0% |
| Governor's Office | 424,733 | 0.9% | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| University of Virginia | 306,900 | 0.7% | 233,490 | 0.5% | 203,071 | 0.5% | 113,053 | 0.3% | 57,083 | 0.1% |
| Virginia Marine Resources Commission | 268,114 | 0.6% | 306,969 | 0.7% | 327,703 | 0.8% | 316,489 | 0.8% | 392,947 | 1.0% |
| City of Virginia Beach | 247,497 | 0.8% | 456,935 | 1.1% | 298,851 | 0.7% | 114,936 | 0.3% | - | 0.0% |
| Virginia Department of Motor Vehicles | 246,916 | 0.5% | 262,515 | 0.6% | 303,964 | 0.7% | 267,804 | 0.7% | 216,711 | 0.5% |
| Iowa State University | 236,604 | 0.4% | 221,568 | 0.5% | 188,858 | 0.4% | - | 0.0% | - | 0.0% |
| Norfolk State University | 182,110 | 0.4% | 49,419 | 0.1% | 60,796 | 0.1% | 11,156 | 0.0% | - | 0.0% |
| George Mason University | 165,351 | 0.4% | 56,657 | 0.1% | 48,681 | 0.1% | 5,059 | 0.0% | 16,116 | 0.0% |
| Eastern Virginia Medical School | 162,934 | 0.4% | 145,427 | 0.3% | 199,933 | 0.5% | 153,664 | 0.4% | 197,914 | 0.5% |
| City of Portsmouth | 151,616 | 0.3% | 343,603 | 0.8% | - | 0.0% | - | 0.0% | 54,764 | 0.1% |
| Crater Planning District Commission | 146,141 | 0.3% | 111,352 | 0.3% | 139,090 | 0.3% | 184,385 | 0.4% | 21,841 | 0.1% |
| State University of New Jersey | 131,470 | 0.3% | 152,130 | 0.4% | 234,796 | 0.5% | 214,648 | 0.5% | 110,690 | 0.3% |
| Texas A&M University | 130,156 | 0.3% | 59,947 | 0.1% | 20,043 | 0.0% | 34,981 | 0.1% | 34,788 | 0.1% |
| Center of Innovative Technology | 129,133 | 0.3% | 83,791 | 0.2% | 210,935 | 0.5% | 248,692 | 0.6% | 119,298 | 0.3% |
| University of Southern California | 115,849 | 0.2% | 124,226 | 0.3% | 70,129 | 0.2% | - | 0.0% | - | 0.0% |
| University of Maryland | 114,225 | 0.2% | 54,735 | 0.1% | 56,451 | 0.1% | 65,400 | 0.2% | 62,173 | 0.2% |
| Hampton Roads Sanitation District Commission | 113,734 | 0.3% | 186,822 | 0.4% | 41,098 | 0.1% | 34,445 | 0.1% | 36,855 | 0.0% |
| University of Michigan | 110,461 | 0.3% | 184,156 | 0.4% | - | 0.0% | 109,307 | 0.3% | - | 0.0% |
| University of Idaho | 109,712 | 0.2% | 373,854 | 0.9% | 257,799 | 0.6% | 302,552 | 0.7% | 56,032 | 0.1% |
| Florida Department of Environmental Protection | 107,779 | 0.2% | 2,584 | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| Virginia Institute of Marine Sciences | 101,293 | 0.2% | 77,524 | 0.2% | 145,916 | 0.3% | 144,193 | 0.4% | 189,869 | 0.5% |
| Virginia Department of Emergency Management | 85,308 | 0.2% | 99,816 | 0.2% | 498,667 | 1.2% | 1,586,670 | 3.9% | 160,694 | 0.4% |
| VA Polytechnic Institute and State University | 50,062 | 0.1% | 276,454 | 0.6% | - | 0.0% | - | 0.0% | - | 0.0% |
| State Council of Higher Education for Virginia | 48,032 | 0.1% | 109,031 | 0.3% | 35,809 | 0.1% | 29,871 | 0.1% | 38,611 | 0.1% |
| Virginia Department of Environmental Quality | - | 0.4% | 269,920 | 0.4% | 1,057,860 | 1.5% | 1,139,467 | 1.5% | 1,054,885 | 1.1% |
| University of Illinois | - | 0.0% | 128,817 | 0.3% | 255,151 | 0.6% | 127,184 | 0.3% | 13,730 | 0.0% |
| University of Texas | - | 0.0% | - | 0.0% | - | 0.0% | 127,357 | 0.3% | 7,712 | 0.0% |
| Wadsworth Center | - | 0.0% | - | 0.0% | - | 0.0% | 119,514 | 0.3% | 102,732 | 0.3% |
| University of Toledo | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% | 546,788 | 1.4% |
| Other State & Local | 1,547,166 | 3.3% | 672,173 | 1.6% | 1,224,843 | 2.8% | 1,391,141 | 3.4% | 1,913,287 | 4.8% |
| SUBTOTAL STATE & LOCAL | $ 13,880,806 | 29.9% | $ 12,389,828 | 28.9% | $ 12,273,648 | 27.6% | $ 11,811,435 | 27.4% | $ 10,881,456 | 26.0% |

# SCHEDULE 2

## OLD DOMINION UNIVERSITY RESEARCH FOUNDATION

## SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE

(MEASURED BY EXPENDITURES INCURRED)

## FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012

| FUNDING SOURCE / AGENCY | FY16 Amount | FY16 Percent of Total | FY15 Amount | FY15 Percent of Total | FY14 Amount | FY14 Percent of Total | FY13 Amount | FY13 Percent of Total | FY12 Amount | FY12 Percent of Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **PRIVATE AND OTHER SPONSORS** | | | | | | | | | | |
| Jefferson Science Associates | $ 1,164,984 | 2.5% | $ 1,061,585 | 2.5% | $ 1,040,048 | 2.4% | $ 1,185,308 | 2.9% | $ 1,245,453 | 3.2% |
| Pulse Biosciences, Inc. | 1,006,931 | 2.2% | 214,159 | 0.5% | - | 0.0% | - | 0.0% | - | 0.0% |
| University of Southampton | 606,869 | 1.3% | 613,368 | 1.4% | 125,447 | 0.3% | - | 0.0% | - | 0.0% |
| National Institute of Aerospace | 459,190 | 1.0% | 319,519 | 0.7% | 251,851 | 0.6% | 393,204 | 1.0% | 442,017 | 1.1% |
| Genedge Alliance (formerly Philpott Manufacturing) | 259,820 | 0.6% | 223,265 | 0.5% | 145,990 | 0.3% | 134,799 | 0.3% | 139,005 | 0.4% |
| Non-Disclosed | 170,200 | 0.4% | 136,827 | 0.3% | - | 0.0% | - | 0.0% | - | 0.0% |
| Blue Moon Fund | 166,253 | 0.4% | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| Dominion Resources Services, Inc. | 158,722 | 0.3% | 122,159 | 0.3% | 169,877 | 0.4% | - | 0.0% | - | 0.0% |
| World Conservation Union (IUCN) | 152,773 | 0.3% | 134,104 | 0.3% | 72,603 | 0.2% | 80,752 | 0.2% | 180,968 | 0.5% |
| Qatar University | 127,698 | 0.3% | 25,861 | 0.1% | 50,312 | 0.1% | 28,207 | 0.1% | 33,251 | 0.1% |
| Advanced Anti-Terror Technologies, Inc. | 117,383 | 0.3% | 106,091 | 0.2% | 155,482 | 0.4% | 115,964 | 0.3% | 209,214 | 0.5% |
| LMI | 113,096 | 0.2% | 127,880 | 0.3% | 158,926 | 0.4% | 99,220 | 0.2% | - | 0.0% |
| The Geneva Foundation | 110,173 | 0.2% | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| Stihl | 100,103 | 0.2% | 16,103 | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| General Dynamics | 97,954 | 0.2% | - | 0.0% | 177,690 | 0.4% | 355,207 | 0.9% | 93,870 | 0.2% |
| American Diabetes Association | 55,927 | 0.1% | 194,606 | 0.5% | 176,183 | 0.4% | 71,151 | 0.2% | 24,951 | 0.1% |
| OncoSec Medical, Inc. | 25,764 | 0.1% | 129,990 | 0.3% | 234,431 | 0.5% | - | 0.0% | - | 0.0% |
| Continental Automotive Systems, Inc | - | 0.0% | 148,000 | 0.3% | - | 0.0% | - | 0.0% | - | 0.0% |
| Cubic Applications, Inc. | - | 0.0% | 147,073 | 0.3% | 289,126 | 0.7% | 10,696 | 0.0% | - | 0.0% |
| Medical Cyberworlds, Inc. | - | 0.0% | 139,377 | 0.3% | 67,779 | 0.2% | 21,949 | 0.1% | - | 0.0% |
| Commonwealth Center for Advanced Manufacturing | - | 0.0% | 138,773 | 0.3% | 1,646 | 0.0% | - | 0.0% | - | 0.0% |
| Opportunity, Inc. | - | 0.0% | 118,474 | 0.3% | 93,313 | 0.2% | - | 0.0% | - | 0.0% |
| Niowave, Inc. | - | 0.0% | - | 0.0% | 484,236 | 1.1% | 352,319 | 0.9% | 234,555 | 0.6% |
| Cazador LLC | - | 0.0% | - | 0.0% | 197,255 | 0.5% | 162,553 | 0.4% | - | 0.0% |
| Business Gateway | - | 0.0% | - | 0.0% | 161,416 | 0.4% | 300,171 | 0.7% | 9,270 | 0.0% |
| WR Systems LTD | - | 0.0% | - | 0.0% | 151,285 | 0.4% | 199,204 | 0.5% | - | 0.0% |
| Children Surgical | - | 0.0% | - | 0.0% | 121,776 | 0.3% | 149,609 | 0.4% | 37,925 | 0.1% |
| Alion Science and Technology Corporation | - | 0.0% | - | 0.0% | 103,513 | 0.2% | 46,123 | 0.1% | 272,425 | 0.7% |
| Other Private Sponsors | 1,557,871 | 3.4% | 1,460,098 | 3.4% | 1,811,198 | 4.2% | 2,767,322 | 6.7% | 2,983,103 | 7.6% |
| SUBTOTAL PRIVATE | $ 6,451,710 | 13.9% | $ 5,577,311 | 13.1% | $ 6,241,383 | 14.5% | $ 6,473,758 | 15.7% | $ 5,906,007 | 15.0% |
| TOTAL | $ 46,456,275 | 99.4% | $ 42,644,725 | 99.8% | $ 43,051,725 | 99.1% | $ 41,194,523 | 98.8% | $ 39,467,773 | 71.4% |

**Note: Certain agencies require direct award to Old Dominion University. The following represents the expenditures by agency on projects passed through by the University.**

# SCHEDULE 2

## OLD DOMINION UNIVERSITY RESEARCH FOUNDATION

## SUMMARY OF UNIVERSITY ACTIVITY BY MAJOR FUNDING SOURCE

(MEASURED BY EXPENDITURES INCURRED)

**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012**

| FUNDING SOURCE / AGENCY | FY16 Amount | FY16 Percent of Total | FY15 Amount | FY15 Percent of Total | FY14 Amount | FY14 Percent of Total | FY13 Amount | FY13 Percent of Total | FY12 Amount | FY12 Percent of Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Old Dominion University pass through from: | | | | | | | | | | |
| Virginia Department Of Education | $ 4,138,355 | 8.9% | $ 4,008,186 | 9.4% | $ 3,976,459 | 9.2% | $ 3,027,748 | 7.3% | $ 3,187,727 | 8.1% |
| Virginia Department of Environmental Quality | 1,068,484 | 2.3% | 909,391 | 2.1% | 148,227 | 0.3% | 165,134 | 0.4% | 7,563 | 0.0% |
| U.S. Department of Education | 758,034 | 1.6% | 420,562 | 1.0% | 627,283 | 1.5% | 659,212 | 1.6% | 601,879 | 1.5% |
| Virginia Biosciences Health Research Corp. | 508,416 | 1.1% | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| U.S. Department of Energy | 480,206 | 1.0% | 245,720 | 0.6% | 161,459 | 0.4% | - | 0.0% | 75,147 | 0.2% |
| United States Air Force | 466,154 | 1.0% | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| Old Dominion University | 352,261 | 0.8% | 639,858 | 1.5% | 519,240 | 1.2% | 896,937 | 2.2% | 1,383,408 | 3.5% |
| Virginia Department Of Behavorial Health and Developmental Services | 76,500 | 0.2% | 57,140 | 0.1% | 98,880 | 0.2% | 73,397 | 0.2% | 69,061 | 0.2% |
| Foreign | (210) | 0.0% | 194,204 | 0.5% | 16,218 | 0.0% | - | 0.0% | - | 0.0% |
| State Council of Higher Education for Virginia | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% | - | 0.0% |
| Virginia Department Of Health | - | 0.0% | - | 0.0% | 51,037 | 0.1% | 34,359 | 0.1% | 26,252 | 0.1% |
| Other Sponsors | 63,831 | 0.1% | 549,682 | 1.3% | 521,433 | 1.2% | 112,680 | 0.3% | 124,899 | 0.3% |
| Old Dominion University Total | $ 7,912,031 | 17.0% | $ 7,024,744 | 16.5% | $ 6,120,236 | 14.2% | $ 4,969,467 | 12.1% | $ 5,475,936 | 13.9% |

Note: Certain prior year amounts have been restated to be consistent with current year presentation.

# SCHEDULE 3

## Comparison of Direct Cost, Indirect Cost and Effective Indirect Cost Rates

## Fiscal Year 2016 through Fiscal Year 2014

SCHEDULE 3

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**REPORT OF SPONSORED PROGRAM ACTIVITY**

**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**

(MEASURED BY EXPENDITURES INCURRED)

**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2014**

| | Fiscal Year 2016 | | | | Fiscal Year 2015 | | | | Fiscal Year 2014 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate |
| **COLLEGE OF ARTS AND LETTERS** | | | | | | | | | | | | |
| Dean's Office | $ 1,972 | $ 158 | $ 2,130 | 8.0% | $ 13,684 | $ 746 | $ 14,430 | 5.5% | $ 29,518 | $ 973 | $ 30,491 | 3.3% |
| Communication and Theatre Arts | 29,337 | 4,112 | 33,450 | 14.0% | 1,868 | - | 1,868 | 0.0% | 4,603 | 2,302 | 6,905 | 50.0% |
| English | 38,301 | 11,816 | 50,117 | 30.8% | 49,984 | 10,246 | 60,229 | 20.5% | 73,498 | 7,815 | 81,313 | 10.6% |
| Foreign Languages / Literatures | - | - | - | 0.0% | 2,501 | 1,325 | 3,826 | 53.0% | | | - | 0.0% |
| History | 3,943 | 315 | 4,259 | 8.0% | 24,968 | 1,492 | 26,459 | 6.0% | 56,736 | 1,946 | 58,682 | 3.4% |
| International Studies | - | - | - | 0.0% | - | - | - | 0.0% | 1,220 | 647 | 1,867 | 53.0% |
| Philosophy & Religious Studies | 2,461 | 994 | 3,455 | 40.4% | - | - | - | 0.0% | - | - | - | 0.0% |
| Political Science & Geography | 55,580 | 5,845 | 61,425 | 10.5% | 28,138 | 1,642 | 29,781 | 5.8% | 79,610 | 4,346 | 83,956 | 5.5% |
| Sociology & Criminal Justice | 8,365 | 4,388 | 12,752 | 52.5% | 9,774 | 3,887 | 13,661 | 39.8% | 4,919 | 2,465 | 7,384 | 50.1% |
| Social Science Research Center | 140,772 | 8,427 | 149,199 | 6.0% | 120,019 | 10,791 | 130,810 | 9.0% | 159,524 | 15,884 | 175,408 | 10.0% |
| College Total | $ 280,730 | $ 36,056 | $ 316,786 | 12.8% | $ 250,935 | $ 30,129 | $ 281,064 | 12.0% | $ 409,627 | $ 36,379 | $ 446,006 | 8.9% |
| **COLLEGE OF BUSINESS AND PUBLIC ADMINISTRATION** | | | | | | | | | | | | |
| Economics | $ 110,551 | $ 15,875 | $ 126,425 | 14.4% | $ (475) | $ 33 | $ (442) | -6.9% | $ 48,049 | $ 12,044 | $ 60,093 | 25.1% |
| Finance | 2,222 | 222 | 2,444 | 10.0% | 6,814 | 681 | 7,495 | 10.0% | - | - | - | 0.0% |
| Information Systems / Decision Sciences | 105,538 | 52,898 | 158,436 | 50.1% | 97,088 | 51,457 | 148,544 | 53.0% | - | - | - | 0.0% |
| Management | 1,293 | - | 1,293 | 0.0% | - | - | - | 0.0% | - | - | - | 0.0% |
| Marketing | 3,090 | 773 | 3,863 | 25.0% | - | - | - | 0.0% | - | - | - | 0.0% |
| Public Service | 8,388 | 1,874 | 10,262 | 22.3% | 8,304 | 2,100 | 10,404 | 25.3% | 16,068 | 6,108 | 22,176 | 38.0% |
| College Total | $ 231,081 | $ 71,641 | $ 302,722 | 31.0% | $ 111,731 | $ 54,271 | $ 166,001 | 48.6% | $ 64,117 | $ 18,152 | $ 82,269 | 28.3% |
| **COLLEGE OF EDUCATION** | | | | | | | | | | | | |
| Dean's Office | $ 412,693 | $ 23,789 | $ 436,482 | 5.8% | $ 240,152 | $ 24,015 | $ 264,167 | 10.0% | $ 296,960 | $ 23,709 | $ 320,669 | 8.0% |
| Center for Education Partnerships | 4,944,938 | 238,064 | 5,183,002 | 4.8% | 4,444,433 | 225,550 | 4,669,983 | 5.1% | 3,386,828 | 243,537 | 3,630,365 | 7.2% |
| Communication Disorders and Special Education | 3,465,079 | 242,944 | 3,708,022 | 7.0% | 3,417,386 | 232,623 | 3,650,009 | 6.8% | 3,328,886 | 215,249 | 3,544,135 | 6.5% |
| Counseling and Human Services | 67,863 | 4,448 | 72,310 | 6.6% | 108,912 | 3,022 | 111,934 | 2.8% | 124,287 | 496 | 124,783 | 0.4% |
| Educational Foundations and Leadership | 768,842 | 47,494 | 816,336 | 6.2% | 741,676 | 57,052 | 798,728 | 7.7% | 833,196 | 83,649 | 916,845 | 10.0% |
| Human Movement Sciences | 37,826 | 3,481 | 41,308 | 9.2% | 103,744 | 5,272 | 109,017 | 5.1% | 119,355 | 5,434 | 124,789 | 4.6% |
| STEM Education and Professional Studies | 1,238,737 | 82,084 | 1,320,821 | 6.6% | 1,730,132 | 118,066 | 1,848,198 | 6.8% | 1,590,601 | 139,536 | 1,730,137 | 8.8% |
| Teaching and Learning | 469,202 | 51,323 | 520,525 | 10.9% | 395,855 | 38,134 | 433,989 | 9.6% | 452,877 | 30,562 | 483,439 | 6.7% |
| College Total | $ 11,405,180 | $ 693,626 | $ 12,098,806 | 6.1% | $ 11,182,290 | $ 703,735 | $ 11,886,025 | 6.3% | $ 10,132,990 | $ 742,172 | $ 10,875,162 | 7.3% |

SCHEDULE 3

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**REPORT OF SPONSORED PROGRAM ACTIVITY**

**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**

(MEASURED BY EXPENDITURES INCURRED)

**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2014**

| | Fiscal Year 2016 | | | | Fiscal Year 2015 | | | | Fiscal Year 2014 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate |
| **COLLEGE OF ENGINEERING** | | | | | | | | | | | | |
| Dean's Office | $ 201,636 | $ 88,518 | $ 290,154 | 43.9% | $ 70,527 | $ 30,838 | $ 101,365 | 43.7% | $ 88,712 | $ 23,242 | $ 111,954 | 26.2% |
| Civil & Environmental Engineering | 643,076 | 247,364 | 890,440 | 38.5% | 474,149 | 174,414 | 649,066 | 36.8% | 380,677 | 129,827 | 510,504 | 34.1% |
| Civil & Environmental Engineering - VMASC | 31,112 | 16,362 | 47,474 | 52.6% | 56,531 | 29,464 | 85,995 | 52.1% | 34,784 | 12,968 | 47,752 | 37.3% |
| Electrical & Computer Engineering | 647,731 | 273,323 | 921,054 | 42.2% | 653,436 | 240,382 | 893,818 | 36.8% | 888,536 | 325,310 | 1,213,846 | 36.6% |
| Electrical & Computer Engineering - ARC | 466,078 | 125,423 | 591,501 | 26.9% | 988,143 | 201,361 | 1,189,505 | 20.4% | 824,619 | 231,205 | 1,055,824 | 28.0% |
| Electrical & Computer Engineering - Bioelectrics | 516,039 | 259,143 | 775,182 | 50.2% | 792,517 | 251,120 | 1,043,637 | 31.7% | 268,338 | 111,470 | 379,808 | 41.5% |
| Engineering Management and Systems Engineering | 302,065 | 108,210 | 410,275 | 35.8% | 369,978 | 166,544 | 536,522 | 45.0% | 93,916 | 42,945 | 136,861 | 45.7% |
| Engineering Management and Systems Engineering - NCSOSE | 6,882 | 4,129 | 11,012 | 60.0% | 27,229 | 14,459 | 41,687 | 53.1% | 109,621 | 48,719 | 158,340 | 44.4% |
| Engineering Management Career Center | - | - | - | 0.0% | - | - | - | 0.0% | 70,982 | 32,531 | 103,513 | 45.8% |
| Engineering Technology | 728,840 | 133,041 | 861,881 | 18.3% | 271,336 | 98,834 | 370,170 | 36.4% | 275,185 | 74,355 | 349,540 | 27.0% |
| Engineering Technology - ARC | - | - | - | 0.0% | 2,836 | 227 | 3,063 | 8.0% | 70,661 | 20,060 | 90,721 | 28.4% |
| Mechanical & Aerospace Engineering | 550,565 | 181,004 | 731,570 | 32.9% | 608,357 | 190,978 | 799,335 | 31.4% | 425,764 | 193,438 | 619,202 | 45.4% |
| Mechanical & Aerospace Engineering - ARC | 23,721 | - | 23,721 | 0.0% | 24,024 | - | 24,024 | 0.0% | 40,953 | - | 40,953 | 0.0% |
| Modeling, Simulation & Visualization | 348,570 | 156,561 | 505,132 | 44.9% | 274,940 | 123,245 | 398,185 | 44.8% | 325,794 | 126,320 | 452,114 | 38.8% |
| Modeling, Simulation & Visualization - VMASC | 1,736,208 | 267,405 | 2,003,612 | 15.4% | 2,637,609 | 449,654 | 3,087,263 | 17.0% | 2,380,675 | 373,923 | 2,754,598 | 15.7% |
| College Total | $ 6,202,523 | $ 1,860,484 | $ 8,063,007 | 30.0% | $ 7,251,613 | $ 1,971,520 | $ 9,223,635 | 27.2% | $ 6,279,217 | $ 1,746,313 | $ 8,025,530 | 27.8% |
| **COLLEGE OF HEALTH SCIENCES** | | | | | | | | | | | | |
| Dean's Office | $ (72) | $ - | $ (72) | 0.0% | $ 25,073 | $ - | $ 25,073 | 0.0% | $ 5,744 | $ - | $ 5,744 | 0.0% |
| Community & Environmental Health | 78,209 | 17,099 | 95,308 | 21.9% | 69,720 | 29,498 | 99,218 | 42.3% | 265,760 | 89,663 | 355,423 | 33.7% |
| Dental Hygiene | 45,527 | 7,495 | 53,022 | 16.5% | 59,174 | 4,819 | 63,993 | 8.1% | 37,664 | 4,009 | 41,673 | 10.6% |
| Medical Diagnostic & Translational Sciences | 300,763 | 57,611 | 358,374 | 19.2% | 23,438 | - | 23,438 | 0.0% | 748,558 | 282,662 | 1,031,220 | 37.8% |
| Medical Diagnostic & Translational Sciences - Bioelectrics | 749,457 | 288,920 | 1,038,377 | 38.6% | 459,311 | 194,306 | 653,617 | 42.3% | - | - | - | 0.0% |
| Nursing | 1,314,803 | 47,951 | 1,362,754 | 3.6% | 891,193 | 39,422 | 930,615 | 4.4% | 625,539 | 20,758 | 646,297 | 3.3% |
| Physical Therapy | 90,239 | 10,201 | 100,441 | 11.3% | 181,366 | 18,240 | 199,606 | 10.1% | 202,020 | 25,279 | 227,299 | 12.5% |
| College Total | $ 2,578,926 | $ 429,277 | $ 3,008,203 | 16.6% | $ 1,709,275 | $ 286,286 | $ 1,995,560 | 16.7% | $ 1,885,285 | $ 422,371 | $ 2,307,656 | 22.4% |

SCHEDULE 3

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**REPORT OF SPONSORED PROGRAM ACTIVITY**

**DIRECT COST, INDIRECT COST AND EFFECTIVE INDIRECT COST RATE**

(MEASURED BY EXPENDITURES INCURRED)

**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2014**

| | Fiscal Year 2016 | | | | Fiscal Year 2015 | | | | Fiscal Year 2014 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate | TOTAL DIRECT COSTS | TOTAL INDIRECT COSTS | TOTAL PROJECT COSTS | Effective Indirect Cost Rate |
| **COLLEGE OF SCIENCES** | | | | | | | | | | | | |
| Dean's Office | $ 1,314 | $ 105 | $ 1,420 | 8.0% | $ 8,323 | $ 497 | $ 8,820 | 6.0% | $ 18,911 | $ 649 | $ 19,560 | 3.4% |
| Biological Sciences | 1,419,895 | 322,804 | 1,742,699 | 22.7% | 1,349,153 | 265,565 | 1,614,718 | 19.7% | 1,421,754 | 243,994 | 1,665,748 | 17.2% |
| Biological Sciences - CBE | - | - | - | 0.0% | - | - | - | 0.0% | 8,788 | 4,997 | 13,785 | 56.9% |
| Center for Coastal Physical Oceanography | 557,024 | 136,369 | 693,392 | 24.5% | 709,362 | 156,623 | 865,985 | 22.1% | 991,675 | 297,941 | 1,289,616 | 30.0% |
| Center for Coastal Physical Oceanography - MARI | 31,141 | 1,774 | 32,915 | 5.7% | - | - | - | 0.0% | - | - | - | 0.0% |
| Chemistry and Biochemistry | 1,725,149 | 477,206 | 2,202,356 | 27.7% | 1,365,854 | 414,277 | 1,780,131 | 30.3% | 1,258,347 | 261,398 | 1,519,745 | 20.8% |
| Chemistry and Biochemistry - VCERC | (3,903) | (2,069) | (5,971) | 53.0% | 32,718 | 16,359 | 49,077 | 50.0% | 197,207 | 87,008 | 284,215 | 44.1% |
| Computer Sciences | 1,153,310 | 454,447 | 1,607,758 | 39.4% | 903,288 | 284,830 | 1,188,118 | 31.5% | 739,875 | 255,168 | 995,043 | 34.5% |
| Mathematics & Statistics | 571,415 | 180,221 | 751,636 | 31.5% | 538,123 | 146,688 | 684,811 | 27.3% | 648,618 | 178,861 | 827,479 | 27.6% |
| Ocean, Earth & Atmospheric Sciences | 2,507,971 | 721,937 | 3,229,908 | 28.8% | 1,724,585 | 654,965 | 2,379,550 | 38.0% | 2,855,822 | 865,827 | 3,721,649 | 30.3% |
| Ocean, Earth & Atmospheric Sciences - SSRP | 257,937 | 91,357 | 349,294 | 35.4% | 418,491 | 76,166 | 494,657 | 18.2% | 226,344 | 58,878 | 285,222 | 26.0% |
| Physics | 2,912,270 | 650,565 | 3,562,835 | 22.3% | 2,705,688 | 709,353 | 3,415,041 | 26.2% | 3,225,277 | 871,996 | 4,097,273 | 27.0% |
| Psychology | 1,015,421 | 311,327 | 1,326,747 | 30.7% | 994,370 | 298,486 | 1,292,856 | 30.0% | 1,195,258 | 341,697 | 1,536,955 | 28.6% |
| College Total | $ 12,148,944 | $ 3,346,042 | $ 15,494,987 | 27.5% | $ 10,749,954 | $ 3,023,809 | $ 13,773,762 | 28.1% | $ 12,787,876 | $ 3,468,414 | $ 16,256,290 | 27.1% |
| **OFFICE OF RESEARCH AND OTHER ACTIVITY** | | | | | | | | | | | | |
| Frank Reidy Research Center for Bioelectrics | $ 1,872,872 | $ 919,257 | $ 2,792,129 | 49.1% | $ 902,278 | $ 407,328 | $ 1,309,606 | 45.1% | $ 560,630 | $ 270,486 | $ 831,116 | 48.2% |
| Virginia Modeling, Analysis and Simulation Center | 1,293,308 | 528,801 | 1,822,109 | 40.9% | 1,357,197 | 638,511 | 1,909,210 | 47.0% | 1,610,567 | 589,137 | 2,199,704 | 36.6% |
| ODU Business Gateway | 1,542,735 | 116,239 | 1,658,975 | 7.5% | 1,180,496 | 174,669 | 1,355,165 | 14.8% | 1,167,780 | 197,824 | 1,365,604 | 16.9% |
| Miscellaneous ODU Units | 824,126 | 74,426 | 898,552 | 9.0% | 701,150 | 43,545 | 744,696 | 6.2% | 619,965 | 42,423 | 662,388 | 6.8% |
| College Total Other Units | $ 5,533,041 | $ 1,638,724 | $ 7,171,765 | 29.6% | $ 4,141,121 | $ 1,264,053 | $ 5,318,676 | 30.5% | $ 3,958,942 | $ 1,099,870 | $ 5,058,812 | 27.8% |
| **TOTAL UNIVERSITY ACTIVITY** | $ 38,380,425 | $ 8,075,851 | $ 46,456,276 | 21.0% | $ 35,396,918 | $ 7,333,802 | $ 42,644,724 | 20.7% | $ 35,518,054 | $ 7,533,671 | $ 43,051,725 | 21.2% |
| **AFFILIATED ACTIVITY** | | | | | | | | | | | | |
| Virginia Commercial Space Flight Authority | - | - | - | 0.0% | 13,423,307 | 19,142 | 13,442,449 | 0.1% | 19,915,448 | 159,043 | 20,074,491 | 0.8% |
| Virginia Space Flight Academy | - | - | - | 0.0% | - | - | - | 0.0% | 21,042 | - | 21,042 | 0.0% |
| Virginia Space Grant Consortium | 3,098,476 | 271,002 | 3,369,477 | 8.7% | 3,718,751 | 417,765 | 4,136,516 | 11.2% | 4,243,287 | 440,278 | 4,683,565 | 10.4% |
| Virginia Tidewater Consortium for Higher Education | 586,562 | 46,532 | 633,094 | 7.9% | 525,067 | 42,838 | 567,905 | 8.2% | 613,979 | 56,239 | 670,218 | 9.2% |
| TOTAL AFFILIATED ACTIVITY | $ 3,685,038 | $ 317,534 | $ 4,002,572 | 16.7% | $ 17,667,126 | $ 479,745 | $ 18,146,871 | 19.5% | $ 24,793,756 | $ 655,560 | $ 25,449,316 | 20.3% |
| GRAND TOTAL | $ 42,065,462 | $ 8,393,385 | $ 50,458,847 | 37.7% | $ 53,064,044 | $ 7,813,546 | $ 60,791,595 | 40.3% | $ 60,311,810 | $ 8,189,231 | $ 68,501,041 | 41.5% |

SSRP= self supporting research program

# SCHEDULE 4

# Sponsored Program Activity

# Individual Project Listing

# Fiscal Year 2016

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **ARTS AND LETTERS** | | | | | | | | | | | | |
| Dean's Office | | | | | | | | | | | | |
| 100367-010 | * U.S. DEPARTMENT OF EDUCATION | WOJTOWICZ, R. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| | | | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | 8.00% | |
| English | | | | | | | | | | | | |
| 400219-010 | * COUNCIL OF WRITING PROGRAM ADMINISTRATORS | BINGHAM-RISHER, R. | - | 250 | - | - | 250 | - | - | 250 | | TRAD |
| 100367-010 | * U.S. DEPARTMENT OF EDUCATION | BOSTIC, T. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| 100367-010 | * U.S. DEPARTMENT OF EDUCATION | HELLER, D. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| 200211-010 | NORFOLK COMMISSION ON THE ARTS & HUMANITIES | PEERY, J. | - | 1,000 | - | - | 1,000 | - | - | 1,000 | | TRAD |
| 400219-010 | * COUNCIL OF WRITING PROGRAM ADMINISTRATORS | RODRIGO, R. | - | 250 | - | - | 250 | - | - | 250 | | TRAD |
| 100105-055 | * NAVSUP FLEET LOGISTICS CENTER NORFOLK | VINCELETTE, E. | 2,799 | - | - | - | 2,799 | 980 | - | 3,779 | | TRAD |
| 100105-065 | * NAVSUP FLEET LOGISTICS CENTER NORFOLK | VINCELETTE, E. | 30,059 | - | - | - | 30,059 | 10,521 | - | 40,579 | | TRAD |
| | | | 34,930 | 3,371 | - | - | 38,301 | 11,816 | - | 50,117 | 30.85% | |
| History | | | | | | | | | | | | |
| 100367-010 | * U.S. DEPARTMENT OF EDUCATION | FINLEY-CROSSWHITE, A. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| 100367-010 | * U.S. DEPARTMENT OF EDUCATION | JERSILD, A. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| | | | 2,072 | 1,871 | - | - | 3,943 | 315 | - | 4,259 | 8.00% | |
| Philosophy & Religious Studies | | | | | | | | | | | | |
| 100591-010 | * NATIONAL SECURITY AGENCY | WITTKOWER, D. | 581 | 949 | - | 931 | 2,461 | 994 | - | 3,455 | | TRAD |
| | | | 581 | 949 | - | 931 | 2,461 | 994 | - | 3,455 | 40.41% | |
| Political Science and Geography | | | | | | | | | | | | |
| 100367-010 | * U.S. DEPARTMENT OF EDUCATION | ADAMS, F. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| 300321-010 | VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY | ADAMS, F. | 2,214 | 2,117 | - | - | 4,332 | - | - | 4,332 | | TRAD |
| 400264-010 | NON-DISCLOSED SPONSORS | ADAMS, F. | 40,770 | 7,230 | - | - | 48,000 | 4,800 | - | 52,800 | | TRAD |
| 300366-010 | * UNIVERSITY OF NORTH CAROLINA | EARNEST, D. | 1,497 | 115 | - | - | 1,612 | 887 | - | 2,499 | | TRAD |
| 600181-010 | EUROPEAN COMMISSION | KARP, R. | - | - | - | (335) | (335) | - | - | (335) | | TRAD |
| | | | 45,518 | 10,398 | - | (335) | 55,580 | 5,845 | - | 61,425 | 10.52% | |
| Sociology and Criminal Justice | | | | | | | | | | | | |
| 200221-010 | * CITY OF SUFFOLK | GAINEY, R. | 732 | - | - | - | 732 | 190 | - | 923 | | TRAD |
| 100581-010 | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | YANG, X. | 7,632 | - | - | - | 7,632 | 4,197 | - | 11,829 | | TRAD |
| | | | 8,364 | - | - | 0 | 8,365 | 4,388 | - | 12,752 | 52.46% | |
| Communication and Theatre Arts | | | | | | | | | | | | |
| 100524-010 | NATIONAL ENDOWMENT FOR THE HUMANITIES | SANTO, A. | - | 15,817 | - | - | 15,817 | 4,112 | - | 19,929 | | TRAD |
| 200196-010 | VA COMMISSION OF THE ARTS | SANTO, A. | - | 7,500 | - | - | 7,500 | - | - | 7,500 | | TRAD |
| 200217-010 | CITY OF NORFOLK | SANTO, A. | 2,965 | - | - | - | 2,965 | - | - | 2,965 | | TRAD |
| 440220-010 | VA FOUNDATION FOR THE HUMANITIES AND PUBLIC POLICY | SANTO, A. | 3,056 | - | - | - | 3,056 | - | - | 3,056 | | TRAD |
| | | | 6,021 | 23,317 | - | - | 29,337 | 4,112 | - | 33,450 | 14.02% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Social Science Research Center | | | | | | | | | | | | | |
| 200147-010 | | NEW HAMPSHIRE DEPARTMENT OF HEALTH AND HUMAN SER | VANDECAR-BURDIN, T. | 19,673 | 5,525 | - | - | 25,198 | 2,520 | - | 27,718 | | SSRC |
| 200151-010 | | CITY OF NORFOLK | VANDECAR-BURDIN, T. | 1,743 | 25 | - | 516 | 2,284 | 594 | - | 2,878 | | SSRC |
| 200197-010 | | CITY OF VIRGINIA BEACH | VANDECAR-BURDIN, T. | 694 | - | - | 0 | 694 | 109 | - | 803 | | SSRC |
| 300292-010 | | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 775 | 922 | - | - | 1,697 | 85 | - | 1,782 | | SSRC |
| 300312-010 | | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 26,844 | 20,982 | - | - | 47,826 | 2,391 | - | 50,217 | | SSRC |
| 300352-010 | | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 14,930 | 8,404 | - | - | 23,334 | 1,167 | - | 24,501 | | SSRC |
| 500248-010 | | LUISA DIAZ-KOPE | VANDECAR-BURDIN, T. | 2,995 | - | - | - | 2,995 | - | - | 2,995 | | SSRC |
| 500283-010 | | HENRICO CITIZEN (T3 MEDIA LLC) | VANDECAR-BURDIN, T. | 841 | - | - | - | 841 | - | - | 841 | | SSRC |
| 600200-010 | | BEIJING INTERNATIONAL STUDIES UNIVERSITY | VANDECAR-BURDIN, T. | 594 | - | - | - | 594 | 315 | - | 909 | | SSRC |
| 200221-010 | * | CITY OF SUFFOLK | VANDECAR-BURDIN, T. | 244 | - | - | - | 244 | 63 | - | 308 | | SSRC |
| 300333-010 | * | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 2,484 | 266 | - | - | 2,750 | 220 | - | 2,970 | | SSRC |
| 300346-010 | * | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 6,401 | 485 | - | 13,391 | 20,277 | - | - | 20,277 | | SSRC |
| 300356-010 | * | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 11,836 | 202 | - | - | 12,037 | 963 | - | 13,000 | | SSRC |
| | | | | 90,055 | 36,809 | - | 13,907 | 140,772 | 8,427 | - | 149,199 | 5.99% | |
| **TOTAL ARTS AND LETTERS** | | | | **$ 188,576** | **$ 77,651** | **$ -** | **$ 14,503** | **$ 280,730** | **$ 36,056** | **$ -** | **$ 316,786** | **12.84%** | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **BUSINESS AND PUBLIC ADMINISTRATION** | | | | | | | | | | | | | |
| Economics | | | | | | | | | | | | | |
| 300335-010 | * | VIRGINIA COMMONWEALTH UNIVERSITY | DU, J. | 5,257 | 516 | - | - | 5,773 | 0 | - | 5,773 | | TRAD |
| 300370-010 | | GEORGE MASON UNIVERSITY | FILER, L. | 63,695 | 1,515 | - | 9,615 | 74,825 | 0 | - | 74,825 | | TRAD |
| 200073-010 | | VA DEPARTMENT OF ECONOMIC DEVELOPMENT | KOCH, J. | 0 | - | - | - | 0 | (1) | - | (1) | | TRAD |
| 300305-010 | * | UNIVERSITY OF VIRGINIA | TALLEY, W. | 17,847 | 2,161 | - | - | 20,008 | 10,604 | - | 30,613 | | TRAD |
| 300305-011 | * | UNIVERSITY OF VIRGINIA | TALLEY, W. | 9,454 | 491.10 | - | - | 9,945 | 5,271 | - | 15,216 | | TRAD |
| | | | | 96,253 | 4,683 | - | 9,615 | 110,551 | 15,875 | - | 126,425 | 14.36% | |
| Finance | | | | | | | | | | | | | |
| 400038-010 | * | SPENCER FOUNDATION | MCSHANE, M. | 2,008 | 0 | - | 214 | 2,222 | 222 | - | 2,444 | | TRAD |
| | | | | 2,008 | - | - | 214 | 2,222 | 222 | - | 2,444 | 10.00% | |
| Information Systems / Decision Sciences | | | | | | | | | | | | | |
| 100242-010 | | NATIONAL SCIENCE FOUNDATION | HE, W. | 32,328 | 4,020 | - | - | 36,348 | 19,264 | - | 55,612 | | TRAD |
| 100242-010 | * | NATIONAL SCIENCE FOUNDATION | LI, L | (246) | 1,108 | - | - | 862 | 457 | - | 1,318 | | TRAD |
| 200188-020 | * | OLD DOMINION UNIVERSITY | MCLEOD, G. | 0 | 655 | - | 1,026 | 1,681 | 52 | - | 1,733 | | TRAD |
| 200188-030 | * | OLD DOMINION UNIVERSITY | MCLEOD, G. | 3,694 | 0 | - | - | 3,694 | 296 | - | 3,989 | | TRAD |
| 100487-010 | | FEDERAL HIGHWAY ADMINISTRATION | NG, M. | 26,312 | 1,388 | - | 427 | 28,127 | 14,681 | - | 42,808 | | TRAD |
| 300234-017 | * | UNIVERSITY OF IDAHO | NG, M. | 1,551 | (0) | - | - | 1,551 | 822 | - | 2,372 | | TRAD |
| 300305-010 | * | UNIVERSITY OF VIRGINIA | NG, M. | 17,847 | 2,161 | - | - | 20,008 | 10,604 | - | 30,613 | | TRAD |
| 300305-011 | * | UNIVERSITY OF VIRGINIA | NG, M. | 9,454 | 491 | - | - | 9,945 | 5,271 | - | 15,216 | | TRAD |
| 100591-010 | * | NATIONAL SECURITY AGENCY | WU, H. | 581 | 949 | - | 931 | 2,461 | 994 | - | 3,455 | | TRAD |
| 100242-010 | * | NATIONAL SCIENCE FOUNDATION | XU, L. | (246) | 1,108.08 | - | - | 862 | 457 | - | 1,318 | | TRAD |
| | | | | 91,273 | 11,881 | - | 2,384 | 105,538 | 52,898 | - | 158,436 | 50.12% | |
| Management | | | | | | | | | | | | | |
| 400274-010 | * | NATIONAL INSTITUTE ON GOVERNMENTAL PURCHASING (NIGF | KLINGER, R. | 1,293 | 0 | - | - | 1,293 | 0 | - | 1,293 | | TRAD |
| | | | | 1,293 | - | - | - | 1,293 | - | - | 1,293 | 0.00% | |
| Marketing | | | | | | | | | | | | | |
| 300359-010 | * | DUKE UNIVERSITY | TANG, C. | 2,602 | 488 | - | - | 3,090 | 773 | - | 3,863 | | TRAD |
| | | | | 2,602 | 488 | - | - | 3,090 | 773 | - | 3,863 | 25.00% | |
| Urban Studies | | | | | | | | | | | | | |
| 400274-010 | * | NATIONAL INSTITUTE ON GOVERNMENTAL PURCHASING (NIGF | GORDON, S. | 1,293 | - | - | - | 1,293 | - | - | 1,293 | | TRAD |
| 400274-010 | * | NATIONAL INSTITUTE ON GOVERNMENTAL PURCHASING (NIGF | LOESCH, M. | 1,293 | - | - | - | 1,293 | - | - | 1,293 | | TRAD |
| 400274-010 | * | NATIONAL INSTITUTE ON GOVERNMENTAL PURCHASING (NIGF | MENGISTU, B. | 1,293 | - | - | - | 1,293 | - | - | 1,293 | | TRAD |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | YUSUF, J. | 2,246 | 173 | - | - | 2,419 | 1,330 | - | 3,749 | | TRAD |
| 300373-010 | * | VA INSTITUTE OF MARINE SCIENCE | YUSUF, J. | 741 | 1,350 | - | - | 2,091 | 544 | - | 2,635 | | TRAD |
| | | | | 6,865 | 1,523 | - | - | 8,388 | 1,874 | - | 10,262 | 22.34% | |
| **TOTAL BUSINESS AND PUBLIC ADMINISTRATION** | | | | **$ 200,294** | **$ 18,575** | **$ -** | **$ 12,213** | **$ 231,081** | **$ 71,641** | **$ -** | **$ 302,722** | 31.00% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **EDUCATION** | | | | | | | | | | | | | |
| Dean's Office | | | | | | | | | | | | | |
| 300360-010 | * | OLD DOMINION UNIVERSITY | BRAY, J. | 0 | 5,000 | - | 111,534.95 | 116,535 | 0 | - | 116,535 | | TRAD |
| 300360-010 | * | OLD DOMINION UNIVERSITY | SHAEFFER, M. | 0 | 2,500 | - | 55,767.48 | 58,267 | 0 | - | 58,267 | | TRAD |
| 100160-010 | | DEFENSE ACTIVITY FOR NON-TRADITIONAL EDUCATION SUPP | WARGO, J. | 58,991 | 13,871 | - | - | 72,861 | 7,286 | - | 80,148 | | TRAD |
| 100568-010 | | DEFENSE ACTIVITY FOR NON-TRADITIONAL EDUCATION SUPP | WARGO, J. | 133,797 | 31,232 | - | - | 165,029 | 16,503 | - | 181,532 | | TRAD |
| | | | | 192,788 | 52,603 | - | 167,302 | 412,693 | 23,789 | - | 436,482 | 5.76% | |
| Center for Educational Partnerships | | | | | | | | | | | | | |
| 100358-010 | * | U.S. DEPARTMENT OF EDUCATION | ARNOLD, P. | 74,195 | 29,117 | - | 1,123,667 | 1,226,978 | 54,755 | - | 1,281,734 | | TRAD |
| 200134-010 | * | NEWPORT NEWS PUBLIC SCHOOLS | ARNOLD, P. | - | - | - | 11,099 | 11,099 | - | - | 11,099 | | TRAD |
| 200185-010 | * | NORFOLK PUBLIC SCHOOLS | ARNOLD, P. | 2,798 | 35 | - | - | 2,833 | 227 | - | 3,060 | | TRAD |
| 200210-010 | * | NEWPORT NEWS PUBLIC SCHOOLS | ARNOLD, P. | 4,676 | - | - | - | 4,676 | - | - | 4,676 | | TRAD |
| 200213-010 | * | CHESAPEAKE PUBLIC SCHOOLS | ARNOLD, P. | 6,611 | - | - | - | 6,611 | - | - | 6,611 | | TRAD |
| 200216-010 | | VIRGINIA BEACH CITY PUBLIC SCHOOLS | ARNOLD, P. | 11,862 | 137 | - | - | 11,999 | - | - | 11,999 | | TRAD |
| 100358-010 | * | U.S. DEPARTMENT OF EDUCATION | CHAPPELL, S . | 37,098 | 14,558 | - | 561,833 | 613,489 | 27,378 | - | 640,867 | | TRAD |
| 200134-010 | * | NEWPORT NEWS PUBLIC SCHOOLS | CHAPPELL, S . | - | - | - | 11,099 | 11,099 | - | - | 11,099 | | TRAD |
| 200185-010 | * | NORFOLK PUBLIC SCHOOLS | CHAPPELL, S . | 1,599 | 20 | - | - | 1,619 | 130 | - | 1,748 | | TRAD |
| 200210-010 | * | NEWPORT NEWS PUBLIC SCHOOLS | CHAPPELL, S . | 1,680 | - | - | - | 1,680 | - | - | 1,680 | | TRAD |
| 200213-010 | * | CHESAPEAKE PUBLIC SCHOOLS | CHAPPELL, S . | 2,454 | - | - | - | 2,454 | - | - | 2,454 | | TRAD |
| 300357-010 | * | JOHNS-HOPKINS UNIVERSITY | CHAPPELL, S . | 17,791 | 1,954 | - | - | 19,745 | 10,465 | - | 30,210 | | TRAD |
| 100244-010 | | NATIONAL SCIENCE FOUNDATION | GARNER, J. | 10,926 | 2,252 | - | - | 13,178 | 3,426 | - | 16,604 | | TRAD |
| 100477-010 | * | NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | GARNER, J. | 2,200 | 244 | - | 450 | 2,894 | 611 | - | 3,505 | | TRAD |
| 200003-010 | | PRINCE WILLIAM COUNTY PUBLIC SCHOOLS | GARNER, J. | 5,098 | 224 | - | - | 5,322 | - | - | 5,322 | | TRAD |
| 200134-010 | * | NEWPORT NEWS PUBLIC SCHOOLS | GARNER, J. | - | - | - | 22,199 | 22,199 | - | - | 22,199 | | TRAD |
| 200183-010 | * | OLD DOMINION UNIVERSITY | GARNER, J. | 20,676 | 9,295 | - | - | 29,972 | 2,398 | - | 32,370 | | TRAD |
| 200183-020 | * | OLD DOMINION UNIVERSITY | GARNER, J. | 14,710 | 2,469 | - | - | 17,179 | 1,374 | - | 18,553 | | TRAD |
| 200188-010 | * | OLD DOMINION UNIVERSITY | GARNER, J. | 6,523 | 248 | - | 3,758 | 10,530 | 542 | - | 11,072 | | TRAD |
| 200188-020 | * | OLD DOMINION UNIVERSITY | GARNER, J. | - | 655 | - | 1,026 | 1,681 | 52 | - | 1,733 | | TRAD |
| 200188-030 | * | OLD DOMINION UNIVERSITY | GARNER, J. | 3,694 | - | - | - | 3,694 | 296 | - | 3,989 | | TRAD |
| 200210-010 | * | NEWPORT NEWS PUBLIC SCHOOLS | GARNER, J. | 840 | - | - | - | 840 | - | - | 840 | | TRAD |
| 200213-010 | * | CHESAPEAKE PUBLIC SCHOOLS | GARNER, J. | 1,227 | - | - | - | 1,227 | - | - | 1,227 | | TRAD |
| 200219-010 | * | PORTSMOUTH PUBLIC SCHOOLS | GARNER, J. | 2,596 | - | - | - | 2,596 | 208 | - | 2,804 | | TRAD |
| 300133-010 | * | OLD DOMINION UNIVERSITY | GARNER, J. | - | (459) | - | - | (459) | (37) | - | (496) | | TRAD |
| 300284-010 | * | OLD DOMINION UNIVERSITY | GARNER, J. | 9,498 | 43,396 | - | 20,834 | 73,728 | 3,848 | - | 77,576 | | TRAD |
| 200188-010 | * | OLD DOMINION UNIVERSITY | LONEY, M. | 26,093 | 993 | - | 15,034 | 42,120 | 2,167 | - | 44,286 | | TRAD |
| 200188-020 | * | OLD DOMINION UNIVERSITY | LONEY, M. | - | 655 | - | 1,026 | 1,681 | 52 | - | 1,733 | | TRAD |
| 200188-030 | * | OLD DOMINION UNIVERSITY | LONEY, M. | 3,694 | - | - | - | 3,694 | 296 | - | 3,989 | | TRAD |
| 200219-010 | * | PORTSMOUTH PUBLIC SCHOOLS | LONEY, M. | 1,731 | - | - | - | 1,731 | 138 | - | 1,869 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100358-010 | * U.S. DEPARTMENT OF EDUCATION | NUNNERY, J. | 166,804 | 67,417 | - | 2,523,173 | 2,757,393 | 124,137 | - | 2,881,530 | | TRAD |
| 200134-010 | * NEWPORT NEWS PUBLIC SCHOOLS | NUNNERY, J. | - | - | - | 11,099 | 11,099 | - | - | 11,099 | | TRAD |
| 200185-010 | * NORFOLK PUBLIC SCHOOLS | NUNNERY, J. | 2,798 | 35 | - | - | 2,833 | 227 | - | 3,060 | | TRAD |
| 200188-020 | * OLD DOMINION UNIVERSITY | NUNNERY, J. | - | 437 | - | 684 | 1,121 | 35 | - | 1,156 | | TRAD |
| 200188-030 | * OLD DOMINION UNIVERSITY | NUNNERY, J. | 2,463 | - | - | - | 2,463 | 197 | - | 2,660 | | TRAD |
| 200210-010 | * NEWPORT NEWS PUBLIC SCHOOLS | NUNNERY, J. | 840 | - | - | - | 840 | - | - | 840 | | TRAD |
| 200213-010 | * CHESAPEAKE PUBLIC SCHOOLS | NUNNERY, J. | 1,227 | - | - | - | 1,227 | - | - | 1,227 | | TRAD |
| 300357-010 | * JOHNS-HOPKINS UNIVERSITY | NUNNERY, J. | 7,625 | 837 | - | - | 8,462 | 4,485 | - | 12,947 | | TRAD |
| 200185-010 | * NORFOLK PUBLIC SCHOOLS | PERRY, T. | 799 | 10 | - | - | 809 | 65 | - | 874 | | TRAD |
| 200188-010 | * OLD DOMINION UNIVERSITY | PERRY, T. | 4,349 | 165 | - | 2,506 | 7,020 | 361 | - | 7,381 | | TRAD |
| 200188-020 | * OLD DOMINION UNIVERSITY | PERRY, T. | - | 437 | - | 684 | 1,121 | 35 | - | 1,156 | | TRAD |
| 200188-030 | * OLD DOMINION UNIVERSITY | PERRY, T. | 2,463 | - | - | - | 2,463 | 197 | - | 2,660 | | TRAD |
| | | | 459,637 | 175,131 | - | 4,310,171 | 4,944,938 | 238,064 | - | 5,183,002 | 4.81% | |
| Communication Disorders and Special Education | | | | | | | | | | | | |
| 100366-010 | * U.S. DEPARTMENT OF EDUCATION | BAKER, C. | 2,140 | 199 | - | 6,264 | 8,603 | 187 | - | 8,790 | | TRAD |
| 300004-010 | * GEORGE MASON UNIVERSITY | BAKER, C. | - | 1,273 | - | - | 1,273 | 102 | - | 1,375 | | TRAD |
| 100559-010 | * U.S. DEPARTMENT OF EDUCATION | BOBZIEN, J. | 8,013 | - | - | 32,989 | 41,002 | 641 | - | 41,643 | | TRAD |
| 300314-010 | * GEORGE MASON UNIVERSITY | BOBZIEN, J. | 2,386 | - | - | - | 2,386 | 191 | - | 2,577 | | TRAD |
| 100367-010 | * U.S. DEPARTMENT OF EDUCATION | BUTLER, C. | 2,762 | 2,495 | - | - | 5,258 | 421 | - | 5,678 | | TRAD |
| 400242-010 | ORGANIZATION FOR AUTISM RESEARCH | CHEZAN, L. | 9,833 | 4,135 | - | - | 13,968 | - | - | 13,968 | | TRAD |
| 200153-010 | OLD DOMINION UNIVERSITY | GABLE, R. | 323 | 43,158 | - | - | 43,481 | 3,479 | - | 46,960 | | TRAD |
| 200169-010 | OLD DOMINION UNIVERSITY | GABLE, R. | 140,424 | 55,593 | - | - | 196,016 | 15,681 | - | 211,698 | | TRAD |
| 200170-010 | OLD DOMINION UNIVERSITY | GABLE, R. | 351,915 | 120,825 | - | 23,633 | 496,373 | 37,819 | - | 534,192 | | TRAD |
| 200170-020 | OLD DOMINION UNIVERSITY | GABLE, R. | 229,361 | 49,145 | - | - | 278,506 | 22,281 | - | 300,787 | | TRAD |
| 200179-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 21,692 | - | - | - | 21,692 | 1,735 | - | 23,428 | | TRAD |
| 300004-010 | * GEORGE MASON UNIVERSITY | GABLE, R. | - | 1,273 | - | - | 1,273 | 102 | - | 1,375 | | TRAD |
| 300135-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 32,464 | 192,061 | - | - | 224,525 | 17,962 | - | 242,487 | | TRAD |
| 300149-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | - | - | - | (314) | (314) | - | - | (314) | | TRAD |
| 300155-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 7,429 | 9,726 | - | 3,412 | 20,567 | 1,372 | - | 21,939 | | TRAD |
| 300155-012 | * OLD DOMINION UNIVERSITY | GABLE, R. | 181 | 49,363 | 9,515 | 0 | 59,059 | 3,963 | - | 63,023 | | TRAD |
| 300155-013 | * OLD DOMINION UNIVERSITY | GABLE, R. | 4,330 | 10,439 | - | (0) | 14,769 | 1,181 | - | 15,950 | | TRAD |
| 300314-010 | * GEORGE MASON UNIVERSITY | GABLE, R. | 2,386 | - | - | - | 2,386 | 191 | - | 2,577 | | TRAD |
| 300325-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 184 | 37,384 | - | (0) | 37,569 | 3,005 | - | 40,574 | | TRAD |
| 300333-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 12,420 | 1,329 | - | - | 13,749 | 1,100 | - | 14,849 | | TRAD |
| 300338-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 222,509 | 53 | - | - | 222,561 | 17,805 | - | 240,366 | | TRAD |
| 300338-020 | * OLD DOMINION UNIVERSITY | GABLE, R. | 59,730 | - | - | - | 59,730 | 4,778 | - | 64,509 | | TRAD |
| 300339-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 114,294 | - | - | - | 114,294 | 9,144 | - | 123,438 | | TRAD |
| 300346-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 19,203 | 1,454 | - | 40,174 | 60,832 | - | - | 60,832 | | TRAD |
| 300351-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 91,265 | 142,561 | - | - | 233,825 | 18,706 | - | 252,531 | | TRAD |
| 300354-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 35,203 | 2,382 | - | - | 37,585 | 3,007 | - | 40,591 | | TRAD |
| 300356-010 | * OLD DOMINION UNIVERSITY | GABLE, R. | 11,836 | 202 | - | - | 12,037 | 963 | - | 13,000 | | TRAD |
| 300382-010 | OLD DOMINION UNIVERSITY | GABLE, R. | - | 8,757 | - | - | 8,757 | 701 | - | 9,457 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | GEAR, S. | 2,762 | 2,495 | - | - | 5,258 | 421 | - | 5,678 | | TRAD |
| 100559-010 | * | U.S. DEPARTMENT OF EDUCATION | GEAR, S. | 8,256 | - | - | 33,988 | 42,245 | 660 | - | 42,905 | | TRAD |
| 100366-010 | * | U.S. DEPARTMENT OF EDUCATION | HESTER, PEGGY | 19,262 | 1,795 | - | 56,373 | 77,430 | 1,685 | - | 79,114 | | TRAD |
| 100559-010 | * | U.S. DEPARTMENT OF EDUCATION | HESTER, PEGGY | 8,013 | - | - | 32,989 | 41,002 | 641 | - | 41,643 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | JUDGE, S. | 4,489 | 4,055 | - | - | 8,544 | 683 | - | 9,227 | | TRAD |
| 300346-010 | * | OLD DOMINION UNIVERSITY | MAYDOSZ, A. | 19,203 | 1,454 | - | 40,174 | 60,832 | - | - | 60,832 | | TRAD |
| 300354-010 | * | OLD DOMINION UNIVERSITY | MAYDOSZ, A. | 11,734 | 794 | - | - | 12,528 | 1,002 | - | 13,530 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | RAYMER, S. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| 100478-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | RICHELS, C. | 11,526 | 1,113 | - | 3,624 | 16,263 | 1,011 | - | 17,274 | | TRAD |
| 200179-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 21,692 | - | - | - | 21,692 | 1,735 | - | 23,428 | | TRAD |
| 300004-010 | * | GEORGE MASON UNIVERSITY | TONELSON, S. | - | 2,546 | - | - | 2,546 | 204 | - | 2,750 | | TRAD |
| 300135-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 32,464 | 192,061 | - | - | 224,525 | 17,962 | - | 242,487 | | TRAD |
| 300149-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | - | - | - | (314) | (314) | - | - | (314) | | TRAD |
| 300155-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 7,429 | 9,726 | - | 3,412 | 20,567 | 1,372 | - | 21,939 | | TRAD |
| 300155-012 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 181 | 49,363 | 9,515 | 0 | 59,059 | 3,963 | - | 63,023 | | TRAD |
| 300155-013 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 4,330 | 10,439 | - | (0) | 14,769 | 1,181 | - | 15,950 | | TRAD |
| 300306-010 | * | GEORGE MASON UNIVERSITY | TONELSON, S. | 10,705 | 1,432 | - | - | 12,136 | 971 | - | 13,107 | | TRAD |
| 300313-010 | | GEORGE MASON UNIVERSITY | TONELSON, S. | 8,422 | 1,641 | - | 8,211 | 18,274 | 805 | - | 19,079 | | TRAD |
| 300313-020 | | GEORGE MASON UNIVERSITY | TONELSON, S. | - | 7,622 | - | - | 7,622 | 610 | - | 8,232 | | TRAD |
| 300314-010 | * | GEORGE MASON UNIVERSITY | TONELSON, S. | 4,772 | - | - | - | 4,772 | 382 | - | 5,154 | | TRAD |
| 300314-020 | | GEORGE MASON UNIVERSITY | TONELSON, S. | - | 4,923 | - | - | 4,923 | 394 | - | 5,316 | | TRAD |
| 300325-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 184 | 37,384 | - | (0) | 37,569 | 3,005 | - | 40,574 | | TRAD |
| 300333-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 34,777 | 3,721 | - | - | 38,498 | 3,080 | - | 41,578 | | TRAD |
| 300338-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 222,509 | 53 | - | - | 222,561 | 17,805 | - | 240,366 | | TRAD |
| 300338-020 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 59,730 | - | - | - | 59,730 | 4,778 | - | 64,509 | | TRAD |
| 300339-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 114,294 | - | - | - | 114,294 | 9,144 | - | 123,438 | | TRAD |
| 300346-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 19,203 | 1,454 | - | 40,174 | 60,832 | - | - | 60,832 | | TRAD |
| 300351-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 4,780 | 1,851 | - | - | 6,631 | 530 | - | 7,161 | | TRAD |
| 300354-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 11,734 | 794 | - | - | 12,528 | 1,002 | - | 13,530 | | TRAD |
| 300356-010 | * | OLD DOMINION UNIVERSITY | TONELSON, S. | 12,194 | 208 | - | - | 12,402 | 992 | - | 13,394 | | TRAD |
| 300362-010 | | GEORGE MASON UNIVERSITY | TONELSON, S. | 1,678 | 322 | - | 2,088 | 4,088 | 160 | - | 4,248 | | TRAD |
| 300363-010 | | GEORGE MASON UNIVERSITY | TONELSON, S. | 1,007 | - | - | - | 1,007 | 81 | - | 1,088 | | TRAD |
| 300368-010 | | GEORGE MASON UNIVERSITY | TONELSON, S. | - | 96 | - | 6,434 | 6,530 | 8 | - | 6,538 | | TRAD |
| | | | | 2,040,653 | 1,072,083 | 19,031 | 333,312 | 3,465,081 | 242,945 | - | 3,708,022 | 7.01% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Counseling and Human Services | | | | | | | | | | | | | |
| 200122-010 | * | CITY OF VIRGINIA BEACH | CRAIGEN, L. | 3,730 | - | - | - | 3,730 | - | - | 3,730 | | TRAD |
| 100478-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | JOHNSON, K. | 11,526 | 1,113 | - | 3,624 | 16,263 | 1,011 | - | 17,274 | | TRAD |
| 100372-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | JOHNSON, K. | 1,700 | 21 | - | - | 1,720 | 138 | - | 1,858 | | TRAD |
| 400283-010 | | AMERICAN PSYCHOLOGICAL FOUNDATION | KEMER, G. | - | 647 | - | - | 647 | - | - | 647 | | TRAD |
| 200122-010 | * | CITY OF VIRGINIA BEACH | LEVINGSTON, K. | 5,595 | - | - | - | 5,595 | - | - | 5,595 | | TRAD |
| 100591-010 | * | NATIONAL SECURITY AGENCY | MILLIKEN, T. | 581 | 949 | - | 931 | 2,461 | 994 | - | 3,455 | | TRAD |
| 300349-011 | * | EASTERN VIRGINIA MEDICAL SCHOOL | REHFUSS, M . | 3,529 | - | - | - | 3,529 | 282 | - | 3,812 | | TRAD |
| 300349-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | REHFUSS, M. | 25,278 | - | - | 8,640 | 33,918 | 2,022 | - | 35,940 | | TRAD |
| | | | | 51,939 | 2,729 | - | 13,195 | 67,863 | 4,448 | - | 72,310 | 6.55% | |
| Educational Foundations and Leadership | | | | | | | | | | | | | |
| 100358-010 | * | U.S. DEPARTMENT OF EDUCATION | BOL, L. | 37,098 | 14,558 | - | 561,833 | 613,489 | 27,378 | - | 640,867 | | TRAD |
| 200188-020 | * | OLD DOMINION UNIVERSITY | BOL, L. | - | 218 | - | 342 | 560 | 17 | - | 578 | | TRAD |
| 200188-030 | * | OLD DOMINION UNIVERSITY | BOL, L. | 1,231 | - | - | - | 1,231 | 99 | - | 1,330 | | TRAD |
| 200210-010 | * | NEWPORT NEWS PUBLIC SCHOOLS | ESQUEDA, M. | 363 | - | - | - | 363 | - | - | 363 | | TRAD |
| 200213-010 | * | CHESAPEAKE PUBLIC SCHOOLS | ESQUEDA, M. | 750 | - | - | - | 750 | - | - | 750 | | TRAD |
| 400248-010 | | ORGANIZATION FOR AUTISM RESEARCH | GLASS, C. | - | 321 | - | - | 321 | - | - | 321 | | TRAD |
| 100422-010 | * | U.S. DEPARTMENT OF JUSTICE | GREGORY, D. | 49,556 | 25,035 | - | 6,829 | 81,421 | - | - | 81,421 | | TRAD |
| 200162-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | MYRAN, S. | 2,113 | 636 | - | 900 | 3,649 | 220 | - | 3,869 | | TRAD |
| 300294-010 | | TEMPLE UNIVERSITY | PEREZ, A. | 31,498 | 2,818 | - | 7,086 | 41,401 | 18,187 | - | 59,589 | | TRAD |
| 200188-020 | * | OLD DOMINION UNIVERSITY | PRIBESH, S. | - | 218 | - | 342 | 560 | 17 | - | 578 | | TRAD |
| 200188-030 | * | OLD DOMINION UNIVERSITY | PRIBESH, S. | 1,231 | - | - | - | 1,231 | 99 | - | 1,330 | | TRAD |
| 200162-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | SANZO, K. | 2,113 | 636 | - | 900 | 3,649 | 220 | - | 3,869 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | SCRIBNER, J. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| 200162-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | SCRIBNER, J. | 2,113 | 636 | - | 900 | 3,649 | 220 | - | 3,869 | | TRAD |
| 200162-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | SUTHERLAND, I. | 8,452 | 2,543 | - | 3,600 | 14,595 | 880 | - | 15,474 | | TRAD |
| | | | | 137,555 | 48,555 | - | 582,732 | 768,844 | 47,496 | - | 816,336 | 6.18% | |
| Human Movement Sciences | | | | | | | | | | | | | |
| 400251-010 | * | HAMPTON ROADS SPORTS COMMISSION | CASE, R. | 1,076 | 718 | - | - | 1,793 | - | - | 1,793 | | TRAD |
| 400056-010 | * | AMERICAN DIABETES ASSOCIATION | COLBERG-OCHS, S. | 21,923 | 1,285 | - | 3,425 | 26,633 | 3,481 | - | 30,114 | | TRAD |
| 400251-010 | * | HAMPTON ROADS SPORTS COMMISSION | LYONS, A. | 1,076 | 718 | - | - | 1,793 | - | - | 1,793 | | TRAD |
| 300002-010 | | OLD DOMINION UNIVERSITY | MORRISON, S. | 2,077 | 150 | - | - | 2,227 | - | - | 2,227 | | TRAD |
| 400251-010 | * | HAMPTON ROADS SPORTS COMMISSION | REAMS, L . | 1,076 | 718 | - | - | 1,793 | - | - | 1,793 | | TRAD |
| 400251-010 | * | HAMPTON ROADS SPORTS COMMISSION | RIDINGER, L. | 1,076 | 718 | - | - | 1,793 | - | - | 1,793 | | TRAD |
| 400251-010 | * | HAMPTON ROADS SPORTS COMMISSION | SHAPIRO, S. | 1,076 | 718 | - | - | 1,793 | - | - | 1,793 | | TRAD |
| | | | | 29,378 | 5,023 | - | 3,425 | 37,826 | 3,481 | - | 41,308 | 9.20% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| STEM Education and Professional Studies | | | | | | | | | | | | | |
| 100247-010 | * | NATIONAL SCIENCE FOUNDATION | ADCOCK, A. | 4,664 | 603 | - | - | 5,266 | 2,791 | - | 8,057 | | TRAD |
| 100252-010 | * | NATIONAL SCIENCE FOUNDATION | BURGIN, S. | 3,752 | 5,127 | - | 696 | 9,575 | 4,706 | - | 14,281 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | BURGIN, S. | 2,762 | 2,495 | - | - | 5,258 | 421 | - | 5,678 | | TRAD |
| 200173-010 | * | VA DEPARTMENT OF REHABILITATIVE SERVICES | DAVIS, S. | 14,135 | 4,429 | - | - | 18,564 | - | - | 18,564 | | TRAD |
| 200207-010 | * | VA DEPARTMENT OF REHABILITATIVE SERVICES | DAVIS, S. | 4,722 | 537 | - | - | 5,258 | - | - | 5,258 | | TRAD |
| 100477-010 | * | NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | DICKERSON, D. | 14,602 | 1,710 | - | 3,150 | 19,462 | 4,078 | - | 23,540 | | TRAD |
| 100539-010 | * | NATIONAL SCIENCE FOUNDATION | DICKERSON, D. | 3,799 | - | - | - | 3,799 | 2,013 | - | 5,812 | | TRAD |
| 200183-010 | * | OLD DOMINION UNIVERSITY | DICKERSON, D. | 2,520 | 816 | - | 1,123 | 4,459 | 267 | - | 4,726 | | TRAD |
| 200183-020 | * | OLD DOMINION UNIVERSITY | DICKERSON, D. | 2,536 | 865 | - | (1,123) | 2,277 | 272 | - | 2,549 | | TRAD |
| 300284-010 | * | OLD DOMINION UNIVERSITY | DICKERSON, D. | 1,357 | 6,199 | - | 2,976 | 10,533 | 550 | - | 11,082 | | TRAD |
| 200162-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | ENDERSON, M. | 3,169 | 954 | - | 1,350 | 5,473 | 330 | - | 5,803 | | TRAD |
| 200177-010 | * | OLD DOMINION UNIVERSITY | ENDERSON, M. | 60,359 | 27,154 | - | 1,471 | 88,984 | 4,376 | - | 93,359 | | TRAD |
| 300143-020 | * | OLD DOMINION UNIVERSITY | ENDERSON, M. | 1,598 | 2,074 | - | 3,350 | 7,021 | 184 | - | 7,205 | | TRAD |
| 300143-040 | * | OLD DOMINION UNIVERSITY | ENDERSON, M . | 13,187 | - | - | - | 13,187 | 659 | - | 13,846 | | TRAD |
| 100358-010 | * | U.S. DEPARTMENT OF EDUCATION | GRANT, M . | 37,098 | 14,558 | - | 561,833 | 613,489 | 27,378 | - | 640,867 | | TRAD |
| 100591-010 | * | NATIONAL SECURITY AGENCY | GRANT, M. | 581 | 949 | - | 931 | 2,461 | 994 | - | 3,455 | | TRAD |
| 100231-010 | * | NATIONAL SCIENCE FOUNDATION | KATSIOLOUDIS, P. | 2,655 | 898 | - | - | 3,552 | 1,883 | - | 5,435 | | TRAD |
| 100477-010 | * | NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | KATSIOLOUDIS, P. | 2,200 | 244 | - | 450 | 2,894 | 611 | - | 3,505 | | TRAD |
| 300361-010 | * | TIDEWATER COMMUNITY COLLEGE | KATSIOLOUDIS, P. | 14,855 | 3,914 | - | - | 18,769 | 10,323 | - | 29,092 | | TRAD |
| 200173-010 | * | VA DEPARTMENT OF REHABILITATIVE SERVICES | KOSLOSKI, M. | 14,135 | 4,429 | - | - | 18,564 | - | - | 18,564 | | TRAD |
| 200207-010 | * | VA DEPARTMENT OF REHABILITATIVE SERVICES | KOSLOSKI, M. | 37,122 | 3,014 | - | - | 40,136 | - | - | 40,136 | | TRAD |
| 100358-010 | * | U.S. DEPARTMENT OF EDUCATION | MORRISON, G. | 18,684 | 5,375 | - | 285,994 | 310,053 | 12,751 | - | 322,804 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | POND, L. | 2,762 | 2,495 | - | - | 5,258 | 421 | - | 5,678 | | TRAD |
| 400149-030 | * | OPPORTUNITY, INC. | REED, P. | 3,184 | 85 | - | 56 | 3,325 | 327 | - | 3,652 | | TRAD |
| 400149-020 | * | OPPORTUNITY, INC. | REED, P. | - | (53) | - | - | (53) | (5) | - | (58) | | VMASC |
| 100192-010 | * | NATIONAL SCIENCE FOUNDATION | RITZ, J. | 611 | 10,690 | - | 3,526 | 14,826 | 5,650 | - | 20,476 | | TRAD |
| 300030-011 | * | VA SPACE GRANT CONSORTIUM | TOMOVIC, C. | 2,517 | 8,751 | - | 537 | 11,805 | - | - | 11,805 | | TRAD |
| 100070-010 | * | ARMY CORPS OF ENGINEERS--NORFOLK DISTRICT | WATSON, G. | - | - | - | 97 | 97 | 49 | - | 146 | | TRAD |
| 100072-010 | * | ARMY MEDICAL RESEARCH AND MATERIALS COMMAND | WATSON, G. | - | 954 | - | - | 954 | 573 | - | 1,527 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | WATSON, G. | 1,036 | 936 | - | - | 1,972 | 158 | - | 2,129 | | TRAD |
| 400149-020 | * | OPPORTUNITY, INC. | WATSON, G. | - | (53) | - | - | (53) | (5) | - | (58) | | TRAD |
| 400149-030 | * | OPPORTUNITY, INC. | WATSON, G. | 3,184 | 85 | - | 56 | 3,325 | 327 | - | 3,652 | | TRAD |
| | | | | 273,784 | 110,232 | - | 866,474 | 1,250,496 | 82,083 | - | 1,332,568 | 6.56% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Teaching and Learning | | | | | | | | | | | | | |
| 200163-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | BUTLER, B. | 2,736 | 1,220 | - | 575 | 4,531 | 142 | - | 4,673 | | TRAD |
| 200163-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | COLWELL, J. | 2,736 | 1,220 | - | 575 | 4,531 | 142 | - | 4,673 | | TRAD |
| 400217-010 | | INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION | CROMPTON, H. | 8,289 | - | - | 157 | 8,446 | 676 | - | 9,122 | | TRAD |
| 100437-010 | * | INSTITUTE OF MUSEUM AND LIBRARY SERVICES | DICKINSON, G. | 7,577 | 4,256 | - | 23,244 | 35,078 | 6,272 | - | 41,349 | | TRAD |
| 100498-010 | * | INSTITUTE OF MUSEUM AND LIBRARY SERVICES | DICKINSON, G. | 7,206 | 12,685 | - | 26,475 | 46,366 | 1,591 | - | 47,957 | | TRAD |
| 300360-010 | * | OLD DOMINION UNIVERSITY | DICKINSON, G. | - | 2,500 | - | 55,767 | 58,267 | - | - | 58,267 | | TRAD |
| 100437-010 | * | INSTITUTE OF MUSEUM AND LIBRARY SERVICES | DOLL, C. | 7,577 | 4,256 | - | 23,244 | 35,078 | 6,272 | - | 41,349 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | FLEENER, C. | 2,762 | 2,495 | - | - | 5,258 | 421 | - | 5,678 | | TRAD |
| 100498-010 | * | INSTITUTE OF MUSEUM AND LIBRARY SERVICES | HOWARD, J. | 7,206 | 12,685 | - | 26,475 | 46,366 | 1,591 | - | 47,957 | | TRAD |
| 100489-010 | | NATIONAL SCIENCE FOUNDATION | KIDD, J. | 26,047 | 5,851 | - | 7,084 | 38,982 | 16,906 | - | 55,888 | | TRAD |
| 100437-010 | * | INSTITUTE OF MUSEUM AND LIBRARY SERVICES | KIMMEL, S. | 7,807 | 4,385 | - | 23,949 | 36,141 | 6,462 | - | 42,602 | | TRAD |
| 500206-010 | | NATIONAL WRITING PROJECT CORPORATION | LEE, L. | 4,590 | 1,985 | - | - | 6,575 | 604 | - | 7,180 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | SOMMERFELDT, J. | 2,762 | 2,495 | - | - | 5,258 | 421 | - | 5,678 | | TRAD |
| 100230-010 | * | NATIONAL SCIENCE FOUNDATION | SUH, Y | 2,342 | 1,709 | - | - | 4,051 | 2,147 | - | 6,198 | | TRAD |
| 100497-010 | | NATIONAL ENDOWMENT FOR THE HUMANITIES | SUH, Y. | 12,829 | 16,693 | - | 104,753 | 134,275 | 7,676 | - | 141,950 | | TRAD |
| | | | | 102,466 | 74,437 | - | 292,299 | 469,205 | 51,325 | - | 520,525 | 10.94% | |
| **EDUCATION TOTAL** | | | | **$ 3,288,198** | **$ 1,540,793** | **$ 19,031** | **$ 6,568,909** | **$ 11,416,932** | **$ 693,621** | **$ -** | **$ 12,110,552** | **6.08%** | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **ENGINEERING AND TECHNOLOGY** | | | | | | | | | | | | | |
| Dean's Office | | | | | | | | | | | | | |
| 100538-010 | * | OFFICE OF NAVAL RESEARCH | DEAN, A. | 42,477 | 7,557 | 1,170 | 4,367 | 55,571 | 32,522 | - | 88,094 | | TRAD |
| 100256-010 | * | NATIONAL SCIENCE FOUNDATION | DHALI, S. | 1,480 | 91 | - | 18,405 | 19,975 | 832 | - | 20,808 | | TRAD |
| 300248-010 | * | HAMPTON UNIVERSITY | DHALI, S. | - | - | - | 1,097 | 1,097 | 307 | - | 1,404 | | TRAD |
| 500153-010 | * | DOMINION RESOURCES SERVICES, INC. | DHALI, S. | 21,678 | 13,261 | 10,032 | - | 44,971 | 18,518 | - | 63,489 | | TRAD |
| 500238-010 | * | NON-DISCLOSED SPONSORS | DHALI, S. | 8,226 | 391 | - | - | 8,617 | 4,567 | - | 13,184 | | TRAD |
| 100241-010 | | NATIONAL SCIENCE FOUNDATION | VAHALA, L. | 4,314 | 2,365 | - | - | 6,679 | 3,540 | - | 10,219 | | TRAD |
| 100390-020 | | U.S. DEPARTMENT OF ENERGY | VAHALA, L. | (44) | - | - | - | (44) | (22) | - | (67) | | TRAD |
| 100538-010 | * | OFFICE OF NAVAL RESEARCH | VAHALA, L . | 14,159 | 2,519 | 390 | 1,456 | 18,524 | 10,841 | - | 29,365 | | TRAD |
| 300280-010 | | COLLEGE OF WILLIAM AND MARY | VAHALA, L. | 27,278 | 2,869 | 10,578 | - | 40,725 | 15,978 | - | 56,703 | | TRAD |
| 400271-001 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | VAHALA, L. | 4,921 | 600 | - | - | 5,521 | 1,435 | - | 6,956 | | TRAD |
| | | | | 124,488 | 29,654 | 22,170 | 25,324 | 201,637 | 88,518 | - | 290,154 | 43.90% | |
| Civil and Environmental Engineering | | | | | | | | | | | | | |
| 200066-010 | | CENTER FOR INNOVATIVE TECHNOLOGY | CETIN, M. | 25,212 | 19,275 | - | - | 44,486 | 13,346 | - | 57,832 | | TRAD |
| 200208-010 | * | VA DEPARTMENT OF TRANSPORTATION | CETIN, M . | 26,209 | 1,986 | - | - | 28,195 | 7,331 | - | 35,526 | | TRAD |
| 300234-010 | * | UNIVERSITY OF IDAHO | CETIN, M. | 152 | 536 | - | - | 688 | 365 | - | 1,053 | | TRAD |
| 300234-014 | | UNIVERSITY OF IDAHO | CETIN, M. | 2,019 | - | - | - | 2,019 | 1,070 | - | 3,089 | | TRAD |
| 300234-017 | * | UNIVERSITY OF IDAHO | CETIN, M. | 3,102 | (1) | - | - | 3,101 | 1,644 | - | 4,745 | | TRAD |
| 300234-018 | * | UNIVERSITY OF IDAHO | CETIN, M . | 5,063 | - | - | - | 5,063 | 2,684 | - | 7,747 | | TRAD |
| 300234-070 | * | UNIVERSITY OF IDAHO | CETIN, M. | 22,622 | 1,316 | - | 21,773 | 45,711 | 12,687 | - | 58,398 | | TRAD |
| 300258-010 | * | UNIVERSITY OF MARYLAND | CETIN, M. | 35,143 | 2,186 | - | - | 37,328 | 19,784 | - | 57,112 | | TRAD |
| 300305-010 | * | UNIVERSITY OF VIRGINIA | CETIN, M. | 44,618 | 5,403 | - | - | 50,021 | 26,511 | - | 76,532 | | TRAD |
| 300305-011 | * | UNIVERSITY OF VIRGINIA | CETIN, M. | 23,634 | 1,228 | - | - | 24,862 | 13,177 | - | 38,039 | | TRAD |
| 300305-012 | * | UNIVERSITY OF VIRGINIA | CETIN, M. | 7,687 | 574 | - | - | 8,261 | 4,378 | - | 12,640 | | TRAD |
| 300305-013 | * | UNIVERSITY OF VIRGINIA | CETIN, M. | 3,545 | 1,500 | - | - | 5,045 | - | - | 5,045 | | TRAD |
| 600197-010 | | MYONGJI UNIVERSITY | CHAE, Y. | 13,815 | 2,289 | - | 19,522 | 35,626 | 19,595 | - | 55,221 | | TRAD |
| 300248-010 | * | HAMPTON UNIVERSITY | ERTEN-UNAL, M. | - | - | - | 17,552 | 17,552 | 4,915 | - | 22,467 | | TRAD |
| 100250-010 | | NATIONAL SCIENCE FOUNDATION | KUMAR, S. | 40,524 | 16,210 | - | - | 56,734 | 30,069 | - | 86,803 | | TRAD |
| 100250-020 | | NATIONAL SCIENCE FOUNDATION | KUMAR, S. | - | (3,000) | - | 11,074 | 8,074 | - | - | 8,074 | | TRAD |
| 100574-010 | | SANDIA NATIONAL LABORATORIES | KUMAR, S. | 5,119 | 1,931 | - | - | 7,049 | - | - | 7,049 | | TRAD |
| 200198-010 | | CITY OF HAMPTON | KUMAR, S. | 4,520 | - | - | 319 | 4,839 | 2,661 | - | 7,500 | | TRAD |
| 500138-030 | | TYTON BIOSCIENCES CORP. LLC | KUMAR, S. | - | - | - | 244 | 244 | 130 | - | 373 | | TRAD |
| 500141-010 | | TYTON BIOSCIENCES CORP. LLC | KUMAR, S. | (16,435) | (325) | - | - | (16,760) | (4,358) | - | (21,118) | | TRAD |
| 500141-020 | | TYTON BIOSCIENCES CORP. LLC | KUMAR, S. | 60,186 | 1,144 | - | - | 61,329 | 9,813 | - | 71,142 | | TRAD |
| 500197-010 | | FIBERIGHT, LLC | KUMAR, S. | - | 14 | - | - | 14 | 8 | - | 22 | | TRAD |
| 100245-010 | | NATIONAL SCIENCE FOUNDATION | MA, G. | 40,453 | 3,621 | - | - | 44,075 | 23,360 | - | 67,434 | | TRAD |
| 100544-010 | | NATIONAL SCIENCE FOUNDATION | MA, G. | - | 1,871 | - | - | 1,871 | 992 | - | 2,863 | | TRAD |
| 200208-010 | * | VA DEPARTMENT OF TRANSPORTATION | PALETI, R. | 26,209 | 1,986 | - | - | 28,195 | 7,331 | - | 35,526 | | TRAD |
| 300305-010 | * | UNIVERSITY OF VIRGINIA | PALETI, R. | 8,924 | 1,081 | - | - | 10,004 | 5,302 | - | 15,306 | | TRAD |
| 300305-011 | * | UNIVERSITY OF VIRGINIA | PALETI, R. | 4,727 | 246 | - | - | 4,972 | 2,635 | - | 7,608 | | TRAD |
| 300305-013 | * | UNIVERSITY OF VIRGINIA | PALETI, R. | 2,363 | 1,000 | - | - | 3,363 | - | - | 3,363 | | TRAD |
| 300376-010 | | UNIVERSITY OF MEMPHIS | PALETI, R. | 16,411 | - | - | - | 16,411 | 2,462 | - | 18,872 | | TRAD |
| 100580-010 | | NATIONAL SCIENCE FOUNDATION | STUART, B. | 14,879 | 46,820 | - | 29,933 | 91,632 | 33,935 | - | 125,567 | | TRAD |
| 300181-010 | | OLD DOMINION UNIVERSITY | WANG, X. | - | - | - | (210) | (210) | - | - | (210) | | TRAD |
| 300378-010 | | OLD DOMINION UNIVERSITY | WANG, X. | 2,826 | - | - | - | 2,826 | - | - | 2,826 | | TRAD |
| 600194-010 | | BEIJING J&C REAL ESTATE INVESTMENT CORP, LTD | WANG, X. | 10,453 | - | - | - | 10,453 | 5,540 | - | 15,993 | | TRAD |
| | | | | 433,977 | 108,891 | - | 100,208 | 643,075 | 247,364 | - | 890,440 | 38.47% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Civil and Environmental Engineering - VMASC: Virginia Modeling & Simulation Center | | | | | | | | | | | | | |
| 200152-010 | * | CITY OF VIRGINIA BEACH | CETIN, M. | 29,512 | 1,360 | - | 240 | 31,112 | 16,362 | - | 47,474 | | VMASC |
| | | | | 29,512 | 1,360 | - | 240 | 31,112 | 16,362 | - | 47,474 | 52.59% | |
| Electrical and Computer Engineering | | | | | | | | | | | | | |
| 300311-010 | | ROCHESTER INSTITUE OF TECHNOLOGY | BAILEY, C. | 38,760 | 9,344 | - | - | 48,105 | 25,495 | - | 73,600 | | TRAD |
| 100256-010 | * | NATIONAL SCIENCE FOUNDATION | CHEN, C. | 986 | 60 | - | 12,270 | 13,317 | 555 | - | 13,872 | | TRAD |
| 400075-010 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | GONZALEZ, O. | 22,216 | 122 | - | 1,320 | 23,658 | 5,808 | - | 29,466 | | TRAD |
| 400271-003 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | GONZALEZ, O. | 6,527 | 77 | - | - | 6,604 | 1,717 | - | 8,321 | | TRAD |
| 100238-010 | | NATIONAL SCIENCE FOUNDATION | IFTEKHARUDDIN, K. | 63,815 | 6,332 | (2,967) | - | 67,181 | 37,178 | - | 104,359 | | TRAD |
| 100238-011 | | NATIONAL SCIENCE FOUNDATION | IFTEKHARUDDIN, K. | 15,557 | - | - | - | 15,557 | - | - | 15,557 | | TRAD |
| 100339-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | IFTEKHARUDDIN, K. | 2,826 | - | - | - | 2,826 | 1,498 | - | 4,325 | | TRAD |
| 100499-010 | * | LANGLEY RESEARCH CENTER | IFTEKHARUDDIN, K. | 16,019 | 336 | - | - | 16,356 | 8,668 | - | 25,024 | | TRAD |
| 100594-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | IFTEKHARUDDIN, K. | 2,132 | - | - | - | 2,132 | 1,173 | - | 3,305 | | TRAD |
| 300261-010 | | OLD DOMINION UNIVERSITY | IFTEKHARUDDIN, K. | 1,773 | - | - | 1,015 | 2,787 | - | - | 2,787 | | TRAD |
| 300305-012 | * | UNIVERSITY OF VIRGINIA | IFTEKHARUDDIN, K. | 11,530 | 862 | - | - | 12,392 | 6,568 | - | 18,959 | | TRAD |
| 300317-010 | * | OLD DOMINION UNIVERSITY | IFTEKHARUDDIN, K. | 11,076 | 1,112 | - | - | 12,188 | - | - | 12,188 | | TRAD |
| 400240-004 | | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | IFTEKHARUDDIN, K. | 31,363 | 909 | - | - | 32,271 | 17,749 | - | 50,021 | | TRAD |
| 500175-001 | | INFOSCITEX CORPORATION | IFTEKHARUDDIN, K. | 11,546 | - | - | - | 11,546 | 6,120 | - | 17,666 | | TRAD |
| 100505-010 | | OLD DOMINION UNIVERSITY | JIANG, C. | - | (410) | 401 | - | (9) | - | - | (9) | | TRAD |
| 100231-010 | * | NATIONAL SCIENCE FOUNDATION | JOSHI, R. | 3,650 | 1,234 | - | - | 4,885 | 2,589 | - | 7,473 | | TRAD |
| 300047-010 | | NORFOLK STATE UNIVERSITY | JOSHI, R. | 15,092 | 899 | - | - | 15,991 | 9,594 | - | 25,585 | | TRAD |
| 100188-010 | | NATIONAL SCIENCE FOUNDATION | KRUSIENSKI, D. | 5,587 | (299) | - | (0) | 5,288 | 2,644 | - | 7,932 | | TRAD |
| 100494-010 | | NATIONAL SCIENCE FOUNDATION | KRUSIENSKI, D. | 16,572 | 15,401 | - | - | 31,973 | 16,946 | - | 48,919 | | TRAD |
| 300260-010 | | OLD DOMINION UNIVERSITY | KRUSIENSKI, D. | - | (27) | - | - | (27) | - | - | (27) | | TRAD |
| 300304-010 | | NORTH CAROLINA STATE UNIVERSITY | KRUSIENSKI, D. | 20,344 | 1,971 | - | - | 22,315 | 11,827 | - | 34,142 | | TRAD |
| 400243-010 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | KRUSIENSKI, D. | 28,326 | - | - | - | 28,326 | 15,013 | - | 43,338 | | TRAD |
| 100583-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | LAI, NICOLA | 581 | - | - | - | 581 | 46 | - | 627 | | TRAD |
| 500262-010 | | BOVIE MEDICAL CORPORATION | LAROUSSI, M. | 10,441 | 7,337 | - | - | 17,778 | 9,778 | - | 27,555 | | TRAD |
| 500263-010 | | INTELLIGENT AUTOMATION, INC. | LI, J. | 3,902 | 5,387 | - | - | 9,289 | 4,923 | - | 14,212 | | TRAD |
| 100256-010 | * | NATIONAL SCIENCE FOUNDATION | MARSILLAC, S. | 2,466 | 151 | - | 30,675 | 33,292 | 1,387 | - | 34,679 | | TRAD |
| 300344-010 | | UNIVERSITY OF TOLEDO | MARSILLAC, S. | 1,622 | - | - | - | 1,622 | 860 | - | 2,482 | | TRAD |
| 300358-010 | | UNIVERSITY OF ILLINOIS (ALL CAMPUSES) | MARSILLAC, S. | 3,057 | 2,240 | - | - | 5,297 | 2,914 | - | 8,211 | | TRAD |
| 500153-010 | * | DOMINION RESOURCES SERVICES, INC. | MARSILLAC, S. | 32,516 | 19,892 | 15,048 | - | 67,456 | 27,777 | - | 95,233 | | TRAD |
| 500238-010 | * | NON-DISCLOSED SPONSORS | MARSILLAC, S. | 5,484 | 261 | - | - | 5,745 | 3,045 | - | 8,789 | | TRAD |
| 100022-053 | | NASA GODDARD SPACEFLIGHT CENTER | POPESCU, O. | 3,214 | 870 | - | - | 4,084 | - | - | 4,084 | | TRAD |
| 100248-010 | | NATIONAL SCIENCE FOUNDATION | XIN, C. | 2,726 | 5,515 | - | - | 8,241 | 4,368 | - | 12,609 | | TRAD |
| 100248-012 | | NATIONAL SCIENCE FOUNDATION | XIN, C. | - | - | - | 10,000 | 10,000 | - | - | 10,000 | | TRAD |
| 100253-010 | | NATIONAL SCIENCE FOUNDATION | XIN, C. | 58,560 | 8,003 | - | 7,000 | 73,563 | 35,278 | - | 108,841 | | TRAD |
| 100253-030 | | NATIONAL SCIENCE FOUNDATION | XIN, C. | - | - | - | 10,000 | 10,000 | - | - | 10,000 | | TRAD |
| 100253-040 | | NATIONAL SCIENCE FOUNDATION | XIN, C. | - | - | - | 3,000 | 3,000 | - | - | 3,000 | | TRAD |
| 100591-010 | * | NATIONAL SECURITY AGENCY | XIN, C. | 581 | 949 | - | 931 | 2,461 | 994 | - | 3,455 | | TRAD |
| 300374-010 | | SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY | ZHANG, Y. | 15,176 | 4,483 | - | - | 19,658 | 10,812 | - | 30,470 | | TRAD |
| | | | | 466,026 | 93,011 | 12,482 | 76,211 | 647,732 | 273,324 | - | 921,054 | 42.20% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Electrical and Computer Engineering - Applied Research Center | | | | | | | | | | | | |
| 100221-010 | * NATIONAL SCIENCE FOUNDATION | BAUMGART, H. | 2,013 | 116 | 2,810 | - | 4,939 | 1,128 | - | 6,067 | | ARC |
| 100383-010 | * U.S. DEPARTMENT OF ENERGY | BAUMGART, H. | 6,302 | 582 | - | - | 6,884 | 3,649 | - | 10,533 | | ARC |
| 100473-010 | NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | BAUMGART, H. | 107,158 | 3,677 | - | - | 110,835 | 28,817 | - | 139,653 | | ARC |
| 300028-010 | UNIVERSITY OF VIRGINIA | BAUMGART, H. | 25,272 | 1,312 | - | - | 26,584 | - | - | 26,584 | | ARC |
| 300034-010 | UNIVERSITY OF VIRGINIA | BAUMGART, H. | - | 293 | - | - | 293 | - | - | 293 | | ARC |
| 300035-010 | UNIVERSITY OF VIRGINIA | BAUMGART, H. | 1,524 | 476 | - | - | 2,000 | - | - | 2,000 | | ARC |
| 500121-010 | MICROXACT, INC. | BAUMGART, H. | - | 2,368 | - | - | 2,368 | 616 | - | 2,983 | | ARC |
| 500250-010 | SUMMIT INFORMATION SOLUTIONS, INC | BAUMGART, H. | 24,359 | - | - | - | 24,359 | 6,333 | - | 30,693 | | ARC |
| 500284-010 | SUMMIT INFORMATION SOLUTIONS, INC | BAUMGART, H. | 24,787 | - | - | - | 24,787 | 6,445 | - | 31,232 | | ARC |
| 100221-010 | * NATIONAL SCIENCE FOUNDATION | ELSAYED-ALI, H. | 16,107 | 927 | 22,476 | - | 39,510 | 9,028 | - | 48,537 | | ARC |
| 100476-010 | LANGLEY RESEARCH CENTER | ELSAYED-ALI, H. | 1,271 | 4,719 | - | (0) | 5,990 | 3,175 | - | 9,165 | | ARC |
| 100495-010 | * NATIONAL SCIENCE FOUNDATION | ELSAYED-ALI, H. | - | 32 | - | - | 32 | 17 | - | 48 | | ARC |
| 100567-010 | LANGLEY RESEARCH CENTER | ELSAYED-ALI, H. | 5,118 | - | - | - | 5,118 | 1,331 | - | 6,448 | | ARC |
| 100571-010 | OFFICE OF NAVAL RESEARCH | ELSAYED-ALI, H. | 10,111 | 25,104 | - | - | 35,215 | 11,269 | - | 46,484 | | ARC |
| 200191-010 | * CENTER FOR INNOVATIVE TECHNOLOGY | ELSAYED-ALI, H. | 6,829 | 1,955 | - | - | 8,784 | 2,635 | - | 11,420 | | ARC |
| 400247-010 | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | ELSAYED-ALI, H. | - | 1,100 | - | - | 1,100 | 583 | - | 1,683 | | ARC |
| 400288-010 | EMBODY | ELSAYED-ALI, H. | - | 2,770 | - | - | 2,770 | 1,524 | - | 4,294 | | ARC |
| 500209-010 | LIFENET | ELSAYED-ALI, H. | 287 | 1,682 | - | (0) | 1,969 | 1,044 | - | 3,013 | | ARC |
| 500210-010 | LIFENET | ELSAYED-ALI, H. | 255 | 790 | - | 2 | 1,047 | 555 | - | 1,602 | | ARC |
| 500222-010 | MORPHIX TECHNOLOGIES | ELSAYED-ALI, H. | 489 | - | - | - | 489 | 259 | - | 747 | | ARC |
| 500241-010 | BNNT, LLC | ELSAYED-ALI, H. | 1,178 | - | - | - | 1,178 | 306 | - | 1,484 | | ARC |
| 500253-010 | LIFENET | ELSAYED-ALI, H. | 155 | 850 | - | - | 1,005 | 553 | - | 1,557 | | ARC |
| 500254-010 | VERTICAL CARBON TECHNOLOGIES, INC. | ELSAYED-ALI, H. | 928 | 692 | - | - | 1,619 | 891 | - | 2,510 | | ARC |
| 500276-010 | LIFENET | ELSAYED-ALI, H. | 613 | 1,650 | - | - | 2,263 | 1,245 | - | 3,507 | | ARC |
| 200191-010 | * CENTER FOR INNOVATIVE TECHNOLOGY | ELSAYED-ALI, H. | 5,603 | 2,067 | - | - | 7,670 | 2,301 | - | 9,971 | | ARC |
| 100230-010 | * NATIONAL SCIENCE FOUNDATION | MARSILLAC, S. | 3,123 | 2,279 | - | - | 5,401 | 2,863 | - | 8,264 | | ARC |
| 100383-010 | * U.S. DEPARTMENT OF ENERGY | MARSILLAC, S. | 22,056 | 2,039 | - | - | 24,095 | 12,770 | - | 36,865 | | ARC |
| 100495-010 | * NATIONAL SCIENCE FOUNDATION | MARSILLAC, S. | - | 32 | - | - | 32 | 17 | - | 48 | | ARC |
| 100221-010 | * NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | 2,013 | 116 | 2,810 | - | 4,939 | 1,128 | - | 6,067 | | ARC |
| 100230-010 | * NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | 10,148 | 7,406 | - | - | 17,555 | 9,304 | - | 26,859 | | ARC |
| 100256-010 | * NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | 3,946 | 242 | - | 49,080 | 53,268 | 2,219 | - | 55,487 | | ARC |
| 100383-010 | * U.S. DEPARTMENT OF ENERGY | NAMKOONG, G. | 3,151 | 291 | - | - | 3,442 | 1,824 | - | 5,266 | | ARC |
| 100495-010 | * NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | - | 116 | - | - | 116 | 61 | - | 177 | | ARC |
| 200191-010 | * CENTER FOR INNOVATIVE TECHNOLOGY | NAMKOONG, G. | 15,935 | 4,562 | - | - | 20,497 | 6,149 | - | 26,646 | | ARC |
| 200191-010 | * CENTER FOR INNOVATIVE TECHNOLOGY | NAMKOONG, G. | 13,074 | 4,823 | - | - | 17,896 | 5,369 | - | 23,265 | | ARC |
| 100495-010 | * NATIONAL SCIENCE FOUNDATION | RAMJEE, B. | - | 32 | - | - | 32 | 17 | - | 48 | | ARC |
| | | | 313,804 | 75,097 | 28,095 | 49,082 | 466,080 | 125,423 | - | 591,501 | 26.91% | |
| Electrical and Computer Engineering - Center for Bioelectrics | | | | | | | | | | | | |
| 300281-010 | UNIVERSITY OF SOUTHERN CALIFORNIA | JIANG, C. | 53,336 | 22,382 | - | - | 75,718 | 40,131 | - | 115,849 | | CBE |
| 500226-001 | * PULSE BIOSCIENCES (ELECTROBLATE) | JIANG, C. | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 600186-010 | * SOUTHAMPTON UNIVERSITY | KONG, M. | 207,885 | 69,307 | 668 | 38 | 277,897 | 146,911 | - | 424,809 | | CBE |
| 500226-001 | * PULSE BIOSCIENCES (ELECTROBLATE) | SCHOENBACH, K. | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 100330-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 2,345 | 914 | - | - | 3,259 | 1,645 | - | 4,903 | | CBE |
| 100461-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 11,570 | 5,165 | 9,347 | - | 26,081 | 8,869 | - | 34,950 | | CBE |
| 100461-011 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 16,486 | 2,441 | - | - | 18,926 | 10,031 | - | 28,958 | | CBE |
| 100548-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 9,495 | 1,412 | 522 | - | 11,429 | 5,999 | - | 17,428 | | CBE |
| 500212-010 | * NON-DISCLOSED SPONSORS | XIAO, S. | 48 | - | - | 840 | 889 | 471 | - | 1,360 | | CBE |
| 400016-010 | EASTERN VIRGINIA MEDICAL SCHOOL | ZEMLIN, C. | 9,019 | - | - | - | 9,019 | - | - | 9,019 | | CBE |
| 500218-010 | ATRICURE, INC | ZEMLIN, C. | - | 1,054 | - | 1,702 | 2,756 | - | - | 2,756 | | CBE |
| | | | 383,468 | 114,458 | 15,534 | 2,580 | 516,039 | 259,144 | - | 775,182 | 50.22% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Mechanical & Aerospace Engineering | | | | | | | | | | | | |
| 100588-010 | * OFFICE OF NAVAL RESEARCH | BAWAB, S. | - | - | 3,324 | - | 3,324 | - | - | 3,324 | | TRAD |
| 300309-010 | * UNIVERSITY OF MICHIGAN | BAWAB, S. | 7,728 | 1,671 | 1,842 | - | 11,241 | 4,982 | - | 16,223 | | TRAD |
| 400080-003 | * NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | BRITCHER, C. | 1,826 | 1,224 | - | 1,566 | 4,615 | 1,677 | - | 6,293 | | TRAD |
| 400221-010 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | BRITCHER, C. | 92,185 | - | - | - | 92,185 | 23,968 | - | 116,153 | | TRAD |
| 400227-010 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | BRITCHER, C. | 2,265 | - | - | - | 2,265 | 589 | - | 2,853 | | TRAD |
| 400260-010 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | BRITCHER, C. | 5,575 | 166 | - | 2,784 | 8,525 | 3,043 | - | 11,567 | | TRAD |
| 400271-002 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | BRITCHER, C. | 16,639 | 2,958 | - | 2,784 | 22,381 | 5,095 | - | 27,477 | | TRAD |
| 500252-010 | VIGYAN | BRITCHER, C. | 26,855 | 533 | - | 2,714 | 30,102 | 7,121 | - | 37,223 | | TRAD |
| 400250-010 | LMI | CREEDON, J. | 41,136 | 2,736 | - | (0) | 43,871 | 23,252 | - | 67,123 | | TRAD |
| 400292-010 | LMI | CREEDON, J. | 28,008 | 1,652 | - | - | 29,660 | 16,313 | - | 45,973 | | TRAD |
| 100458-010 | NATIONAL SCIENCE FOUNDATION | HAO, J. | 35,285 | 10,185 | - | - | 45,470 | 24,099 | - | 69,569 | | TRAD |
| 100231-010 | * NATIONAL SCIENCE FOUNDATION | HOU, G. | 3,650 | 1,234 | - | - | 4,885 | 2,589 | - | 7,473 | | TRAD |
| 100256-010 | * NATIONAL SCIENCE FOUNDATION | HOU, G. | 986 | 60 | - | 12,270 | 13,317 | 555 | - | 13,872 | | TRAD |
| 100569-010 | * OFFICE OF NAVAL RESEARCH | HOU, G. | - | - | 52,400 | - | 52,400 | - | - | 52,400 | | TRAD |
| 100588-010 | * OFFICE OF NAVAL RESEARCH | HOU, G. | - | - | 3,324 | - | 3,324 | - | - | 3,324 | | TRAD |
| 300248-010 | * HAMPTON UNIVERSITY | HOU, G. | - | - | - | 1,097 | 1,097 | 307 | - | 1,404 | | TRAD |
| 300310-010 | * UNIVERSITY OF MICHIGAN | HOU, G. | 8,867 | 68 | - | - | 8,935 | 4,736 | - | 13,671 | | TRAD |
| 400080-002 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | LANDMAN, D. | 37,259 | 6,556 | - | - | 43,815 | 11,392 | - | 55,207 | | TRAD |
| 400241-010 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | LANDMAN, D. | 23,908 | 2,265 | (2,265) | - | 23,908 | 13,872 | - | 37,780 | | TRAD |
| 400080-003 | * NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | LANDMAN, D. | 1,826 | 1,224 | - | 1,566 | 4,615 | 1,677 | - | 6,293 | | TRAD |
| 300248-010 | * HAMPTON UNIVERSITY | LUETKE, N. | - | - | - | 2,194 | 2,194 | 614 | - | 2,808 | | TRAD |
| 100560-010 | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | MARUTHAMUTHU, V. | 2,637 | 1,894 | - | - | 4,531 | 2,401 | - | 6,932 | | TRAD |
| 400255-010 | JEFFRESS RESEARCH GRANTS PROGRAM | MARUTHAMUTHU, V. | 13,487 | 11,825 | - | - | 25,312 | - | - | 25,312 | | TRAD |
| 100549-010 | AIR FORCE RESEARCH LABORATORY | NEWMAN, B. | 12,625 | - | - | - | 12,625 | 4,545 | - | 17,170 | | TRAD |
| 100499-010 | * LANGLEY RESEARCH CENTER | NEWMAN, B. | 16,019 | 336 | - | - | 16,356 | 8,668 | - | 25,024 | | TRAD |
| 300252-010 | STEVENS INSTITUTE OF TECHNOLOGY | RINGLEB, S. | - | - | - | 1 | 1 | - | - | 1 | | TRAD |
| 400236-010 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | TOLSON, R. | 5,502 | - | - | - | 5,502 | 1,431 | - | 6,933 | | TRAD |
| 100532-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | WRIGGERS, W. | 30,682 | 3,429 | - | - | 34,111 | 18,079 | - | 52,189 | | TRAD |
| | | | 414,950 | 50,016 | 58,624 | 26,975 | 550,566 | 181,004 | - | 731,570 | 32.88% | |
| Mechanical & Aerospace Engineering - NCSOSE | | | | | | | | | | | | |
| 400110-011 | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | ELMUSTAFA, A. | 23,721 | - | - | - | 23,721 | - | - | 23,721 | | NCSOSE |
| | | | 23,721 | - | - | - | 23,722 | - | - | 23,721 | 0.00% | |
| Engineering Technology | | | | | | | | | | | | |
| 300309-010 | * UNIVERSITY OF MICHIGAN | AYALA, O. | 7,728 | 1,671 | 1,842 | - | 11,241 | 4,982 | - | 16,223 | | TRAD |
| 300365-010 | * OLD DOMINION UNIVERSITY | CONSIDINE, C. | 2,632 | - | - | - | 2,632 | 395 | - | 3,027 | | TRAD |
| 400277-010 | * BLUE MOON FUND | CONSIDINE, C. | 56,958 | 35,898 | - | - | 92,856 | 13,928 | - | 106,785 | | TRAD |
| 100022-052 | NASA GODDARD SPACEFLIGHT CENTER | FOSTER, D. | 8,485 | - | - | - | 8,485 | - | - | 8,485 | | TRAD |
| 400279-010 | ADVANCED TECHNOLOGY INTERNATIONAL | FOSTER, D. | 4,681 | 5,011 | - | - | 9,693 | 5,331 | - | 15,024 | | TRAD |
| 100192-010 | * NATIONAL SCIENCE FOUNDATION | HSIUNG, S. | 1,221 | 21,379 | - | 7,051 | 29,652 | 11,300 | - | 40,952 | | TRAD |
| 100545-010 | NATIONAL SCIENCE FOUNDATION | HSIUNG, S. | 349 | 27,584 | - | - | 27,933 | 3,103 | - | 31,037 | | TRAD |
| 100192-010 | * NATIONAL SCIENCE FOUNDATION | JONES, R. | 611 | 10,690 | - | 3,526 | 14,826 | 5,650 | - | 20,476 | | TRAD |
| 300030-011 | * VA SPACE GRANT CONSORTIUM | JOVANOVIC, V. | 2,323 | 8,078 | - | 496 | 10,897 | - | - | 10,897 | | TRAD |
| 300361-010 | * TIDEWATER COMMUNITY COLLEGE | JOVANOVIC, V. | 18,568 | 4,893 | - | - | 23,461 | 12,904 | - | 36,365 | | TRAD |
| 400240-001 | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | JOVANOVIC, V. | 1,560 | - | - | - | 1,560 | 406 | - | 1,965 | | TRAD |
| 400240-002 | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | JOVANOVIC, V. | 1,557 | - | - | - | 1,557 | 405 | - | 1,962 | | TRAD |
| 100572-010 | * OFFICE OF NAVAL RESEARCH | LAWRENCE, R. | 5,806 | - | - | - | 5,806 | 3,774 | - | 9,579 | | TRAD |
| 300365-010 | * OLD DOMINION UNIVERSITY | LESTER, J. | 957 | - | - | - | 957 | 144 | - | 1,101 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100143-003 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | MICHAELI, J. | 6,882 | - | - | - | 6,882 | 4,129 | - | 11,012 | | TRAD |
| 100534-010 | | OFFICE OF NAVAL RESEARCH | MICHAELI, J. | 976 | 11,429 | 115,603 | - | 128,007 | 8,063 | - | 136,070 | | TRAD |
| 100538-010 | * | OFFICE OF NAVAL RESEARCH | MICHAELI, J. | 35,398 | 6,298 | 975 | 3,639 | 46,309 | 27,102 | - | 73,411 | | TRAD |
| 100569-010 | * | OFFICE OF NAVAL RESEARCH | MICHAELI, J. | - | - | 104,800 | - | 104,800 | - | - | 104,800 | | TRAD |
| 100572-010 | * | OFFICE OF NAVAL RESEARCH | MICHAELI, J. | 5,806 | - | - | - | 5,806 | 3,774 | - | 9,579 | | TRAD |
| 100588-010 | * | OFFICE OF NAVAL RESEARCH | MICHAELI, J. | - | - | 4,432 | - | 4,432 | - | - | 4,432 | | TRAD |
| 300309-010 | * | UNIVERSITY OF MICHIGAN | MICHAELI, J. | 15,457 | 3,343 | 3,683 | - | 22,483 | 9,964 | - | 32,446 | | TRAD |
| 300310-010 | * | UNIVERSITY OF MICHIGAN | MICHAELI, J. | 14,779 | 113 | - | - | 14,892 | 7,893 | - | 22,784 | | TRAD |
| 400296-010 | * | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | MICHAELI, J. | 3,243 | - | - | - | 3,243 | 1,135 | - | 4,378 | | TRAD |
| 500213-010 | * | OREGON IRON WORKS, INC | MICHAELI, J. | - | - | - | 215 | 215 | 114 | - | 329 | | TRAD |
| 500278-010 | | APPLIED SYSTEMS AND TECHNOLOGY TRANSFER (AST2) | MICHAELI, J. | 5,315 | - | - | - | 5,315 | 1,382 | - | 6,697 | | TRAD |
| 100569-010 | * | OFFICE OF NAVAL RESEARCH | MOSES, P. | - | - | 104,800 | - | 104,800 | - | - | 104,800 | | TRAD |
| 300310-010 | * | UNIVERSITY OF MICHIGAN | MOSES, P. | 5,912 | 45 | - | - | 5,957 | 3,157 | - | 9,114 | | TRAD |
| 300365-010 | * | OLD DOMINION UNIVERSITY | SEEK, M. | 1,196 | - | - | - | 1,196 | 179 | - | 1,376 | | TRAD |
| 400296-010 | * | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | SEEK, M. | 3,243 | - | - | - | 3,243 | 1,135 | - | 4,378 | | TRAD |
| 500213-010 | * | OREGON IRON WORKS, INC | SEEK, M . | - | - | - | 215 | 215 | 114 | - | 329 | | TRAD |
| 400190-010 | | METAL BUILIDING MANUFACTURERS ASSOCIATION (MBMA) | SEEK, M. | 2,268 | 707 | - | 2,025 | 5,000 | - | - | 5,000 | | TRAD |
| 400245-010 | | AMERICAN IRON AND STEEL INSTITUTION | SEEK, M. | 446 | 253 | - | - | 700 | - | - | 700 | | TRAD |
| 400110-013 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | TOMOVIC, M. | 7,294 | - | - | - | 7,294 | - | - | 7,294 | | TRAD |
| 300361-010 | * | TIDEWATER COMMUNITY COLLEGE | TOMOVIC, M. | 3,714 | 979 | - | - | 4,692 | 2,581 | - | 7,273 | | TRAD |
| | | | | 225,364 | 138,370 | 336,134 | 17,167 | 717,035 | 133,043 | - | 850,076 | 18.55% | |
| Engineering Management | | | | | | | | | | | | | |
| 100070-010 | * | ARMY CORPS OF ENGINEERS--NORFOLK DISTRICT | BOWLING, S. | - | - | - | 97 | 97 | 49 | - | 146 | | TRAD |
| 100143-003 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | COTTER, S. | 6,882 | - | - | - | 6,882 | 4,129 | - | 11,012 | | TRAD |
| 100070-010 | * | ARMY CORPS OF ENGINEERS--NORFOLK DISTRICT | DANIELS, C. | - | - | - | 97 | 97 | 49 | - | 146 | | TRAD |
| 100247-010 | * | NATIONAL SCIENCE FOUNDATION | DANIELS, C. | 3,498 | 452 | - | - | 3,950 | 2,093 | - | 6,043 | | TRAD |
| 100503-010 | | LANGLEY RESEARCH CENTER | GHEORGHE, A. | - | 113 | - | 46,476 | 46,589 | - | - | 46,589 | | TRAD |
| 500002-020 | * | EXOSTRATEGIES, INC. | HANDLEY, H. | 9,326 | - | - | 314 | 9,640 | 5,109 | - | 14,750 | | TRAD |
| 500215-010 | | NON-DISCLOSED SPONSORS | HANDLEY, H. | 291 | - | - | - | 291 | 154 | - | 445 | | TRAD |
| 500251-010 | | NON-DISCLOSED SPONSORS | HANDLEY, H. | 32,681 | - | - | - | 32,681 | 17,321 | - | 50,002 | | TRAD |
| 500260-010 | | CONTRACTING RESOURCES GROUP | HANDLEY, H. | 10,787 | 1,200 | - | - | 11,987 | 6,353 | - | 18,340 | | TRAD |
| 100488-010 | * | NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | HESTER, P. (Patrick) | 39,666 | 1,541 | - | - | 41,207 | 21,840 | - | 63,047 | | TRAD |
| 100070-010 | * | ARMY CORPS OF ENGINEERS--NORFOLK DISTRICT | LANDAETA, R. | - | - | - | 389 | 389 | 195 | - | 583 | | TRAD |
| 500205-010 | * | VIRGINIA NATURAL GAS | LANDAETA, R. | - | - | - | 6 | 6 | 2 | - | 7 | | TRAD |
| 100070-010 | * | ARMY CORPS OF ENGINEERS--NORFOLK DISTRICT | PARSONS, V. | - | - | - | 97 | 97 | 49 | - | 146 | | TRAD |
| 100070-010 | * | ARMY CORPS OF ENGINEERS--NORFOLK DISTRICT | PAZOS-LAGO, P. | - | - | - | 97 | 97 | 49 | - | 146 | | TRAD |
| 100247-010 | * | NATIONAL SCIENCE FOUNDATION | PAZOS-LAGO, P. | 15,157 | 1,959 | - | - | 17,116 | 9,071 | - | 26,187 | | TRAD |
| 500205-010 | * | VIRGINIA NATURAL GAS | PAZOS-LAGO, P. | - | - | - | 52 | 52 | 14 | - | 66 | | TRAD |
| 500205-011 | | VIRGINIA NATURAL GAS | PAZOS-LAGO, P. | 9,273 | - | - | - | 9,273 | 2,504 | - | 11,777 | | TRAD |
| 300018-010 | * | VA INSTITUTE OF MARINE SCIENCE | PINTO, C. | 6,322 | 3,363 | - | 699 | 10,385 | 5,133 | - | 15,518 | | TRAD |
| 400038-010 | * | SPENCER FOUNDATION | PINTO, C. | 2,008 | - | - | 214 | 2,222 | 222 | - | 2,444 | | TRAD |
| 500002-020 | * | EXOSTRATEGIES, INC. | PINTO, C. | 5,716 | - | - | 193 | 5,909 | 3,132 | - | 9,040 | | TRAD |
| 600187-010 | | QATAR UNIVERSITY | RABADI, G. | 9,801 | 2,427 | - | - | 12,228 | 2,446 | - | 14,674 | | TRAD |
| 600195-010 | | QATAR UNIVERSITY | RABADI, G. | 65,381 | 159 | - | - | 65,539 | 13,108 | - | 78,647 | | TRAD |
| 100070-010 | * | ARMY CORPS OF ENGINEERS--NORFOLK DISTRICT | RABADI, G. | - | - | - | 97 | 97 | 49 | - | 146 | | TRAD |
| 100143-003 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | SECK, M. | 6,882 | - | - | - | 6,882 | 4,129 | - | 11,012 | | TRAD |
| 100143-003 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | SOUSA-POZA, A. | 18,353 | - | - | - | 18,353 | 11,012 | - | 29,364 | | TRAD |
| | | | | 242,023 | 11,214 | - | 48,828 | 302,065 | 108,216 | - | 410,275 | 35.83% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Engineering Management - NCSOSE | | | | | | | | | | | | | |
| 100143-003 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | KEATING, C. | 6,882 | - | - | - | 6,882 | 4,129 | - | 11,012 | | ARC |
| | | | | 6,882 | - | - | - | 6,882 | 4,129 | - | 11,012 | 60.00% | |
| Modeling, Simuation & Visualization | | | | | | | | | | | | | |
| 500198-020 | * | CHILDREN'S SURGICAL SPECIALTY GROUP, INC. | AUDETTE, M. | 4,953 | 66 | 4,791 | - | 9,810 | 2,760 | - | 12,570 | | TRAD |
| 200194-010 | * | COMMONWEALTH HEALTH RESEARCH BOARD | BRUNO, R. | 8,770 | 10,129 | - | - | 18,899 | - | - | 18,899 | | TRAD |
| 100143-002 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | LEATHRUM, J. | 1,756 | - | - | - | 1,756 | 1,054 | - | 2,810 | | TRAD |
| 100143-004 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | LEATHRUM, J. | 8,614 | - | - | - | 8,614 | 5,599 | - | 14,212 | | TRAD |
| 400253-010 | * | BOSTON VA RESEARCH INSTITUTE, INC | LYNCH, C. | 13,201 | - | - | - | 13,201 | 1,980 | - | 15,181 | | TRAD |
| 300329-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | MCKENZIE, F. | 2,182 | - | - | 2,276 | 4,458 | 1,445 | - | 5,903 | | TRAD |
| 500198-020 | * | CHILDREN'S SURGICAL SPECIALTY GROUP, INC. | MCKENZIE, F. | 4,953 | 66 | 4,791 | - | 9,810 | 2,760 | - | 12,570 | | TRAD |
| 100143-002 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | MIELKE, R. | 1,756 | - | - | - | 1,756 | 1,054 | - | 2,810 | | TRAD |
| 100143-004 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | MIELKE, R. | 8,614 | - | - | - | 8,614 | 5,599 | - | 14,212 | | TRAD |
| 200194-010 | * | COMMONWEALTH HEALTH RESEARCH BOARD | SACHS, P. | 8,770 | 10,129 | - | - | 18,899 | - | - | 18,899 | | TRAD |
| 100538-010 | * | OFFICE OF NAVAL RESEARCH | SHEN, Y. | 35,398 | 6,298 | 975 | 3,639 | 46,309 | 27,102 | - | 73,411 | | TRAD |
| 300359-010 | * | DUKE UNIVERSITY | SHEN, Y. | 2,602 | 488 | - | - | 3,090 | 773 | - | 3,863 | | TRAD |
| 400265-010 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | SHEN, Y. | 12,778 | - | - | - | 12,778 | 7,028 | - | 19,807 | | TRAD |
| 100518-010 | | AMES RESEARCH LABS | SOSONKINA, M. | 28,504 | 1,510 | - | - | 30,014 | 15,907 | - | 45,922 | | TRAD |
| 100543-010 | | NATIONAL SCIENCE FOUNDATION | SOSONKINA, M. | - | 5,919 | - | - | 5,919 | 1,539 | - | 7,458 | | TRAD |
| 300240-010 | | IOWA STATE UNIVERSITY | SOSONKINA, M. | 5,623 | 3,045 | - | - | 8,669 | 4,594 | - | 13,263 | | TRAD |
| 300241-010 | | IOWA STATE UNIVERSITY | SOSONKINA, M. | 40,081 | 13,097 | - | - | 53,178 | 28,184 | - | 81,362 | | TRAD |
| 300242-010 | | IOWA STATE UNIVERSITY | SOSONKINA, M. | 27,431 | 2,777 | - | - | 30,207 | 16,010 | - | 46,217 | | TRAD |
| 300343-010 | | IOWA STATE UNIVERSITY | SOSONKINA, M. | 15,204 | - | - | 10,940 | 26,143 | 13,856 | - | 39,999 | | TRAD |
| 300343-020 | | IOWA STATE UNIVERSITY | SOSONKINA, M. | 33,024 | 3,422 | - | - | 36,446 | 19,317 | - | 55,763 | | TRAD |
| | | | | 264,212 | 56,948 | 10,557 | 16,854 | 348,567 | 156,561 | - | 505,132 | 44.92% | |
| Virginia Commercial Space Flight Authority - VMASC | | | | | | | | | | | | | |
| 100105-050 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 828 | - | - | 48,310 | 49,138 | 290 | - | 49,427 | | VMASC |
| 100105-051 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 578 | - | - | 20,635 | 21,213 | 202 | - | 21,415 | | VMASC |
| 100105-052 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 337 | - | - | 88,724 | 89,061 | 118 | - | 89,179 | | VMASC |
| 100105-053 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 184 | - | - | 38,164 | 38,348 | 64 | - | 38,412 | | VMASC |
| 100105-054 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 184 | - | - | 59,830 | 60,013 | 64 | - | 60,077 | | VMASC |
| 100105-055 | * | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 147 | - | - | - | 147 | 52 | - | 199 | | VMASC |
| 100105-056 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 133,641 | - | - | - | 133,641 | 46,774 | - | 180,415 | | VMASC |
| 100105-057 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 31,149 | (1,793) | - | - | 29,357 | 10,275 | - | 39,631 | | VMASC |
| 100105-058 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 42,026 | - | - | - | 42,026 | 14,709 | - | 56,735 | | VMASC |
| 100105-060 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 121,478 | - | - | - | 121,478 | 42,517 | - | 163,995 | | VMASC |
| 100105-061 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 8,038 | 60,051 | - | - | 68,089 | 23,831 | - | 91,920 | | VMASC |
| 100105-062 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 11,512 | 25,000 | - | 66,721 | 103,233 | 12,779 | - | 116,012 | | VMASC |
| 100105-063 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 67,436 | 8,110 | - | - | 75,546 | 26,441 | - | 101,987 | | VMASC |
| 100105-064 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 1,772 | 25,000 | - | 90,605 | 117,377 | 9,370 | - | 126,748 | | VMASC |
| 100105-065 | * | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 17,063 | - | - | - | 17,063 | 5,972 | - | 23,034 | | VMASC |
| 100105-066 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 15,181 | - | - | - | 15,181 | 5,313 | - | 20,494 | | VMASC |
| 100105-067 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 3,370 | 25,000 | - | 297,581 | 325,951 | 9,929 | - | 335,880 | | VMASC |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100105-068 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 2,996 | 25,000 | - | 56,891 | 84,887 | 9,799 | - | 94,685 | | VMASC |
| 100105-069 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 76,943 | - | - | - | 76,943 | 26,930 | - | 103,873 | | VMASC |
| 100105-070 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 3,370 | 25,000 | - | 21,580 | 49,950 | 9,929 | - | 59,879 | | VMASC |
| 100151-010 | | OFFICE OF THE SECRETARY OF DEFENSE | SOKOLOWSKI, J. | - | - | - | (503) | (503) | (50) | - | (554) | | VMASC |
| 100457-010 | | MODELING AND SIMULATION COORDINATION OFFICE | SOKOLOWSKI, J. | 98,748 | - | - | - | 98,748 | 7,321 | - | 106,069 | | VMASC |
| 100467-000 | | NAVAL SURFACE WARFARE CENTER | SOKOLOWSKI, J. | (2,041) | (1,312) | - | - | (3,353) | (2,012) | - | (5,365) | | VMASC |
| 100500-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | - | 1,751 | - | 1,289 | 3,040 | 882 | - | 3,922 | | VMASC |
| 100553-010 | | NORFOLK NAVAL SHIPYARD | SOKOLOWSKI, J. | - | 43 | - | 632 | 675 | - | - | 675 | | VMASC |
| 100561-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | - | 4,386 | - | - | 4,386 | 1,404 | - | 5,790 | | VMASC |
| 100590-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 691 | 11,670 | - | - | 12,361 | 4,450 | - | 16,811 | | VMASC |
| 300336-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 554 | - | - | 1 | 555 | - | - | 555 | | VMASC |
| 300336-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 19,445 | - | - | - | 19,445 | - | - | 19,445 | | VMASC |
| 300337-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 2,178 | - | - | - | 2,178 | - | - | 2,178 | | VMASC |
| 400193-000 | | NONE | SOKOLOWSKI, J. | - | 69,905 | - | 10,182 | 80,087 | - | - | 80,087 | | VMASC |
| | | | | 657,805 | 277,812 | - | 800,642 | 1,736,259 | 267,354 | - | 2,003,614 | 15.40% | |
| **TOTAL ENGINEERING** | | | | **$ 3,586,231** | **$ 956,830** | **$ 483,597** | **$ 1,164,112** | **$ 6,190,770** | **$ 1,860,433** | **$ -** | **$ 8,051,203** | **30.05%** | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **HEALTH SCIENCES** | | | | | | | | | | | | | |
| Community & Environmental Health | | | | | | | | | | | | | |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | BECKER, S. | 2,246 | 173 | - | - | 2,419 | 1,330 | - | 3,749 | | TRAD |
| 400277-010 | * | BLUE MOON FUND | BECKER, S. | 6,329 | 3,989 | - | - | 10,317 | 1,548 | - | 11,865 | | TRAD |
| 100446-010 | | CENTERS FOR DISEASE CONTROL AND PREVENTION (DHHS) | BLANDO, J. | 14,298 | 309 | - | - | 14,607 | 7,304 | - | 21,911 | | TRAD |
| 100506-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | JENG, A. | 12,355 | 22,142 | - | - | 34,497 | - | - | 34,497 | | TRAD |
| 400167-010 | | MOTON COMMUNITY HOUSE | JENG, A. | 407 | - | - | - | 407 | 204 | - | 611 | | TRAD |
| 400298-010 | | GREATER SOUTHEAST DEVELOPMENT CORPORATION | JENG, A. | 642 | 475 | - | - | 1,117 | - | - | 1,117 | | TRAD |
| 100334-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | RUDATSIKIRA, E. | 708 | (25) | - | - | 683 | 362 | - | 1,045 | | TRAD |
| 100334-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | SZKLO-COXE, M. | 708 | (25) | - | - | 683 | 362 | - | 1,045 | | TRAD |
| 100334-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | ZHANG, H. | 708 | (25) | - | - | 683 | 362 | - | 1,045 | | TRAD |
| 300269-010 | | UNIVERSITY OF BUFFALO | ZHANG, H. | 8,545 | 131 | - | - | 8,676 | 4,598 | - | 13,274 | | TRAD |
| 300359-010 | * | DUKE UNIVERSITY | ZHANG, H. | 3,469 | 651 | - | - | 4,120 | 1,030 | - | 5,150 | | TRAD |
| | | | | 50,414 | 27,795 | - | - | 78,211 | 17,099 | - | 95,308 | 21.86% | |
| Dental Hygiene | | | | | | | | | | | | | |
| 300319-010 | * | OLD DOMINION UNIVERSITY | BRUHN, A. | 3,749 | - | - | 680 | 4,429 | - | - | 4,429 | | TRAD |
| 100372-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | LEMASTER, M. | 1,700 | 21 | - | - | 1,720 | 138 | - | 1,858 | | TRAD |
| 300318-010 | | OLD DOMINION UNIVERSITY | MCCOMBS, G. | 23,560 | 338 | - | - | 23,897 | 7,169 | - | 31,066 | | TRAD |
| 300349-011 | * | EASTERN VIRGINIA MEDICAL SCHOOL | MCCOMBS, G. | 1,176 | - | - | - | 1,176 | 94 | - | 1,271 | | TRAD |
| 400259-010 | * | AMERICAN DENTAL HYGIENE ASSOCIATION | MCCOMBS, G. | 410 | 1,596 | - | 260 | 2,266 | - | - | 2,266 | | TRAD |
| 300319-010 | * | OLD DOMINION UNIVERSITY | NEWCOMB, T. | 5,998 | - | - | 1,088 | 7,086 | - | - | 7,086 | | TRAD |
| 300349-011 | * | EASTERN VIRGINIA MEDICAL SCHOOL | TOLLE, L. | 1,176 | - | - | - | 1,176 | 94 | - | 1,271 | | TRAD |
| 400259-010 | * | AMERICAN DENTAL HYGIENE ASSOCIATION | TOLLE, L. | 684 | 2,660 | - | 433 | 3,776 | - | - | 3,776 | | TRAD |
| | | | | 38,453 | 4,614 | - | 2,460 | 45,528 | 7,495 | - | 53,022 | 16.46% | |
| Medical Diagnostic Translation Sciences | | | | | | | | | | | | | |
| 200194-010 | * | COMMONWEALTH HEALTH RESEARCH BOARD | BRUNO, R. | 15,743 | 6,185 | - | - | 21,928 | - | - | 21,928 | | TRAD |
| 300263-010 | * | OLD DOMINION UNIVERSITY | BRUNO, R. | (72) | - | - | - | (72) | - | - | (72) | | TRAD |
| 300308-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | BRUNO, R. | 3,214 | - | - | - | 3,214 | - | - | 3,214 | | TRAD |
| 400246-010 | | EPIMEDX LLC | JOSHI, S. | 12,479 | 2,049 | - | - | 14,528 | - | - | 14,528 | | TRAD |
| 300364-010 | | OLD DOMINION UNIVERSITY | OGLE, R. | 73,849 | 13,696 | - | 75,000 | 162,545 | 26,264 | - | 188,809 | | TRAD |
| 100578-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | RIETHMAN, H. | 14,484 | 29,278 | - | 19,696 | 63,458 | 24,069 | - | 87,527 | | TRAD |
| 400272-010 | | THE WISTAR INSTITUTE | RIETHMAN, H. | 4,737 | 8,497 | - | - | 13,234 | 7,279 | - | 20,512 | | TRAD |
| 200194-010 | * | COMMONWEALTH HEALTH RESEARCH BOARD | SACHS, P. | 15,743 | 6,185 | - | - | 21,928 | - | - | 21,928 | | TRAD |
| 300263-010 | * | OLD DOMINION UNIVERSITY | SACHS, P. | (72) | - | - | - | (72) | - | - | (72) | | TRAD |
| | | | | 140,106 | 65,889 | - | 94,696 | 300,691 | 57,611 | - | 358,302 | 19.16% | |
| Medical Diagnostic Translation Sciences - Center for Bioelectrics | | | | | | | | | | | | | |
| 500226-003 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HARGRAVE, B. | 24,446 | 13,366 | - | - | 37,812 | 20,040 | - | 57,852 | | CBE |
| 100579-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, L. | 18,911 | 33,430 | - | - | 52,341 | 28,788 | - | 81,128 | | CBE |
| 500226-002 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, L. | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 100516-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, R. | 92,584 | 67,358 | - | - | 159,942 | 84,769 | - | 244,711 | | CBE |
| 100517-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, R. | 40,332 | 12,932 | - | - | 53,264 | 28,230 | - | 81,494 | | CBE |
| 100517-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, R. | 54,700 | 3,253 | - | - | 57,952 | 30,715 | - | 88,667 | | CBE |
| 400231-010 | | OLD DOMINION UNIVERSITY | HELLER, R. | 115,309 | 15,615 | - | 149,406 | 280,330 | 39,277 | - | 319,607 | | CBE |
| 500110-010 | | VANDALIA RESEARCH, INC. | HELLER, R. | - | - | - | 31,698 | 31,698 | 19,019 | - | 50,717 | | CBE |
| 500156-014 | | ONCOSEC MEDICAL, INC. | HELLER, R. | - | - | - | 16,839 | 16,839 | 8,925 | - | 25,764 | | CBE |
| 500226-000 | | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, R. | - | (49) | - | - | (49) | - | - | (49) | | CBE |
| 500226-001 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, R. | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 500226-005 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, R. | 3,842 | 2,439 | - | - | 6,282 | 3,455 | - | 9,737 | | CBE |
| | | | | 390,821 | 156,141 | 4,552 | 197,943 | 749,457 | 288,922 | - | 1,038,377 | 38.55% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Nursing | | | | | | | | | | | | | |
| 100566-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | ADAMS, T. | 33,808 | 1,920 | - | 18,000 | 53,727 | 2,858 | - | 56,586 | | TRAD |
| 100372-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | FOWLER, C. | 3,399 | 41 | - | - | 3,441 | 275 | - | 3,716 | | TRAD |
| 100533-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | FOWLER, C. | 30,919 | 10,510 | - | 42,350 | 83,779 | 3,314 | - | 87,094 | | TRAD |
| 300335-010 | * | VIRGINIA COMMONWEALTH UNIVERSITY | FOWLER, C. | 5,257 | 516 | - | - | 5,773 | - | - | 5,773 | | TRAD |
| 100478-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | HANEY, T. | 11,526 | 1,113 | - | 3,624 | 16,263 | 1,011 | - | 17,274 | | TRAD |
| 100533-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | HANEY, T. | 30,919 | 10,510 | - | 42,350 | 83,779 | 3,314 | - | 87,094 | | TRAD |
| 400249-010 | * | BARRY ROBINSON CENTER | HANEY, T. | - | - | 2,207 | - | 2,207 | - | - | 2,207 | | TRAD |
| 100566-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | HAWKINS, J. | 33,808 | 1,920 | - | 18,000 | 53,727 | 2,858 | - | 56,586 | | TRAD |
| 100373-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | KARLOWICZ, K. | - | - | - | (2,190) | (2,190) | - | - | (2,190) | | TRAD |
| 100566-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | KARLOWICZ, K. | 22,538 | 1,280 | - | 12,000 | 35,818 | 1,905 | - | 37,724 | | TRAD |
| 300335-010 | * | VIRGINIA COMMONWEALTH UNIVERSITY | KARLOWICZ, K. | 5,257 | 516 | - | - | 5,773 | - | - | 5,773 | | TRAD |
| 400256-010 | | VIRGINIA NURSES FOUNDATION | KARLOWICZ, K. | 1,433 | - | - | 100 | 1,533 | - | - | 1,533 | | TRAD |
| 400269-010 | | THE ARNOLD P. GOLD FOUNDATION | KARLOWICZ, K. | - | 982 | - | - | 982 | - | - | 982 | | TRAD |
| 100478-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | MURRAY, D. | 11,526 | 1,113 | - | 3,624 | 16,263 | 1,011 | - | 17,274 | | TRAD |
| 100478-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | POSTON, R. | 11,526 | 1,113 | - | 3,624 | 16,263 | 1,011 | - | 17,274 | | TRAD |
| 100533-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | POSTON, R. | 30,919 | 10,510 | - | 42,350 | 83,779 | 3,314 | - | 87,094 | | TRAD |
| 100372-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | RENAUD, M . | 3,399 | 41 | - | - | 3,441 | 275 | - | 3,716 | | TRAD |
| 100372-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | RUTLEDGE, C. | 4,249 | 52 | - | - | 4,301 | 344 | - | 4,645 | | TRAD |
| 100373-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | RUTLEDGE, C. | - | - | - | (2,190) | (2,190) | - | - | (2,190) | | TRAD |
| 100373-020 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | RUTLEDGE, C. | - | - | - | 379,688 | 379,688 | - | - | 379,688 | | TRAD |
| 100478-010 | | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | RUTLEDGE, C. | 212,538 | 11,510 | - | 40,117 | 264,165 | 17,924 | - | 282,088 | | TRAD |
| 100533-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | RUTLEDGE, C. | 46,379 | 15,764 | - | 63,526 | 125,669 | 4,971 | - | 130,641 | | TRAD |
| 400249-010 | * | BARRY ROBINSON CENTER | RUTLEDGE, C. | - | - | 1,103 | - | 1,103 | - | - | 1,103 | | TRAD |
| 100533-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | WILES, L. | 15,460 | 5,255 | - | 21,175 | 41,890 | 1,657 | - | 43,547 | | TRAD |
| 100566-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | WILES, L. | 22,538 | 1,280 | - | 12,000 | 35,818 | 1,905 | - | 37,724 | | TRAD |
| | | | | 537,399 | 75,944 | 3,310 | 698,150 | 1,314,803 | 47,953 | - | 1,362,754 | 3.65% | |
| Physical Therapy | | | | | | | | | | | | | |
| 400263-010 | * | EASTERN ATHLETIC TRAINER'S ASSOCIATION | HOCH, J. | 801 | 1,604 | - | - | 2,405 | - | - | 2,405 | | TRAD |
| 400263-010 | * | EASTERN ATHLETIC TRAINER'S ASSOCIATION | HOCH, M. | 801 | 1,604 | - | - | 2,405 | - | - | 2,405 | | TRAD |
| 100372-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | KOTT, K. | 2,550 | 31 | - | - | 2,581 | 206 | - | 2,787 | | TRAD |
| 100478-010 | * | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES | KOTT, K. | 11,526 | 1,113 | - | 3,624 | 16,263 | 1,011 | - | 17,274 | | TRAD |
| 400249-010 | * | BARRY ROBINSON CENTER | KOTT, K. | - | - | 2,207 | - | 2,207 | - | - | 2,207 | | TRAD |
| 300331-010 | | GEORGE MASON UNIVERSITY | MORRISON, S. | 8,835 | 2,687 | - | - | 11,522 | - | - | 11,522 | | TRAD |
| 400056-010 | * | AMERICAN DIABETES ASSOCIATION | MORRISON, S. | 37,582 | 2,203 | - | 5,871 | 45,657 | 5,968 | - | 51,625 | | TRAD |
| 300266-010 | | OHIO STATE UNIVERSITY | VAN LUNEN, B. | 5,690 | - | - | - | 5,690 | 3,016 | - | 8,706 | | TRAD |
| 400259-010 | * | AMERICAN DENTAL HYGIENE ASSOCIATION | WALKER, M. | 274 | 1,064 | - | 173 | 1,511 | - | - | 1,511 | | TRAD |
| | | | | 68,058 | 10,306 | 2,207 | 9,668 | 90,240 | 10,201 | - | 100,441 | 11.30% | |
| **TOTAL HEALTH SCIENCES** | | | | **$ 1,225,251** | **$ 340,688** | **$ 10,069** | **$ 1,002,918** | **$ 2,578,930** | **$ 429,279** | **$ -** | **$ 3,008,203** | **16.65%** | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **SCIENCES** | | | | | | | | | | | | | |
| Dean's Office | | | | | | | | | | | | | |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | MATHEWS, T. | 691 | 624 | - | - | 1,314 | 105 | - | 1,420 | | TRAD |
| | | | | 691 | 624 | - | - | 1,313 | 105 | - | 1,420 | 8.01% | |
| Biological Sciences | | | | | | | | | | | | | |
| 400270-010 | | HOWARD HUGHES MEDICAL INSTITUTE | BAREKZI, N. | - | 3,754 | - | - | 3,754 | - | - | 3,754 | | TRAD |
| 100529-010 | | NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | BARSHIS, D. | 14,679 | 2,702 | - | - | 17,381 | 4,345 | - | 21,727 | | TRAD |
| 100504-010 | | U.S. ENVIRONMENTAL PROTECTION AGENCY | BUTLER, M. | 20,499 | 17,857 | - | - | 38,356 | 9,973 | - | 48,329 | | TRAD |
| 200214-010 | | FLORIDA FISH & WILDLIFE CONSERVATION COMMISSION | BUTLER, M. | 3,938 | 9,872 | - | - | 13,810 | 3,591 | - | 17,401 | | TRAD |
| 200214-011 | | FLORIDA FISH & WILDLIFE CONSERVATION COMMISSION | BUTLER, M. | 10,228 | 13,469 | - | - | 23,696 | 6,161 | - | 29,857 | | TRAD |
| 300288-010 | | UNIVERSITY OF FLORIDA | BUTLER, M. | 20,144 | 1,028 | - | - | 21,172 | 5,293 | - | 26,465 | | TRAD |
| 300379-010 | | UNIVERSITY OF FLORIDA | BUTLER, M. | 11,346 | 3,004 | - | - | 14,350 | 3,731 | - | 18,081 | | TRAD |
| 600182-010 | | GOVERNMENT OF THE BAHAMAS | BUTLER, M. | - | 21,770 | - | - | 21,770 | - | - | 21,770 | | TRAD |
| 100235-010 | | NATIONAL SCIENCE FOUNDATION | CARPENTER, K. | 5,037 | 13,186 | - | - | 18,223 | 9,658 | - | 27,881 | | TRAD |
| 300298-010 | | OLD DOMINION UNIVERSITY | CARPENTER, K. | 5,693 | 138 | - | 2 | 5,833 | 292 | - | 6,125 | | TRAD |
| 300347-010 | | ARIZONA STATE UNIVERSITY | CARPENTER, K. | 18,168 | - | - | - | 18,168 | - | - | 18,168 | | TRAD |
| 600174-010 | | QATAR UNIVERSITY | CARPENTER, K. | 24,165 | - | - | 5,379 | 29,544 | 4,833 | - | 34,377 | | TRAD |
| 600185-010 | | WORLD CONSERVATION UNION (IUCN) | CARPENTER, K. | 39,855 | 9,800 | - | 4,093 | 53,748 | 14,896 | - | 68,644 | | TRAD |
| 600190-010 | | WORLD CONSERVATION UNION (IUCN) | CARPENTER, K. | 75,188 | 5,659 | - | - | 80,847 | 3,282 | - | 84,129 | | TRAD |
| 100340-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | DAINES, D. | 2,554 | 4,539 | - | - | 7,093 | 3,759 | - | 10,852 | | TRAD |
| 100550-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | DAINES, D. | 64,572 | 64,952 | 17,598 | - | 147,122 | 68,648 | - | 215,770 | | TRAD |
| 300295-010 | | OLD DOMINION UNIVERSITY | DAUER, D. | 32,359 | - | - | 16,962 | 49,321 | 6,443 | - | 55,764 | | TRAD |
| 300334-011 | | OLD DOMINION UNIVERSITY | DAUER, D. | 223,393 | 22,972 | - | - | 246,365 | 22,623 | - | 268,988 | | TRAD |
| 300027-010 | | UNIVERSITY OF VIRGINIA | DAY, F. | 4,669 | 2,375 | - | - | 7,044 | 1,831 | - | 8,875 | | TRAD |
| 200165-010 | | HAMPTON ROADS SANITATION DISTRICT COMMISSION | EGERTON, T. | - | - | - | 2,864 | 2,864 | 716 | - | 3,579 | | TRAD |
| 200195-010 | | HAMPTON ROADS SANITATION DISTRICT COMMISSION | EGERTON, T. | 51,445 | 137 | - | - | 51,582 | 12,895 | - | 64,477 | | TRAD |
| 200199-010 | | VA DEPARTMENT OF HEALTH | EGERTON, T. | 25,720 | 8,332 | - | - | 34,053 | 2,572 | - | 36,625 | | TRAD |
| 300295-030 | | OLD DOMINION UNIVERSITY | EGERTON, T. | 5,839 | 344 | - | 11,399 | 17,582 | 1,758 | - | 19,340 | | TRAD |
| 300299-010 | | OLD DOMINION UNIVERSITY | EGERTON, T. | (81) | - | - | - | (81) | (8) | - | (89) | | TRAD |
| 300334-014 | | OLD DOMINION UNIVERSITY | EGERTON, T. | 66,843 | 4,026 | - | - | 70,869 | 7,087 | - | 77,955 | | TRAD |
| 100586-010 | | U.S. DEPARTMENT OF AGRICULTURE | GAFF, H. | - | 707 | - | - | 707 | - | - | 707 | | TRAD |
| 200200-010 | * | VA DEPARTMENT OF GAME AND INLAND FISHERIES | GAFF, H. | 3,985 | 1,342 | - | - | 5,328 | - | - | 5,328 | | TRAD |
| 400214-010 | | THE JAYNE KOSKINAS TED GIOVANIS FOUNDATION FOR HEAL | GAFF, H. | - | 8,461 | - | - | 8,461 | 931 | - | 9,392 | | TRAD |
| 600193-010 | | UNIVERSITY OF KWAZULU-NATAL (SOUTH AFRICA) | GAFF, H. | 26,648 | - | - | - | 26,648 | - | - | 26,648 | | TRAD |
| 200200-010 | * | VA DEPARTMENT OF GAME AND INLAND FISHERIES | GAUTHIER, D . | 11,956 | 4,027 | - | - | 15,983 | - | - | 15,983 | | TRAD |
| 400210-010 | * | JEFFRESS RESEARCH GRANTS PROGRAM | GAUTHIER, D. | 22,967 | 9,817 | - | - | 32,784 | - | - | 32,784 | | TRAD |
| 200067-010 | | VA DEPARTMENT OF AGRICULTURE | HORTH, L. | 2,521 | 3,211 | - | - | 5,732 | - | - | 5,732 | | TRAD |
| 200186-010 | | VA DEPARTMENT OF AGRICULTURE | HORTH, L. | 9,075 | - | - | - | 9,075 | - | - | 9,075 | | TRAD |
| 200212-010 | | VA DEPARTMENT OF AGRICULTURE | HORTH, L. | 3,421 | 8,650 | - | - | 12,070 | - | - | 12,070 | | TRAD |
| 400268-010 | | VIRGINIA STATE BEEKEEPERS ASSOCIATION | HORTH, L. | - | 915 | - | - | 915 | - | - | 915 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | HYNES, W. | 691 | 624 | - | - | 1,314 | 105 | - | 1,420 | | TRAD |
| 400215-010 | | THE JAYNE KOSKINAS TED GIOVANIS FOUNDATION FOR HEAL | HYNES, W. | - | 2,532 | - | - | 2,532 | 278 | - | 2,810 | | TRAD |
| 400299-010 | | FAUQUIER LYME SUPPORT GROUP | HYNES, W. | - | 54 | - | - | 54 | - | - | 54 | | TRAD |
| 100496-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | KRAJ, P. | 125,269 | 65,421 | - | - | 190,690 | 101,066 | - | 291,756 | | TRAD |
| 100509-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | KRAJ, P. | - | 2,378 | - | - | 2,378 | 1,260 | - | 3,638 | | TRAD |
| 400287-002 | | CALIFORNIA SEA GRANT | MAXWELL, S. | - | - | - | 4,166 | 4,166 | - | - | 4,166 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100555-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | OSGOOD, C. | 419 | 176 | - | - | 596 | 328 | - | 923 | | TRAD |
| 100585-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | OSGOOD, C. | 1,563 | 463 | - | - | 2,026 | 1,114 | - | 3,140 | | TRAD |
| 300201-010 | | NORTH CAROLINA STATE UNIVERSITY | SONENSHINE, D. | 2,695 | 3,259 | - | - | 5,954 | 2,977 | - | 8,931 | | TRAD |
| 300202-020 | | NORTH CAROLINA STATE UNIVERSITY | SONENSHINE, D. | - | (49) | - | - | (49) | (21) | - | (70) | | TRAD |
| 500247-010 | | INTREXON CORPORATION | SONENSHINE, D. | 10,349 | 6,031 | - | - | 16,380 | 9,009 | - | 25,388 | | TRAD |
| 100542-010 | | NATIONAL SCIENCE FOUNDATION | WALTERS, E. | 24,657 | 2,097 | - | 27,797 | 54,551 | 6,956 | - | 61,507 | | TRAD |
| 200174-010 | | MARYLAND DEPARTMENT OF NATURAL RESOURCES | WALTERS, E. | 1,950 | 93 | - | - | 2,043 | 531 | - | 2,574 | | TRAD |
| 300194-010 | | UNIVERSITY OF DELAWARE | WALTERS, E. | 14,960 | - | - | - | 14,960 | 3,889 | - | 18,849 | | TRAD |
| 400211-010 | | VIRGINIA ACADEMY OF SCIENCE | WALTERS, E. | - | - | - | 189 | 189 | - | - | 189 | | TRAD |
| 400254-010 | | VIRGINIA ACADEMY OF SCIENCE | WALTERS, E. | - | 1,198 | - | - | 1,198 | - | - | 1,198 | | TRAD |
| 400261-010 | | COASTAL VIRGINIA WILDLIFE OBSERVATORY | WALTERS, E. | 6,944 | 1,804 | - | - | 8,747 | - | - | 8,747 | | TRAD |
| | | | | 996,324 | 333,122 | 17,598 | 72,852 | 1,419,895 | 322,804 | - | 1,742,699 | 22.73% | |
| Center for Coastal Physical Oceanography | | | | | | | | | | | | | |
| 300007-010 | | STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES) | ATKINSON, L. | 3,443 | 1,562 | - | - | 5,005 | 500 | - | 5,505 | | TRAD |
| 300018-010 | * | VA INSTITUTE OF MARINE SCIENCE | ATKINSON, L. | 2,709 | 1,441 | - | 300 | 4,451 | 2,200 | - | 6,650 | | TRAD |
| 300205-010 | | STATE UNIVERSITY OF NEW JERSEY (ALL CAMPUSES) | ATKINSON, L. | 72,415 | 11,561 | - | - | 83,976 | 41,988 | - | 125,965 | | TRAD |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | ATKINSON, L. | 749 | 58 | - | - | 806 | 443 | - | 1,250 | | TRAD |
| 300273-010 | | VA INSTITUTE OF MARINE SCIENCE | COVI, M. | 53,241 | 396 | - | - | 53,636 | 210 | - | 53,846 | | TRAD |
| 300273-011 | | VA INSTITUTE OF MARINE SCIENCE | COVI, M. | 8,397 | - | - | - | 8,397 | - | - | 8,397 | | TRAD |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | COVI, M. | 749 | 58 | - | - | 806 | 443 | - | 1,250 | | TRAD |
| 100325-020 | * | NATIONAL SCIENCE FOUNDATION | DINNIMAN, M. | 6,215 | 26 | - | - | 6,241 | 3,121 | - | 9,362 | | TRAD |
| 100493-010 | * | U.S. ENVIRONMENTAL PROTECTION AGENCY | DINNIMAN, M. | 4,143 | 87 | - | - | 4,231 | 423 | - | 4,654 | | TRAD |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | EZER, T. | 749 | 58 | - | - | 806 | 443 | - | 1,250 | | TRAD |
| 100217-010 | * | NATIONAL SCIENCE FOUNDATION | HOFMANN, E. | 3,609 | (1,096) | (2,354) | 108,710 | 108,869 | 1,332 | - | 110,201 | | TRAD |
| 100325-020 | * | NATIONAL SCIENCE FOUNDATION | HOFMANN, E. | 6,215 | 26 | - | - | 6,241 | 3,121 | - | 9,362 | | TRAD |
| 100471-020 | | NATIONAL SCIENCE FOUNDATION | HOFMANN, E. | - | - | - | 26 | 26 | - | - | 26 | | TRAD |
| 100477-010 | * | NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | HOFMANN, E. | 2,998 | 244 | - | 450 | 3,692 | 811 | - | 4,503 | | TRAD |
| 100539-010 | * | NATIONAL SCIENCE FOUNDATION | HOFMANN, E. | 10,075 | 625 | - | - | 10,700 | 5,671 | - | 16,370 | | TRAD |
| 200154-010 | | FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION | HOFMANN, E. | 70,444 | - | - | - | 70,444 | 37,335 | - | 107,779 | | TRAD |
| 300279-010 | | PENNSYLVANIA STATE UNIVERSITY | HOFMANN, E. | 38,425 | 830 | - | - | 39,254 | 20,805 | - | 60,059 | | TRAD |
| 100217-010 | * | NATIONAL SCIENCE FOUNDATION | KLINCK, J. | 3,609 | (1,096) | (2,354) | 108,710 | 108,869 | 1,332 | - | 110,201 | | TRAD |
| 100325-020 | * | NATIONAL SCIENCE FOUNDATION | KLINCK, J. | 6,215 | 26 | - | - | 6,241 | 3,121 | - | 9,362 | | TRAD |
| 100493-010 | * | U.S. ENVIRONMENTAL PROTECTION AGENCY | KLINCK, J. | 4,143 | 87 | - | - | 4,231 | 423 | - | 4,654 | | TRAD |
| 100022-051 | | NASA GODDARD SPACEFLIGHT CENTER | PLAG, H. | - | 5,506 | - | - | 5,506 | - | - | 5,506 | | TRAD |
| 100463-010 | | JET PROPULSION LABORATORY | PLAG, H. | 12,970 | - | - | - | 12,970 | 6,874 | - | 19,844 | | TRAD |
| 100539-010 | * | NATIONAL SCIENCE FOUNDATION | ST- LAURENT, P. | 10,190 | 625 | - | - | 10,815 | 5,732 | - | 16,547 | | TRAD |
| 600192-010 | | ARUP | PLAG, H. | - | - | - | 811 | 811 | 41 | - | 852 | | TRAD |
| | | | | 321,701 | 21,025 | (4,708) | 219,006 | 557,026 | 136,369 | - | 693,392 | 24.48% | |
| Center for Coastal Physical Oceanography - MARI | | | | | | | | | | | | | |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | PLAG, H. | 2,995 | 230 | - | - | 3,225 | 1,774 | - | 4,998 | | TRAD |
| 100565-010 | | U.S. FISH AND WILDLIFE SERVICES | PLAG, H. | 26,665 | 1,252 | - | - | 27,916 | - | - | 27,916 | | TRAD |
| | | | | 29,659 | 1,482 | - | - | 31,141 | 1,774 | - | 32,915 | 5.70% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Chemistry and Biochemistry | | | | | | | | | | | | | |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | BAYSE, C. | 691 | 624 | - | - | 1,314 | 105 | - | 1,420 | | TRAD |
| 400258-010 | | VIRGINIA ACADEMY OF SCIENCE | BAYSE, C. | - | 1,250 | - | - | 1,250 | - | - | 1,250 | | TRAD |
| 100038-010 | | NASA GODDARD SPACEFLIGHT CENTER | BERNATH, P. | 92,180 | 910 | - | - | 93,090 | 49,338 | - | 142,428 | | TRAD |
| 100039-010 | | NASA GODDARD SPACEFLIGHT CENTER | BERNATH, P. | 26,670 | 3,821 | - | - | 30,490 | 16,160 | - | 46,650 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | BERNATH, P. | 691 | 624 | - | - | 1,314 | 105 | - | 1,420 | | TRAD |
| 100456-010 | | NASA GODDARD SPACEFLIGHT CENTER | BERNATH, P. | 89,911 | 2,086 | - | - | 91,997 | 48,758 | - | 140,755 | | TRAD |
| 100465-010 | | NASA GODDARD SPACEFLIGHT CENTER | BERNATH, P. | 21,585 | 3,827 | - | - | 25,412 | 13,468 | - | 38,880 | | TRAD |
| 300275-010 | | OLD DOMINION UNIVERSITY | BERNATH, P. | 74,947 | 5,863 | 3,030 | 230,475 | 314,315 | 42,829 | - | 357,144 | | TRAD |
| 500204-010 | | BRUKER OPTICS, INC. | COOPER, J. | 3,988 | 196 | - | 14,645 | 18,829 | 9,979 | - | 28,807 | | TRAD |
| 500266-010 | | BRUKER OPTICS, INC. | COOPER, J. | 8,726 | - | - | - | 8,726 | 4,799 | - | 13,526 | | TRAD |
| 300295-020 | | OLD DOMINION UNIVERSITY | DONAT, J. | 25,407 | 23,464 | - | 84,816 | 133,687 | 6,920 | - | 140,608 | | TRAD |
| 300334-013 | | OLD DOMINION UNIVERSITY | DONAT, J. | 274,653 | 139,448 | 27,034 | - | 441,136 | 35,280 | - | 476,416 | | TRAD |
| 400218-010 | | VIRGINIA ACADEMY OF SCIENCE | GREENE, L. | - | 34 | - | 189 | 223 | - | - | 223 | | TRAD |
| 100513-010 | | NATIONAL SCIENCE FOUNDATION | HATCHER, P. | 41,156 | 12,575 | - | - | 53,731 | 28,477 | - | 82,208 | | TRAD |
| 300006-010 | | UNIVERSITY OF MAINE | HATCHER, P. | 19,949 | 161 | - | - | 20,110 | 6,033 | - | 26,143 | | TRAD |
| 300195-010 | | TEXAS A&M UNIVERSITY | HATCHER, P. | 741 | - | - | - | 741 | 371 | - | 1,112 | | TRAD |
| 300323-010 | | TEXAS A&M UNIVERSITY | HATCHER, P. | 70,875 | 12,840 | - | - | 83,715 | 44,369 | - | 128,084 | | TRAD |
| 500146-010 | | TOTAL, S.A. | HATCHER, P. | 12,414 | 55 | - | 185 | 12,654 | 8,164 | - | 20,818 | | TRAD |
| 100452-010 | | NATIONAL SCIENCE FOUNDATION | HOLDER, A. | 16,964 | 9,192 | - | - | 26,156 | 13,863 | - | 40,018 | | TRAD |
| 100450-010 | | NATIONAL SCIENCE FOUNDATION | MAO, J. | 28,262 | 1,839 | - | - | 30,100 | 15,953 | - | 46,053 | | TRAD |
| 100232-010 | | NATIONAL SCIENCE FOUNDATION | MOPPER, K. | 6,450 | 102 | - | - | 6,552 | 3,472 | - | 10,024 | | TRAD |
| 100512-010 | * | NATIONAL SCIENCE FOUNDATION | MOPPER, K. | 13,894 | 7,538 | 3,461 | - | 24,893 | 9,905 | - | 34,797 | | TRAD |
| 100512-012 | | NATIONAL SCIENCE FOUNDATION | MOPPER, K. | - | - | - | 1,318 | 1,318 | - | - | 1,318 | | TRAD |
| 100512-020 | * | NATIONAL SCIENCE FOUNDATION | MOPPER, K. | 7,797 | 1,719 | - | - | 9,516 | 5,044 | - | 14,560 | | TRAD |
| 100512-021 | | NATIONAL SCIENCE FOUNDATION | MOPPER, K. | - | 3,759 | - | - | 3,759 | 1,992 | - | 5,751 | | TRAD |
| 100556-010 | | NATIONAL SCIENCE FOUNDATION | POUTSMA, J. | 1,387 | - | - | - | 1,387 | 735 | - | 2,122 | | TRAD |
| 300355-010 | | COLLEGE OF WILLIAM AND MARY | POUTSMA, J. | 2,073 | - | - | - | 2,073 | 1,098 | - | 3,171 | | TRAD |
| 100236-010 | | NATIONAL SCIENCE FOUNDATION | WANG, G. | 63,897 | 21,619 | - | - | 85,517 | 45,324 | - | 130,841 | | TRAD |
| 500256-010 | | BOEHRINGER INGELHEIM | WANG, G. | 10,901 | 1,010 | - | - | 11,912 | - | - | 11,912 | | TRAD |
| 100523-010 | | NATIONAL SCIENCE FOUNDATION | WOZNIAK, A. | 50,274 | 3,605 | - | - | 53,879 | 28,556 | - | 82,435 | | TRAD |
| 100254-010 | | NATIONAL SCIENCE FOUNDATION | XU, N. | 10,238 | 852 | - | - | 11,090 | 5,878 | - | 16,968 | | TRAD |
| 100254-011 | | NATIONAL SCIENCE FOUNDATION | XU, N. | 4,000 | 56 | - | 14,714 | 18,770 | - | - | 18,770 | | TRAD |
| 100254-012 | | NATIONAL SCIENCE FOUNDATION | XU, N. | 23,835 | 10,685 | - | 2,400 | 36,920 | 8,975 | - | 45,895 | | TRAD |
| 100254-013 | | NATIONAL SCIENCE FOUNDATION | XU, N. | - | 646 | - | 10,100 | 10,746 | - | - | 10,746 | | TRAD |
| 100255-016 | | NATIONAL SCIENCE FOUNDATION | XU, N. | 1,000 | - | - | 2,560 | 3,560 | - | - | 3,560 | | TRAD |
| 100490-010 | | NATIONAL SCIENCE FOUNDATION | XU, N. | 18,668 | 1,286 | - | - | 19,954 | 10,576 | - | 30,530 | | TRAD |
| 100555-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XU, N . | 7,969 | 3,346 | - | - | 11,315 | 6,223 | - | 17,539 | | TRAD |
| 100585-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XU, N . | 6,252 | 1,851 | - | - | 8,102 | 4,456 | - | 12,559 | | TRAD |
| 300317-010 | * | OLD DOMINION UNIVERSITY | XU, N. | 13,580 | 1,359 | - | - | 14,939 | - | - | 14,939 | | TRAD |
| 300317-010 | * | OLD DOMINION UNIVERSITY | XU, X. | (43) | - | - | - | (43) | - | - | (43) | | TRAD |
| | | | | 1,051,982 | 278,240 | 33,525 | 361,402 | 1,725,143 | 477,206 | - | 2,202,356 | 27.66% | |
| Chemistry and Biochemistry - VCERC | | | | | | | | | | | | | |
| 100222-010 | * | NATIONAL SCIENCE FOUNDATION | HATCHER, P. | (1,327) | - | - | - | (1,327) | (703) | - | (2,030) | | VCERC |
| 100222-010 | * | NATIONAL SCIENCE FOUNDATION | WOZNIAK, A. | (2,576) | - | - | - | (2,576) | (1,365) | - | (3,941) | | VCERC |
| | | | | (3,903) | - | - | - | (3,903) | (2,069) | - | (5,971) | 53.00% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Computer Sciences | | | | | | | | | | | | | |
| 100483-010 | * | NATIONAL SCIENCE FOUNDATION | CHERNIKOV, A. | 18,727 | 5,578 | - | - | 24,305 | 12,882 | - | 37,187 | | TRAD |
| 100525-010 | | NATIONAL SCIENCE FOUNDATION | CHERNIKOV, A. | - | - | - | 8,321 | 8,321 | - | - | 8,321 | | TRAD |
| 400222-010 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | CHERNIKOV, A. | 34,571 | 5,032 | 1,920 | - | 41,523 | 3,282 | - | 44,805 | | TRAD |
| 500268-001 | * | ENGILITY | CHERNIKOV, A. | 18,206 | - | - | - | 18,206 | 10,013 | - | 28,219 | | TRAD |
| 100204-010 | | NATIONAL SCIENCE FOUNDATION | CHRISOCHOIDES, N. | 26,374 | 4,195 | - | - | 30,568 | 15,284 | - | 45,852 | | TRAD |
| 100249-010 | | NATIONAL SCIENCE FOUNDATION | CHRISOCHOIDES, N. | - | - | - | 5,699 | 5,699 | - | - | 5,699 | | TRAD |
| 100483-010 | * | NATIONAL SCIENCE FOUNDATION | CHRISOCHOIDES, N. | 36,352 | 10,829 | - | - | 47,181 | 25,006 | - | 72,187 | | TRAD |
| 100558-010 | | LANGLEY RESEARCH CENTER | CHRISOCHOIDES, N. | 28,675 | 19,043 | - | - | 47,718 | 26,245 | - | 73,963 | | TRAD |
| 500268-001 | * | ENGILITY | CHRISOCHOIDES, N. | 36,964 | - | - | - | 36,964 | 20,330 | - | 57,294 | | TRAD |
| 500245-010 | | CUSTOMER 1 FOCUS, LLC | GUPTA, R. | 8,645 | - | - | 1,353 | 9,998 | 2,600 | - | 12,598 | | TRAD |
| 600196-010 | | ACHARYA INSTITUTE OF TECHNOLOGY | GUPTA, R. | - | 8,997 | - | - | 8,997 | - | - | 8,997 | | TRAD |
| 100468-010 | * | NATIONAL SCIENCE FOUNDATION | HE, J. | 28,823 | 4,088 | - | - | 32,912 | 17,443 | - | 50,355 | | TRAD |
| 100532-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HE, J . | 38,074 | 2,487 | - | - | 40,560 | 21,497 | - | 62,057 | | TRAD |
| 100209-010 | | NATIONAL SCIENCE FOUNDATION | JI, S. | 94,472 | 10,918 | - | - | 105,390 | 55,855 | - | 161,245 | | TRAD |
| 100468-010 | * | NATIONAL SCIENCE FOUNDATION | JI, S. | 11,529 | 1,635 | - | - | 13,165 | 6,977 | - | 20,142 | | TRAD |
| 100486-010 | | NATIONAL SCIENCE FOUNDATION | JI, S. | 2,296 | - | - | - | 2,296 | 1,217 | - | 3,512 | | TRAD |
| 300315-010 | | OLD DOMINION UNIVERSITY | JI, S. | 12,124 | (66) | - | - | 12,058 | - | - | 12,058 | | TRAD |
| 100186-010 | | NATIONAL SCIENCE FOUNDATION | LI, Y. | 25,947 | 50 | - | - | 25,997 | 12,998 | - | 38,995 | | TRAD |
| 100186-011 | | NATIONAL SCIENCE FOUNDATION | LI, Y. | 4,666 | - | - | - | 4,666 | - | - | 4,666 | | TRAD |
| 500155-010 | | E&E ENTERPRISES | MALY, K. | 7,590 | - | - | - | 7,590 | 1,973 | - | 9,564 | | TRAD |
| 500161-010 | | ABS ENTERPRISE SERVICES GROUP | MALY, K. | 2,753 | - | - | 5,339 | 8,092 | 2,104 | - | 10,196 | | TRAD |
| 600189-010 | | PES INSTITUTE OF TECHNOLOGY | MALY, K. | - | - | - | 4,506 | 4,506 | - | - | 4,506 | | TRAD |
| 100467-010 | | NATIONAL SCIENCE FOUNDATION | NADEEM, T. | 67,035 | 24,074 | - | 11,281 | 102,391 | 48,288 | - | 150,679 | | TRAD |
| 100481-010 | * | NATIONAL SCIENCE FOUNDATION | NADEEM, T. | 4,699 | 660 | - | - | 5,359 | 2,840 | - | 8,199 | | TRAD |
| 100507-010 | * | NATIONAL SCIENCE FOUNDATION | NADEEM, T. | 29,867 | 1,667 | 51,709 | - | 83,243 | 16,713 | - | 99,956 | | TRAD |
| 100514-010 | | NATIONAL SCIENCE FOUNDATION | NADEEM, T. | - | - | - | 20,000 | 20,000 | - | - | 20,000 | | TRAD |
| 300234-017 | * | UNIVERSITY OF IDAHO | NADEEM, T. | 1,551 | (0) | - | - | 1,551 | 822 | - | 2,372 | | TRAD |
| 300234-018 | * | UNIVERSITY OF IDAHO | NADEEM, T. | 5,063 | - | - | - | 5,063 | 2,684 | - | 7,747 | | TRAD |
| 100485-010 | * | NATIONAL ENDOWMENT FOR THE HUMANITIES | NELSON, M. | 16,316 | 10,180 | - | - | 26,496 | 14,043 | - | 40,539 | | TRAD |
| 100519-010 | * | INSTITUTE OF MUSEUM AND LIBRARY SERVICES | NELSON, M. | 28,930 | 4,109 | - | - | 33,039 | 17,510 | - | 50,549 | | TRAD |
| 100552-010 | * | NATIONAL SCIENCE FOUNDATION | NELSON, M. | 15,996 | 2,896 | - | - | 18,892 | 10,013 | - | 28,904 | | TRAD |
| 300380-010 | * | OLD DOMINION UNIVERSITY | NELSON, M. | 2,832 | 1,621 | - | - | 4,453 | - | - | 4,453 | | TRAD |
| 600191-010 | | INTERNATIONAL INERNET PRESERVATION CONSORTIUM | NELSON, M. | 20,633 | 6,553 | - | - | 27,186 | - | - | 27,186 | | TRAD |
| 100202-010 | * | NATIONAL SCIENCE FOUNDATION | OLARIU, S. | 4 | 350 | - | - | 354 | 177 | - | 532 | | TRAD |
| 100202-011 | * | NATIONAL SCIENCE FOUNDATION | OLARIU, S. | 1,381 | - | - | - | 1,381 | - | - | 1,381 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100468-010 | * | NATIONAL SCIENCE FOUNDATION | RANJAN, D. | 8,647 | 1,227 | - | - | 9,874 | 5,233 | - | 15,107 | | TRAD |
| 100554-010 | * | NATIONAL SCIENCE FOUNDATION | RANJAN, D. | 5,500 | 15 | - | - | 5,515 | 2,923 | - | 8,438 | | TRAD |
| 300326-010 | * | OLD DOMINION UNIVERSITY | RANJAN, D. | 7,104 | - | - | - | 7,104 | - | - | 7,104 | | TRAD |
| 400110-015 | * | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | RANJAN, D. | 4,520 | - | - | - | 4,520 | - | - | 4,520 | | TRAD |
| 400210-010 | * | JEFFRESS RESEARCH GRANTS PROGRAM | RANJAN, D. | 11,484 | 4,909 | - | - | 16,392 | - | - | 16,392 | | TRAD |
| 400257-010 | * | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | RANJAN, D. | 7,258 | - | - | - | 7,258 | 3,992 | - | 11,250 | | TRAD |
| 400262-010 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | RANJAN, D. | 5,537 | - | - | - | 5,537 | - | - | 5,537 | | TRAD |
| 400295-010 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | RANJAN, D. | 4,467 | - | - | - | 4,467 | 1,161 | - | 5,628 | | TRAD |
| 100202-010 | * | NATIONAL SCIENCE FOUNDATION | WEIGLE, M. | 4 | 350 | - | - | 354 | 177 | - | 532 | | TRAD |
| 100202-011 | * | NATIONAL SCIENCE FOUNDATION | WEIGLE, M. | 1,381 | - | - | - | 1,381 | - | - | 1,381 | | TRAD |
| 100481-010 | * | NATIONAL SCIENCE FOUNDATION | WEIGLE, M. | 4,699 | 660 | - | - | 5,359 | 2,840 | - | 8,199 | | TRAD |
| 100485-010 | * | NATIONAL ENDOWMENT FOR THE HUMANITIES | WEIGLE, M. | 16,316 | 10,180 | - | - | 26,496 | 14,043 | - | 40,539 | | TRAD |
| 100519-010 | * | INSTITUTE OF MUSEUM AND LIBRARY SERVICES | WEIGLE, M. | 28,930 | 4,109 | - | - | 33,039 | 17,510 | - | 50,549 | | TRAD |
| 100552-010 | * | NATIONAL SCIENCE FOUNDATION | WEIGLE, M. | 15,996 | 2,896 | - | - | 18,892 | 10,013 | - | 28,904 | | TRAD |
| 300380-010 | * | OLD DOMINION UNIVERSITY | WEIGLE, M. | 2,832 | 1,621 | - | - | 4,453 | - | - | 4,453 | | TRAD |
| 100532-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | WRIGGERS, W. | 58,157 | 2,373 | - | - | 60,530 | 32,081 | - | 92,611 | | TRAD |
| 100468-010 | * | NATIONAL SCIENCE FOUNDATION | ZUBAIR, M. | 8,647 | 1,227 | - | - | 9,874 | 5,233 | - | 15,107 | | TRAD |
| 100554-010 | * | NATIONAL SCIENCE FOUNDATION | ZUBAIR, M. | 5,500 | 15 | - | - | 5,515 | 2,923 | - | 8,438 | | TRAD |
| 300295-060 | | OLD DOMINION UNIVERSITY | ZUBAIR, M. | 5,219 | - | - | 3,600 | 8,819 | 882 | - | 9,700 | | TRAD |
| 300326-010 | * | OLD DOMINION UNIVERSITY | ZUBAIR, M. | 7,104 | - | - | - | 7,104 | - | - | 7,104 | | TRAD |
| 300334-015 | | OLD DOMINION UNIVERSITY | ZUBAIR, M. | 10,337 | - | - | - | 10,337 | 1,034 | - | 11,371 | | TRAD |
| 400110-015 | * | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | ZUBAIR, M. | 4,520 | - | - | - | 4,520 | - | - | 4,520 | | TRAD |
| 400210-010 | * | JEFFRESS RESEARCH GRANTS PROGRAM | ZUBAIR, M. | 11,484 | 4,909 | - | - | 16,392 | - | - | 16,392 | | TRAD |
| 400257-010 | * | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | ZUBAIR, M. | 7,258 | - | - | - | 7,258 | 3,992 | - | 11,250 | | TRAD |
| 400286-010 | | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | ZUBAIR, M. | 6,202 | - | - | - | 6,202 | 1,612 | - | 7,814 | | TRAD |
| | | | | 880,197 | 159,386 | 53,629 | 60,098 | 1,153,315 | 454,447 | - | 1,607,758 | 39.40% | |
| Mathematics and Statistics | | | | | | | | | | | | | |
| 100007-010 | | LANGLEY RESEARCH CENTER | BADAVI, F. | 175,783 | 8,021 | - | - | 183,803 | 47,789 | - | 231,592 | | TRAD |
| 300295-050 | | OLD DOMINION UNIVERSITY | CHAGANTY, R. | 2,160 | - | - | 7,844 | 10,004 | 1,000 | - | 11,004 | | TRAD |
| 300334-010 | | OLD DOMINION UNIVERSITY | CHAGANTY, R. | 16,688 | 48 | - | - | 16,736 | 1,674 | - | 18,409 | | TRAD |
| 400018-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | CHAGANTY, R. | 29,484 | 2,023 | - | - | 31,507 | - | - | 31,507 | | TRAD |
| 400056-010 | * | AMERICAN DIABETES ASSOCIATION | DIAWARA, N. | 3,132 | 184 | - | 489 | 3,805 | 497 | - | 4,302 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | DORREPAAL, J. | 691 | 624 | - | - | 1,314 | 105 | - | 1,420 | | TRAD |
| 200162-010 | * | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | DOVIAK, S. | 3,169 | 954 | - | 1,350 | 5,473 | 330 | - | 5,803 | | TRAD |
| 100020-010 | | NASA/HEADQUARTERS | HU, F. | 87,475 | 8,024 | - | - | 95,499 | 47,750 | - | 143,249 | | TRAD |
| 100557-010 | | NATIONAL SCIENCE FOUNDATION | LUO, L. | - | 5,700 | - | 10,300 | 16,000 | - | - | 16,000 | | TRAD |
| 100243-010 | * | NATIONAL SCIENCE FOUNDATION | PENG, Y. | 25,860 | 1,842 | - | - | 27,702 | 14,682 | - | 42,384 | | TRAD |
| 300335-010 | * | VIRGINIA COMMONWEALTH UNIVERSITY | SHETH-CHANDRA, M. | 5,257 | 516 | - | - | 5,773 | - | - | 5,773 | | TRAD |
| 100367-010 | * | U.S. DEPARTMENT OF EDUCATION | STROZAK, R. | 691 | 624 | - | - | 1,314 | 105 | - | 1,420 | | TRAD |
| 100016-010 | | LANGLEY RESEARCH CENTER | TWEED, J. | 7,502 | - | - | - | 7,502 | 1,951 | - | 9,453 | | TRAD |
| 100480-010 | * | LANGLEY RESEARCH CENTER | TWEED, J. | 2,048 | 111 | - | - | 2,160 | 562 | - | 2,721 | | TRAD |
| 100480-010 | * | LANGLEY RESEARCH CENTER | WALKER, S. | 21,419 | - | - | - | 21,419 | 5,569 | - | 26,988 | | TRAD |
| 100219-010 | | NATIONAL SCIENCE FOUNDATION | WANG, J. | 21,424 | 4,555 | - | - | 25,979 | 13,769 | - | 39,748 | | TRAD |
| 100231-010 | * | NATIONAL SCIENCE FOUNDATION | WANG, J. | 6,637 | 2,244 | - | - | 8,881 | 4,707 | - | 13,588 | | TRAD |
| 100243-010 | * | NATIONAL SCIENCE FOUNDATION | WANG, J. | 17,240 | 1,228 | - | - | 18,468 | 9,788 | - | 28,256 | | TRAD |
| 100501-010 | * | NATIONAL SCIENCE FOUNDATION | WANG, J. | 16,873 | 2,434 | - | - | 19,307 | 10,233 | - | 29,539 | | TRAD |
| 100480-010 | * | LANGLEY RESEARCH CENTER | WILSON, J. | 60,340 | 2,115 | - | - | 62,455 | 16,238 | - | 78,693 | | TRAD |
| 100564-010 | | NATIONAL SCIENCE FOUNDATION | ZHOU, R. | 4,185 | 2,130 | - | - | 6,315 | 3,473 | - | 9,788 | | TRAD |
| | | | | 508,058 | 43,375 | - | 19,983 | 571,412 | 180,221 | - | 751,636 | 31.54% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Ocean, Earth and Atmospheric Sciences | | | | | | | | | | | | | |
| 100211-010 | | NATIONAL SCIENCE FOUNDATION | BOCHDANSKY, A. | 34,387 | 378 | - | - | 34,765 | 18,425 | - | 53,190 | | TRAD |
| 100225-010 | | NATIONAL SCIENCE FOUNDATION | BOCHDANSKY, A. | 26,348 | 15,352 | - | - | 41,699 | 22,101 | - | 63,800 | | TRAD |
| 300320-010 | | OLD DOMINION UNIVERSITY | BOCHDANSKY, A. | 8,817 | 18,661 | - | - | 27,479 | - | - | 27,479 | | TRAD |
| 300282-010 | * | NATIONAL SCIENCE FOUNDATION | BOCHDANSKY, A. | - | - | (8) | - | (8) | - | - | (8) | | TRAD |
| 100228-010 | | NATIONAL SCIENCE FOUNDATION | BURDIGE, D. | 14,338 | 1,863 | - | (0) | 16,201 | 8,587 | - | 24,787 | | TRAD |
| 100528-010 | | NATIONAL SCIENCE FOUNDATION | BURDIGE, D. | - | (229) | (28,645) | - | (28,874) | - | - | (28,874) | | TRAD |
| 100536-010 | | NATIONAL SCIENCE FOUNDATION | BURDIGE, D. | 64,470 | 36,069 | 28,645 | 99,908 | 229,092 | 55,296 | - | 284,388 | | TRAD |
| 300332-010 | | TEXAS A&M UNIVERSITY | BURDIGE, D. | 850 | - | - | 110 | 960 | - | - | 960 | | TRAD |
| 100022-042 | | NASA GODDARD SPACEFLIGHT CENTER | CHAPPELL, P. | - | 355 | - | - | 355 | - | - | 355 | | TRAD |
| 100530-010 | | NATIONAL SCIENCE FOUNDATION | CHAPPELL, P. | 48,896 | 19,326 | - | - | 68,223 | 36,158 | - | 104,380 | | TRAD |
| 100547-010 | | NATIONAL SCIENCE FOUNDATION | CHAPPELL, P. | 11,905 | 4,454 | - | - | 16,358 | 8,670 | - | 25,028 | | TRAD |
| 200188-020 | * | OLD DOMINION UNIVERSITY | COVI, M. | - | 437 | - | 684 | 1,121 | 35 | - | 1,156 | | TRAD |
| 200188-030 | * | OLD DOMINION UNIVERSITY | COVI, M. | 2,463 | - | - | - | 2,463 | 197 | - | 2,660 | | TRAD |
| 300316-010 | | VA INSTITUTE OF MARINE SCIENCE | COVI, M. | 1,527 | - | - | - | 1,527 | - | - | 1,527 | | TRAD |
| 300353-010 | | VA INSTITUTE OF MARINE SCIENCE | COVI, M. | 727 | 4,488 | - | - | 5,215 | 1,356 | - | 6,571 | | TRAD |
| 300373-010 | * | VA INSTITUTE OF MARINE SCIENCE | COVI, M. | 1,236 | 2,250 | - | - | 3,486 | 906 | - | 4,392 | | TRAD |
| 400282-010 | | BLUE MOON FUND | COVI, M. | 31,986 | 5,460 | - | - | 37,446 | 5,617 | - | 43,063 | | TRAD |
| 100214-010 | | NATIONAL SCIENCE FOUNDATION | CUTTER, G. | 37,438 | 12,570 | - | - | 50,008 | 25,004 | - | 75,012 | | TRAD |
| 100223-010 | | NATIONAL SCIENCE FOUNDATION | CUTTER, G. | 41,953 | 8,972 | - | - | 50,925 | 26,990 | - | 77,915 | | TRAD |
| 100257-010 | | NATIONAL SCIENCE FOUNDATION | CUTTER, G. | 55,831 | 101,129 | - | 30,575 | 187,534 | 83,188 | - | 270,722 | | TRAD |
| 100484-010 | | NATIONAL SCIENCE FOUNDATION | CUTTER, G. | 25,073 | 2,661 | - | - | 27,734 | 14,699 | - | 42,433 | | TRAD |
| 100198-010 | | NATIONAL SCIENCE FOUNDATION | DARBY, D. | 4,508 | 3,836 | - | - | 8,343 | 4,172 | - | 12,515 | | TRAD |
| 100501-010 | * | NATIONAL SCIENCE FOUNDATION | DOBBS, F. | 15,575 | 2,247 | - | - | 17,822 | 9,446 | - | 27,267 | | TRAD |
| 200220-010 | | VA WATER RESOURCES RESEARCH CENTER | DOBBS, F. | 318 | - | - | - | 318 | - | - | 318 | | TRAD |
| 100511-010 | | NASA/HEADQUARTERS | HAMLINGTON, B. | 7,491 | 13,583 | - | - | 21,074 | 11,169 | - | 32,244 | | TRAD |
| 100577-010 | | NATIONAL SCIENCE FOUNDATION | HAMLINGTON, B. | 1,722 | - | - | - | 1,722 | 947 | - | 2,669 | | TRAD |
| 300372-010 | | UNIVERSITY OF COLORADO | HAMLINGTON, B. | 12,729 | - | - | - | 12,729 | 6,746 | - | 19,475 | | TRAD |
| 100023-010 | * | NATIONAL SCIENCE FOUNDATION | HARVEY, R. | 446 | (16) | - | 5,565 | 5,995 | 1 | - | 5,996 | | TRAD |
| 100227-010 | | NATIONAL SCIENCE FOUNDATION | HARVEY, R. | 61,198 | 8,952 | - | - | 70,150 | 37,180 | - | 107,330 | | TRAD |
| 100433-010 | | NORTH PACIFIC RESEARCH BOARD | HARVEY, R. | - | 1,780 | - | - | 1,780 | 943 | - | 2,723 | | TRAD |
| 100540-010 | | NORTH PACIFIC RESEARCH BOARD | HARVEY, R. | - | 1,117 | - | - | 1,117 | 592 | - | 1,710 | | TRAD |
| 300233-010 | | UNIVERSITY OF TEXAS AT AUSTIN | HARVEY, R. | 46,779 | 4,719 | - | (76) | 51,422 | 25,749 | - | 77,171 | | TRAD |
| 300282-010 | * | NATIONAL SCIENCE FOUNDATION | HARVEY, R. | - | - | (8) | - | (8) | - | - | (8) | | TRAD |
| 600198-010 | | STANTEC | HARVEY, R. | 1,851 | 1,100 | - | - | 2,950 | 767 | - | 3,718 | | TRAD |
| 300322-010 | | UNIVERSITY OF SOUTHERN MISSISSIPPI | HOFMANN, E. | 31,630 | 1,549 | - | - | 33,179 | 17,585 | - | 50,764 | | TRAD |
| 200016-010 | | VA MARINE RESOURCES COMMISSION (VMRC) | JONES, C. | - | (247) | - | - | (247) | (47) | - | (295) | | TRAD |
| 200018-010 | | VA MARINE RESOURCES COMMISSION (VMRC) | JONES, C. | - | (86) | - | - | (86) | (22) | - | (108) | | TRAD |
| 200020-010 | | VA MARINE RESOURCES COMMISSION (VMRC) | JONES, C. | - | (1,276) | - | - | (1,276) | (319) | - | (1,595) | | TRAD |
| 200176-010 | | VA MARINE RESOURCES COMMISSION (VMRC) | JONES, C. | 62,102 | 5,409 | - | - | 67,511 | 16,878 | - | 84,388 | | TRAD |
| 200202-010 | | VA MARINE RESOURCES COMMISSION (VMRC) | JONES, C. | 138,496 | 10,082 | - | - | 148,578 | 37,145 | - | 185,723 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100040-010 | | NASA GODDARD SPACEFLIGHT CENTER | MULHOLLAND, M. | (62) | - | - | (0) | (62) | (33) | - | (95) | | TRAD |
| 100233-010 | | NATIONAL SCIENCE FOUNDATION | MULHOLLAND, M. | 33,981 | 2,584 | 12,603 | - | 49,168 | 19,380 | - | 68,548 | | TRAD |
| 100464-010 | | NATIONAL SCIENCE FOUNDATION | MULHOLLAND, M. | 89,567 | 40,051 | - | - | 129,619 | 68,698 | - | 198,316 | | TRAD |
| 100512-010 | * | NATIONAL SCIENCE FOUNDATION | MULHOLLAND, M. | 22,669 | 12,298 | 5,647 | - | 40,614 | 16,160 | - | 56,774 | | TRAD |
| 100512-020 | * | NATIONAL SCIENCE FOUNDATION | MULHOLLAND, M. | 12,722 | 2,805 | - | - | 15,527 | 8,229 | - | 23,756 | | TRAD |
| 300118-012 | | OLD DOMINION UNIVERSITY | MULHOLLAND, M. | - | - | - | 32 | 32 | - | - | 32 | | TRAD |
| 300282-010 | * | NATIONAL SCIENCE FOUNDATION | MULHOLLAND, M. | - | - | (8) | - | (8) | - | - | (8) | | TRAD |
| 300293-010 | | DARTMOUTH COLLEGE | MULHOLLAND, M. | - | 283 | - | - | 283 | - | - | 283 | | TRAD |
| 300330-010 | | UNIVERSITY OF NEW HAMPSHIRE | MULHOLLAND, M. | 21,844 | 6,370 | - | - | 28,214 | 17,166 | - | 45,380 | | TRAD |
| 300371-010 | | DARTMOUTH COLLEGE | MULHOLLAND, M. | 17,226 | 1,246 | - | - | 18,472 | - | - | 18,472 | | TRAD |
| 100510-010 | | NATIONAL SCIENCE FOUNDATION | SCHMIDT, M. | 19,535 | 36,352 | - | 103,187 | 159,074 | 29,621 | - | 188,695 | | TRAD |
| 100220-010 | | NATIONAL SCIENCE FOUNDATION | SEDWICK, P. | 35,634 | 840 | - | - | 36,475 | 19,332 | - | 55,806 | | TRAD |
| 100233-020 | | NATIONAL SCIENCE FOUNDATION | SEDWICK, P. | 26,510 | 2,939 | - | - | 29,448 | 15,608 | - | 45,056 | | TRAD |
| 100325-010 | | NATIONAL SCIENCE FOUNDATION | SEDWICK, P. | 19,257 | (52) | - | - | 19,205 | 9,603 | - | 28,807 | | TRAD |
| 100325-020 | * | NATIONAL SCIENCE FOUNDATION | SEDWICK, P. | 6,215 | 26 | - | - | 6,241 | 3,121 | - | 9,362 | | TRAD |
| 100546-010 | | NATIONAL SCIENCE FOUNDATION | SEDWICK, P. | - | - | 522,612 | - | 522,612 | - | - | 522,612 | | TRAD |
| 100563-010 | | NATIONAL SCIENCE FOUNDATION | SEDWICK, P. | 9,430 | 7,910 | - | - | 17,340 | 9,537 | - | 26,877 | | TRAD |
| 300282-010 | * | NATIONAL SCIENCE FOUNDATION | SEDWICK, P. | - | - | (8) | - | (8) | - | - | (8) | | TRAD |
| 200177-010 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 60,359 | 27,154 | - | 1,471 | 88,984 | 4,376 | - | 93,359 | | TRAD |
| 200183-010 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 5,039 | 1,632 | - | 2,246 | 8,917 | 534 | - | 9,451 | | TRAD |
| 200183-020 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 5,071 | 1,729 | - | (2,246) | 4,554 | 544 | - | 5,098 | | TRAD |
| 200188-010 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 6,523 | 248 | - | 3,758 | 10,530 | 542 | - | 11,072 | | TRAD |
| 200188-020 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | - | 655 | - | 1,026 | 1,681 | 52 | - | 1,733 | | TRAD |
| 200188-030 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 3,694 | - | - | - | 3,694 | 296 | - | 3,989 | | TRAD |
| 300041-010 | | VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY | WHITTECAR, G. | 23,997 | 9,486 | - | 528 | 34,011 | 11,719 | - | 45,730 | | TRAD |
| 300133-010 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | - | (197) | - | - | (197) | (16) | - | (212) | | TRAD |
| 300143-020 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 1,598 | 2,074 | - | 3,350 | 7,021 | 184 | - | 7,205 | | TRAD |
| 300143-040 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 13,187 | - | - | - | 13,187 | 659 | - | 13,846 | | TRAD |
| 300284-010 | * | OLD DOMINION UNIVERSITY | WHITTECAR, G. | 2,714 | 12,399 | - | 5,953 | 21,065 | 1,100 | - | 22,165 | | TRAD |
| 500048-010 | | WEANACK LAND LIMITED PARTNERS | WHITTECAR, G. | 3,587 | 460 | - | - | 4,047 | 1,052 | - | 5,099 | | TRAD |
| 100181-010 | | NATIONAL SCIENCE FOUNDATION | ZIMMERMAN, R. | 8,438 | 7,347 | - | - | 15,785 | 7,893 | - | 23,678 | | TRAD |
| 100493-010 | * | U.S. ENVIRONMENTAL PROTECTION AGENCY | ZIMMERMAN, R. | 4,143 | 87 | - | - | 4,231 | 423 | - | 4,654 | | TRAD |
| 200160-010 | | MARYLAND DEPARTMENT OF NATURAL RESOURCES | ZIMMERMAN, R. | 968 | 474 | - | - | 1,441 | - | - | 1,441 | | TRAD |
| 300282-010 | * | NATIONAL SCIENCE FOUNDATION | ZIMMERMAN, R. | - | - | (8) | - | (8) | - | - | (8) | | TRAD |
| | | | | 1,246,934 | 464,145 | 540,822 | 256,069 | 2,507,974 | 721,937 | - | 3,229,908 | 28.79% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Ocean, Earth and Atmospheric Sciences - SSRP | | | | | | | | | | | | | |
| 200166-010 | | HAMPTON ROADS SANITATION DISTRICT COMMISSION | FILIPPINO, K. | 36,020 | 522 | - | - | 36,542 | 9,136 | - | 45,678 | | SSRP |
| 100023-010 | * | NATIONAL SCIENCE FOUNDATION | FILIPPINO, K. | 4,015 | (145) | - | 50,085 | 53,955 | 6 | - | 53,961 | | SSRP |
| 100215-010 | | NATIONAL SCIENCE FOUNDATION | HILL, V. | 134,035 | 15,336 | - | - | 149,370 | 79,166 | - | 228,537 | | SSRP |
| 100493-010 | * | U.S. ENVIRONMENTAL PROTECTION AGENCY | HILL, V. | 4,143 | 87 | - | - | 4,231 | 423 | - | 4,654 | | SSRP |
| 100575-010 | | NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | HILL, V. | 4,070 | - | - | - | 4,070 | 2,238 | - | 6,308 | | SSRP |
| 300265-010 | | UNIVERSITY OF WASHINGTON | HILL, V. | 775 | - | - | - | 775 | 388 | - | 1,163 | | SSRP |
| 400285-010 | | CONSORTIUM FOR OCEAN LEADERSHIP, INC. | HILL, V. | - | 8,994 | - | - | 8,994 | - | - | 8,994 | | SSRP |
| | | | | 183,058 | 24,795 | - | 50,085 | 257,937 | 91,357 | - | 349,294 | 35.42% | |
| Physics | | | | | | | | | | | | | |
| 100388-140 | * | U.S. DEPARTMENT OF ENERGY | AMARIAN, M. | 78,335 | 10,947 | 1,085 | 334 | 90,701 | 44,641 | - | 135,342 | | TRAD |
| 100472-010 | * | NATIONAL SCIENCE FOUNDATION | ARETI, H. | - | (46) | - | 43,836 | 43,790 | - | - | 43,790 | | TRAD |
| 100392-030 | * | U.S. DEPARTMENT OF ENERGY | BALITSKY, I. | 12,885 | 1,430 | - | 1,401 | 15,716 | 7,587 | - | 23,303 | | TRAD |
| 100388-140 | * | U.S. DEPARTMENT OF ENERGY | BUELTMANN, S. | 78,335 | 10,947 | 1,085 | 334 | 90,701 | 44,641 | - | 135,342 | | TRAD |
| 100472-010 | * | NATIONAL SCIENCE FOUNDATION | BUELTMANN, S. | - | (15) | - | 14,612 | 14,597 | - | - | 14,597 | | TRAD |
| 100252-010 | * | NATIONAL SCIENCE FOUNDATION | DE PAOR, D. | 33,770 | 46,140 | - | 6,265 | 86,174 | 42,352 | - | 128,526 | | TRAD |
| 300340-010 | | JAMES MADISON UNIVERSITY | DE PAOR, D. | - | 645 | - | - | 645 | 168 | - | 812 | | TRAD |
| 100387-010 | * | U.S. DEPARTMENT OF ENERGY | DELAYEN, J. | 28,622 | 11,910 | 7,641 | 161,604 | 209,777 | 21,482 | - | 231,259 | | TRAD |
| 100394-010 | | U.S. DEPARTMENT OF ENERGY | DELAYEN, J. | (3,615) | - | - | - | (3,615) | (1,808) | - | (5,423) | | TRAD |
| 100443-030 | | FERMI NATIONAL ACCELERATOR LABORATORY | DELAYEN, J. | 88,955 | 24,682 | - | 17,754 | 131,391 | 56,818 | - | 188,209 | | TRAD |
| 100443-040 | | FERMI NATIONAL ACCELERATOR LABORATORY | DELAYEN, J. | 29,864 | 17,020 | - | 3,925 | 50,808 | 12,190 | - | 62,998 | | TRAD |
| 100492-010 | * | NATIONAL SCIENCE FOUNDATION | DELAYEN, J. | 37,188 | 6,620 | - | 10,111 | 53,919 | 23,218 | - | 77,138 | | TRAD |
| 400275-010 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | DELAYEN, J. | 29,548 | 4,455 | - | - | 34,003 | 8,841 | - | 42,843 | | TRAD |
| 500279-010 | | NIOWAVE, INC. | DELAYEN, J. | 7,579 | 10,241 | - | - | 17,819 | 9,801 | - | 27,620 | | TRAD |
| 100388-140 | * | U.S. DEPARTMENT OF ENERGY | DODGE, G. | 77,397 | 10,816 | 1,072 | 330 | 89,615 | 44,106 | - | 133,721 | | TRAD |
| 100381-010 | | U.S. DEPARTMENT OF ENERGY | DUDEK, J. | - | 6,279 | - | - | 6,279 | 1,633 | - | 7,912 | | TRAD |
| 100392-030 | * | U.S. DEPARTMENT OF ENERGY | DUDEK, J. | 12,885 | 1,430 | - | 1,401 | 15,716 | 7,587 | - | 23,303 | | TRAD |
| 300068-010 | | OLD DOMINION UNIVERSITY | DUDEK, J. | 71,905 | 10,137 | - | - | 82,041 | 41,021 | - | 123,062 | | TRAD |
| 100554-010 | * | NATIONAL SCIENCE FOUNDATION | GODUNOV, A. | 25 | - | - | - | 25 | 13 | - | 38 | | TRAD |
| 100554-010 | * | NATIONAL SCIENCE FOUNDATION | GODUNOV, A. | 5,476 | 15 | - | - | 5,491 | 2,910 | - | 8,401 | | TRAD |
| 300326-010 | * | OLD DOMINION UNIVERSITY | GODUNOV, A. | 7,104 | - | - | - | 7,104 | - | - | 7,104 | | TRAD |
| 100387-010 | * | U.S. DEPARTMENT OF ENERGY | GUREVICH, A. | 28,622 | 11,910 | 7,641 | 161,604 | 209,777 | 21,482 | - | 231,259 | | TRAD |
| 100387-020 | | U.S. DEPARTMENT OF ENERGY | GUREVICH, A. | 3,010 | 7,356 | - | - | 10,367 | 2,695 | - | 13,062 | | TRAD |
| 100492-010 | * | NATIONAL SCIENCE FOUNDATION | GUREVICH, A. | 37,188 | 6,620 | - | 10,111 | 53,919 | 23,218 | - | 77,138 | | TRAD |
| 100195-010 | | NATIONAL SCIENCE FOUNDATION | HAVEY, M. | - | 56 | 500 | - | 556 | 28 | - | 584 | | TRAD |
| 100388-140 | * | U.S. DEPARTMENT OF ENERGY | HYDE, C. | 78,335 | 10,947 | 1,085 | 334 | 90,701 | 44,641 | - | 135,342 | | TRAD |
| 100429-010 | | BROOKHAVEN NATIONAL LABORATORY | HYDE, C. | 36,570 | - | - | - | 36,570 | 19,382 | - | 55,951 | | TRAD |
| 100587-010 | | NATIONAL SCIENCE FOUNDATION | KRAFFT, G. | - | - | - | 19,902 | 19,902 | - | - | 19,902 | | TRAD |
| 100384-010 | * | U.S. DEPARTMENT OF ENERGY | KUHN, S. | 2,463 | 1,651 | - | (1) | 4,113 | 2,057 | - | 6,169 | | TRAD |
| 100388-140 | * | U.S. DEPARTMENT OF ENERGY | KUHN, S. | 78,335 | 10,947 | 1,085 | 334 | 90,701 | 44,641 | - | 135,342 | | TRAD |
| 100392-030 | * | U.S. DEPARTMENT OF ENERGY | RADYUSHKIN, A. | 12,885 | 1,430 | - | 1,401 | 15,716 | 7,587 | - | 23,303 | | TRAD |
| 400110-019 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | RANJAN, D. | 13,547 | - | - | - | 13,547 | - | - | 13,547 | | TRAD |
| 100392-030 | * | U.S. DEPARTMENT OF ENERGY | SCHIAVILLA, R. | 12,885 | 1,430 | - | 1,401 | 15,716 | 7,587 | - | 23,303 | | TRAD |
| 400110-016 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 21,103 | - | - | - | 21,103 | - | - | 21,103 | | TRAD |
| 400110-018 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 143,685 | 15,293 | - | - | 158,978 | - | - | 158,978 | | TRAD |
| 400124-030 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 186,957 | 6,592 | - | - | 193,549 | - | - | 193,549 | | TRAD |
| 400124-031 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 41,281 | - | - | - | 41,281 | - | - | 41,281 | | TRAD |
| 400124-032 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 35,082 | - | - | - | 35,082 | - | - | 35,082 | | TRAD |
| 400124-040 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 508,833 | - | - | - | 508,833 | - | - | 508,833 | | TRAD |
| 400223-010 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 64,139 | - | - | - | 64,139 | - | - | 64,139 | | TRAD |
| 400124-041 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | SUKENIK, C. | 40,037 | - | - | - | 40,037 | - | - | 40,037 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100554-010 | * | NATIONAL SCIENCE FOUNDATION | TERZIC, B. | 5,500 | 15 | - | - | 5,515 | 2,923 | - | 8,438 | | TRAD |
| 300326-010 | * | OLD DOMINION UNIVERSITY | TERZIC, B. | 7,104 | - | - | - | 7,104 | - | - | 7,104 | | TRAD |
| 100392-030 | * | U.S. DEPARTMENT OF ENERGY | VAN ORDEN, J. | 12,885 | 1,430 | - | 1,401 | 15,716 | 7,587 | - | 23,303 | | TRAD |
| 100386-010 | | U.S. DEPARTMENT OF ENERGY | VUSKOVIC, L. | 1,793 | 719 | 3,743 | - | 6,254 | 1,331 | - | 7,585 | | TRAD |
| 100535-010 | | U.S. DEPARTMENT OF ENERGY | VUSKOVIC, L. | 98,598 | 16,983 | - | - | 115,581 | 51,507 | - | 167,088 | | TRAD |
| 100384-010 | * | U.S. DEPARTMENT OF ENERGY | WEINSTEIN, L. | 2,463 | 1,651 | - | (1) | 4,113 | 2,057 | - | 6,169 | | TRAD |
| 100388-140 | * | U.S. DEPARTMENT OF ENERGY | WEINSTEIN, L. | 78,335 | 10,947 | 1,085 | 334 | 90,701 | 44,641 | - | 135,342 | | TRAD |
| | | | | 2,147,889 | 279,076 | 26,022 | 459,283 | 2,912,264 | 650,565 | - | 3,562,835 | 22.34% | |
| Psychology | | | | | | | | | | | | | |
| 100242-010 | * | NATIONAL SCIENCE FOUNDATION | ASH, I. | (246) | 1,108 | - | - | 862 | 457 | - | 1,318 | | TRAD |
| 100329-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | BARRACO, C. | 71,077 | 23,813 | - | - | 94,890 | 7,591 | - | 102,481 | | TRAD |
| 100335-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | BARRACO, C. | 4,487 | 859 | - | 194 | 5,540 | 2,833 | - | 8,373 | | TRAD |
| 100521-010 | * | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | BLISS, J. | 48,419 | 2,271 | - | - | 50,689 | 17,741 | - | 68,431 | | TRAD |
| 500072-010 | | ADVANCED ANTI-TERROR TECHNOLOGIES CORPORATION (A2 | BLISS, J. | (2,544) | (5,000) | - | - | (7,544) | (3,998) | - | (11,542) | | TRAD |
| 500073-010 | | ADVANCED ANTI-TERROR TECHNOLOGIES CORPORATION (A2 | BLISS, J. | - | - | - | 1,035 | 1,035 | 151 | - | 1,186 | | TRAD |
| 500031-010 | | BATTELLE CORPORATION | BRILL, C. | - | (2,214) | - | - | (2,214) | (576) | - | (2,789) | | TRAD |
| 500267-010 | | BATTELLE NATIONAL BIODEFENSE INSITITUTE | BRILL, C. | 10,000 | 22,655 | - | - | 32,655 | 8,490 | - | 41,146 | | TRAD |
| 300377-010 | * | EASTERN VIRGINIA MEDICAL SCHOOL | CIGULAROV, K. | 6,123 | - | - | - | 6,123 | 1,592 | - | 7,715 | | TRAD |
| 100349-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HENSON, M. | 13,266 | 3,452 | - | (1,683) | 15,035 | 8,359 | - | 23,393 | | TRAD |
| 100551-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HENSON, M. | 60,729 | 39,676 | - | 11,333 | 111,738 | 53,215 | - | 164,952 | | TRAD |
| 100551-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HERON, K . | 3,374 | 2,204 | - | 630 | 6,208 | 2,956 | - | 9,164 | | TRAD |
| 100521-010 | * | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | HU, X. | 48,419 | 2,271 | - | - | 50,689 | 17,741 | - | 68,431 | | TRAD |
| 100335-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | KELLEY, M. | 4,487 | 859 | - | 194 | 5,540 | 2,833 | - | 8,373 | | TRAD |
| 100349-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | KELLEY, M. | 119,391 | 31,070 | - | (15,150) | 135,311 | 75,230 | - | 210,541 | | TRAD |
| 100479-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | KELLEY, M. | - | 473 | - | 30,040 | 30,513 | - | - | 30,513 | | TRAD |
| 100551-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | KELLEY, M. | 3,374 | 2,204 | - | 630 | 6,208 | 2,956 | - | 9,164 | | TRAD |
| 400293-010 | | HUMAN RESOURCES RESEARCH ORGANIZATION (HUMRRO) | LANDERS, R. | 4,457 | - | - | - | 4,457 | 2,362 | - | 6,819 | | TRAD |
| 100335-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | LEWIS, R. | 9,872 | 1,889 | - | 427 | 12,188 | 6,233 | - | 18,422 | | TRAD |
| 100521-010 | * | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | MADHAVAN, P. | 30,877 | 1,777 | - | - | 32,655 | 11,429 | - | 44,084 | | TRAD |
| 100240-010 | | NATIONAL SCIENCE FOUNDATION | MAJOR, D. | 77,931 | 14,777 | - | (850) | 91,858 | 49,135 | - | 140,993 | | TRAD |
| 100240-020 | | NATIONAL SCIENCE FOUNDATION | MAJOR, D. | 6,323 | (19,794) | - | 23,663 | 10,193 | - | - | 10,193 | | TRAD |
| 100570-010 | | NATIONAL SCIENCE FOUNDATION | MAJOR, D. | 7,533 | - | - | - | 7,533 | 3,992 | - | 11,525 | | TRAD |
| 400141-010 | | CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS | PAULSON, J. | 12,878 | - | - | - | 12,878 | - | - | 12,878 | | TRAD |
| 400205-010 | | CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS | PAULSON, J. | 7,933 | - | - | - | 7,933 | - | - | 7,933 | | TRAD |
| 200171-010 | | VA DEPARTMENT OF MOTOR VEHICLES | PORTER, B. | 25,669 | 9,301 | - | - | 34,969 | 3,497 | - | 38,466 | | TRAD |
| 200172-010 | | VA DEPARTMENT OF MOTOR VEHICLES | PORTER, B. | 32,391 | 25,000 | - | 5,445 | 62,836 | 5,739 | - | 68,575 | | TRAD |
| 200205-010 | | VA DEPARTMENT OF MOTOR VEHICLES | PORTER, B. | 49,439 | 24,459 | - | - | 73,898 | 7,390 | - | 81,288 | | TRAD |
| 200206-010 | | VA DEPARTMENT OF MOTOR VEHICLES | PORTER, B. | 40,857 | 12,403 | - | - | 53,261 | 5,326 | - | 58,587 | | TRAD |
| 300324-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | SCERBO, M. | 2,461 | - | - | (1) | 2,461 | 640 | - | 3,101 | | TRAD |
| 300337-010 | * | OLD DOMINION UNIVERSITY | SCERBO, M. | 17,571 | 2,122 | - | - | 19,693 | - | - | 19,693 | | TRAD |
| 300377-010 | * | EASTERN VIRGINIA MEDICAL SCHOOL | SCERBO, M. | 6,123 | - | - | - | 6,123 | 1,592 | - | 7,715 | | TRAD |
| 100527-011 | | NASA GODDARD SPACEFLIGHT CENTER | STILL, J. | 2,314 | - | - | - | 2,314 | - | - | 2,314 | | TRAD |
| 100335-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | WINSTEAD, B. | 4,487 | 859 | - | 194 | 5,540 | 2,833 | - | 8,373 | | TRAD |
| 100521-010 | * | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | YAMANI, Y. | 17,541 | 494 | - | - | 18,035 | 6,312 | - | 24,347 | | TRAD |
| | | | | 747,013 | 198,987 | - | 56,100 | 1,002,102 | 304,055 | - | 1,306,156 | 30.34% | |
| **TOTAL SCIENCES** | | | | **$ 8,109,603** | **$ 1,804,257** | **$ 666,888** | **$ 1,554,878** | **$ 12,135,621** | **$ 3,338,771** | **$ -** | **$ 15,474,395** | **27.51%** | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **OFFICE OF RESEARCH AND OTHER ACTIVITY** | | | | | | | | | | | | |
| Frank Reidy Research Center for Bioelectrics | | | | | | | | | | | | |
| 500226-003 | * PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 48,892 | 26,731 | - | - | 75,623 | 40,080 | - | 115,704 | | CBE |
| 500226-005 | * PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 3,842 | 2,439 | - | - | 6,282 | 3,455 | - | 9,737 | | CBE |
| 500226-006 | * PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 6,460 | 12,368 | - | - | 18,828 | 10,355 | - | 29,183 | | CBE |
| 500226-008 | * PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 7,180 | 3,849 | - | - | 11,029 | 6,066 | - | 17,095 | | CBE |
| 100475-010 | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | CATRAVAS, J. | 103,295 | 9,950 | - | - | 113,245 | 60,020 | - | 173,265 | | CBE |
| 300010-010 | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 92,710 | 36,641 | - | - | 129,351 | 68,556 | - | 197,907 | | CBE |
| 300010-020 | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 65,152 | 24,916 | - | - | 90,068 | 47,736 | - | 137,804 | | CBE |
| 300327-010 | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 44,683 | 38,727 | - | - | 83,410 | 44,207 | - | 127,617 | | CBE |
| 300327-020 | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 40,927 | 6,230 | - | - | 47,157 | 24,993 | - | 72,151 | | CBE |
| 500226-008 | * PULSE BIOSCIENCES (ELECTROBLATE) | CATRAVAS, J. | 7,180 | 3,849 | - | - | 11,029 | 6,066 | - | 17,095 | | CBE |
| 600186-010 | * SOUTHAMPTON UNIVERSITY | CHEN, H. | 89,093 | 29,703 | 286 | 16 | 119,099 | 62,962 | - | 182,061 | | CBE |
| 100517-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | GUO, S. | 20,364 | 3,468 | - | - | 23,832 | 12,631 | - | 36,463 | | CBE |
| 500226-001 | * PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 500226-003 | * PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 24,446 | 13,366 | - | - | 37,812 | 20,040 | - | 57,852 | | CBE |
| 500226-005 | * PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 7,685 | 4,879 | - | - | 12,564 | 6,910 | - | 19,474 | | CBE |
| 500226-006 | * PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 2,768 | 5,300 | - | - | 8,069 | 4,438 | - | 12,507 | | CBE |
| 100330-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 10,943 | 4,265 | - | - | 15,208 | 7,675 | - | 22,883 | | CBE |
| 100461-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 11,570 | 5,165 | 9,347 | - | 26,081 | 8,869 | - | 34,950 | | CBE |
| 100461-011 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 16,486 | 2,441 | - | - | 18,926 | 10,031 | - | 28,958 | | CBE |
| 100548-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 75,964 | 11,294 | 4,175 | - | 91,433 | 47,992 | - | 139,425 | | CBE |
| 300345-010 | OLD DOMINION UNIVERSITY | PAKHOMOV, A. | 36,719 | 60,378 | - | 76,865 | 173,963 | 58,259 | - | 232,221 | | CBE |
| 500212-000 | GENERAL DYNAMICS | PAKHOMOV, A. | 54,773 | 8,264 | - | - | 63,038 | 34,917 | - | 97,954 | | CBE |
| 500212-010 | * NON-DISCLOSED SPONSORS | PAKHOMOV, A. | 824 | - | - | 14,283 | 15,107 | 8,007 | - | 23,114 | | CBE |
| 500226-002 | * PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOV, A. | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 500226-004 | * PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOV, A. | 55,184 | 21,065 | 8,369 | - | 84,617 | 40,412 | - | 125,029 | | CBE |
| 100330-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOVA, O. | 2,345 | 914 | - | - | 3,259 | 1,645 | - | 4,903 | | CBE |
| 100548-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOVA, O. | 9,495 | 1,412 | 522 | - | 11,429 | 5,999 | - | 17,428 | | CBE |
| 300345-012 | OLD DOMINION UNIVERSITY | PAKHOMOVA, O. | 40,475 | 7,311 | - | - | 47,786 | 28,672 | - | 76,458 | | CBE |
| 500212-010 | * NON-DISCLOSED SPONSORS | PAKHOMOVA, O. | 3,438 | 486 | - | 840 | 4,764 | 2,525 | - | 7,289 | | CBE |
| 500226-002 | * PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOVA, O. | 64,873 | 30,495 | 32,851 | - | 128,219 | 50,545 | - | 178,764 | | CBE |
| 500226-004 | * PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOVA, O. | 6,417 | 2,449 | 973 | - | 9,839 | 4,699 | - | 14,538 | | CBE |
| 100517-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | SCHOENBACH, K. | 20,364 | 3,468 | - | - | 23,832 | 12,631 | - | 36,463 | | CBE |
| 100548-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | SEMENOV, I. | 18,991 | 2,824 | 1,044 | - | 22,858 | 11,998 | - | 34,856 | | CBE |
| 500212-010 | * NON-DISCLOSED SPONSORS | SEMENOV, I. | 3,438 | 486 | - | 840 | 4,764 | 2,525 | - | 7,289 | | CBE |
| 500226-002 | * PULSE BIOSCIENCES (ELECTROBLATE) | SEMENOV, I. | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 500226-004 | * PULSE BIOSCIENCES (ELECTROBLATE) | SEMENOV, I. | 2,567 | 980 | 389 | - | 3,936 | 1,880 | - | 5,815 | | CBE |
| 100341-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | STACEY, M. | 7,788 | 4,045 | - | 20,428 | 32,261 | 6,269 | - | 38,531 | | CBE |
| 400140-010 | BREEDEN-ADAMS FOUNDATION | STACEY, M. | 7,507 | 5,582 | - | 5 | 13,094 | - | - | 13,094 | | CBE |
| 100474-010 | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | VERNIER, T. | 9,741 | - | - | 182 | 9,922 | 5,844 | - | 15,767 | | CBE |
| 300345-013 | OLD DOMINION UNIVERSITY | VERNIER, T. | 40,162 | 3,685 | - | - | 43,847 | 26,308 | - | 70,154 | | CBE |
| 300345-011 | OLD DOMINION UNIVERSITY | XIAO, S. | 44,925 | 7,662 | 3,189 | - | 55,777 | 31,553 | - | 87,329 | | CBE |
| 300369-010 | UNIVERSITY OF TEXAS AT ARLINGTON | XIAO, S. | 2,411 | 781 | - | - | 3,191 | 1,755 | - | 4,946 | | CBE |
| 500212-010 | * NON-DISCLOSED SPONSORS | XIAO, S. | 3,389 | 486 | - | - | 3,875 | 2,054 | - | 5,929 | | CBE |
| 500226-002 | * PULSE BIOSCIENCES (ELECTROBLATE) | XIAO, S. | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 100548-010 | * U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | ZEMLIN, C. | 75,964 | 11,294 | 4,175 | - | 91,433 | 47,992 | - | 139,425 | | CBE |
| 500226-007 | * PULSE BIOSCIENCES (ELECTROBLATE) | ZEMLIN, C. | 9,102 | 4,839 | - | - | 13,941 | 7,667 | - | 21,608 | | CBE |
| | | | 1,249,337 | 436,097 | 73,978 | 113,460 | 1,872,875 | 919,257 | - | 2,792,129 | 49.08% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| Virginia Modeling, Analysis and Simulation Center - VMASC | | | | | | | | | | | | | |
| 100334-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | BEHR, J. | 6,018 | (214) | - | - | 5,804 | 3,076 | - | 8,881 | | VMASC |
| 100515-010 | * | U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT | BEHR, J. | 19,027 | 7,182 | - | - | 26,209 | 13,891 | - | 40,099 | | VMASC |
| 200158-010 | * | CITY OF PORTSMOUTH | BEHR, J. | 6,086 | 19 | - | 3,364 | 9,469 | 5,019 | - | 14,488 | | VMASC |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | BEHR, J. | 2,246 | 173 | - | - | 2,419 | 1,330 | - | 3,749 | | VMASC |
| 100488-010 | * | NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | COLLINS, A. | 39,666 | 1,541 | - | - | 41,207 | 21,840 | - | 63,047 | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | COLLINS, A. | 14,756 | 680 | - | 120 | 15,556 | 8,181 | - | 23,737 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | COLLINS, A. | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 300258-010 | * | UNIVERSITY OF MARYLAND | COLLINS, A. | 7,029 | 437 | - | - | 7,466 | 3,957 | - | 11,422 | | VMASC |
| 300367-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | COLLINS, A. | 33,850 | - | - | - | 33,850 | 18,617 | - | 52,467 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | COLLINS, A. | 8,399 | 3,920 | - | - | 12,318 | 6,529 | - | 18,847 | | VMASC |
| 100072-010 | * | ARMY MEDICAL RESEARCH AND MATERIALS COMMAND | CROLL, M. | - | 318 | - | - | 318 | 191 | - | 509 | | VMASC |
| 100143-004 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | CROLL, M. | 8,614 | - | - | - | 8,614 | 5,599 | - | 14,212 | | VMASC |
| 100105-059 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | DIALLO, S. | 7,820 | - | - | (1) | 7,819 | 2,737 | - | 10,556 | | VMASC |
| 100482-010 | * | NAVAL AIR WARFARE CENTER TSD | DIALLO, S. | 4,327 | 867 | - | - | 5,194 | 3,116 | - | 8,310 | | VMASC |
| 400253-010 | * | BOSTON VA RESEARCH INSTITUTE, INC | DIALLO, S. | 13,201 | 3,080 | - | - | 16,281 | 2,442 | - | 18,723 | | VMASC |
| 400253-010 | * | BOSTON VA RESEARCH INSTITUTE, INC | DIALLO, S. | 13,201 | - | - | - | 13,201 | 1,980 | - | 15,181 | | VMASC |
| 100334-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | DIAZ, R. | 6,018 | (209) | - | - | 5,809 | 3,079 | - | 8,888 | | VMASC |
| 100515-010 | * | U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT | DIAZ, R. | 19,027 | 7,182 | - | - | 26,209 | 13,891 | - | 40,099 | | VMASC |
| 200158-010 | * | CITY OF PORTSMOUTH | DIAZ, R. | 5,907 | 19 | - | 3,265 | 9,191 | 4,871 | - | 14,062 | | VMASC |
| 100488-010 | * | NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | EZELL, B. | 52,888 | 2,055 | - | - | 54,943 | 29,120 | - | 84,062 | | VMASC |
| 200190-010 | | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | EZELL, B. | 30,884 | 1,594 | - | - | 32,478 | 17,213 | - | 49,692 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | EZELL, B. | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 400289-010 | * | BATTELLE CORPORATION | EZELL, B. | 33,023 | 396 | - | - | 33,419 | 18,381 | - | 51,800 | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | FOYTIK, P. | 14,756 | 680 | - | 120 | 15,556 | 8,181 | - | 23,737 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | FOYTIK, P. | 8,399 | 3,920 | - | - | 12,318 | 6,529 | - | 18,847 | | VMASC |
| 200189-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | FOYTIK, P. | 2,738 | - | - | - | 2,738 | 1,451 | - | 4,190 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | FRYDENLUND, E. | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 400284-010 | * | THE GENEVA FOUNDATION | GORE, R. | 17,427 | 343 | - | - | 17,770 | 9,773 | - | 27,543 | | VMASC |
| 400289-010 | * | BATTELLE CORPORATION | GORE, R. | 33,023 | 396 | - | - | 33,419 | 18,381 | - | 51,800 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | GARCIA, H. | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 300319-010 | * | OLD DOMINION UNIVERSITY | GARCIA, H. | 3,749 | - | - | 680 | 4,429 | - | - | 4,429 | | VMASC |
| 400244-010 | * | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | GARCIA, H. | 13,617 | 906 | - | - | 14,523 | 3,776 | - | 18,299 | | VMASC |
| 100515-010 | * | U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT | GILES, B. | 9,513 | 3,591 | - | - | 13,104 | 6,945 | - | 20,050 | | VMASC |
| 200158-010 | * | CITY OF PORTSMOUTH | GILES, B. | 5,907 | 19 | - | 3,265 | 9,191 | 4,871 | - | 14,062 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | GILES, B. | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 300319-010 | * | OLD DOMINION UNIVERSITY | GILES, B. | 1,499 | - | - | 272 | 1,771 | - | - | 1,771 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | GORE, R. | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 100576-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | GORE, R. | 5,906 | - | - | (0) | 5,905 | 3,839 | - | 9,744 | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | JORDAN, C. | 14,756 | 680 | - | 120 | 15,556 | 8,181 | - | 23,737 | | VMASC |
| 200184-010 | * | CITY OF PORTSMOUTH | JORDAN, C. | 2,413 | - | - | 0 | 2,413 | 1,279 | - | 3,692 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | JORDAN, C. | 4,199 | 1,960 | - | - | 6,159 | 3,264 | - | 9,423 | | VMASC |
| 400253-010 | * | BOSTON VA RESEARCH INSTITUTE, INC | LYNCH, C. | 13,201 | 3,080 | - | - | 16,281 | 2,442 | - | 18,723 | | VMASC |
| 300328-010 | | NORFOLK STATE UNIVERSITY | PADILLA, J. | 95,866 | 6,438 | - | - | 102,304 | 54,221 | - | 156,524 | | VMASC |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | PADILLA, J. | 749 | 58 | - | - | 806 | 443 | - | 1,250 | | VMASC |
| 100335-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PADILLA, J. | 6,581 | 1,259 | - | 285 | 8,126 | 4,156 | - | 12,281 | | VMASC |
| 100482-010 | * | NAVAL AIR WARFARE CENTER TSD | PADILLA, J. | 4,327 | 867 | - | - | 5,194 | 3,116 | - | 8,310 | | VMASC |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100072-010 | * | ARMY MEDICAL RESEARCH AND MATERIALS COMMAND | PAPELIS, Y. | - | 1,272 | - | - | 1,272 | 763 | - | 2,036 | | VMASC |
| 100143-002 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | PAPELIS, Y. | 5,268 | - | - | - | 5,268 | 3,161 | - | 8,430 | | VMASC |
| 100143-004 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | PAPELIS, Y. | 17,227 | - | - | - | 17,227 | 11,198 | - | 28,425 | | VMASC |
| 100499-010 | * | LANGLEY RESEARCH CENTER | PAPELIS, Y. | 32,038 | 673 | - | - | 32,711 | 17,337 | - | 50,048 | | VMASC |
| 100521-010 | * | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | PAPELIS, Y. | 16,140 | 757 | - | - | 16,896 | 5,914 | - | 22,810 | | VMASC |
| 300337-010 | * | OLD DOMINION UNIVERSITY | PAPELIS, Y. | 17,571 | 2,122 | - | - | 19,693 | - | - | 19,693 | | VMASC |
| 400149-020 | * | OPPORTUNITY, INC. | PAPELIS, Y. | - | (105) | - | - | (105) | (11) | - | (116) | | VMASC |
| 400149-030 | * | OPPORTUNITY, INC. | PAPELIS, Y. | 6,368 | 169 | - | 112 | 6,650 | 654 | - | 7,304 | | VMASC |
| 100072-010 | * | ARMY MEDICAL RESEARCH AND MATERIALS COMMAND | PARODI, A. | - | 3,817 | - | - | 3,817 | 2,290 | - | 6,108 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | PARODI, A. | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 400284-010 | * | THE GENEVA FOUNDATION | PARODI, A. | 52,280 | 1,030 | - | - | 53,310 | 29,320 | - | 82,630 | | VMASC |
| 400240-003 | | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | RECHOWICZ, K | 5,754 | - | - | (0) | 5,754 | 1,496 | - | 7,250 | | VMASC |
| 400244-010 | * | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | RECHOWICZ, K | 20,426 | 1,358 | - | - | 21,784 | 5,664 | - | 27,448 | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | ROBINSON, M. | 73,779 | 3,400 | - | 600 | 77,779 | 40,905 | - | 118,685 | | VMASC |
| 200184-010 | * | CITY OF PORTSMOUTH | ROBINSON, M. | 7,239 | - | - | 1 | 7,239 | 3,837 | - | 11,077 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | ROBINSON, M. | 20,997 | 9,799 | - | - | 30,796 | 16,322 | - | 47,117 | | VMASC |
| 200189-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | ROBINSON, M. | 8,215 | - | - | - | 8,215 | 4,354 | - | 12,569 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | ROBINSON, M. | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 300234-010 | * | UNIVERSITY OF IDAHO | ROBINSON, M. | 51 | 179 | - | - | 229 | 122 | - | 351 | | VMASC |
| 300234-017 | * | UNIVERSITY OF IDAHO | ROBINSON, M. | 1,551 | (0) | - | - | 1,551 | 822 | - | 2,372 | | VMASC |
| 300234-070 | * | UNIVERSITY OF IDAHO | ROBINSON, M. | 7,541 | 439 | - | 7,258 | 15,237 | 4,229 | - | 19,466 | | VMASC |
| 300258-010 | * | UNIVERSITY OF MARYLAND | ROBINSON, M. | 28,114 | 1,749 | - | - | 29,863 | 15,827 | - | 45,690 | | VMASC |
| 100105-064 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 2,162 | - | - | 190,658 | 192,820 | 757 | - | 193,576 | | VMASC |
| 100105-066 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 45,203 | 3,225 | - | - | 48,428 | 16,950 | - | 65,378 | | VMASC |
| 300337-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 1,727 | 472 | - | - | 2,198 | - | - | 2,198 | | VMASC |
| 300341-010 | | VIRGINIA COMMONWEALTH UNIVERSITY | WEINBERG, S. | 35,475 | 5,315 | - | - | 40,790 | 21,618 | - | 62,408 | | VMASC |
| | | | | 1,006,809 | 89,702 | - | 210,117 | 1,306,629 | 536,129 | - | 1,842,757 | 41.03% | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| ODU Business Gateway | | | | | | | | | | | | |
| 200224-010 | VIRGINIA ECONOMIC DEVELOPMENT PARTNERSHIP INTERNAT | BRINKER, J. | 1,744 | - | - | - | 1,744 | - | - | 1,744 | | TRAD |
| 400273-010 | SENTARA HOSPITALS | BRINKER, J. | 12,734 | 952 | - | - | 13,686 | 3,558 | - | 17,245 | | TRAD |
| 400281-010 | SENTARA HOSPITALS | BRINKER, J. | 16,883 | 934 | - | 5,596 | 23,413 | 6,087 | - | 29,500 | | TRAD |
| 400290-010 | SENTARA HOSPITALS | BRINKER, J. | 5,719 | 326 | - | 1,892 | 7,937 | 2,063 | - | 10,000 | | TRAD |
| 500018-010 | AETNA INSULATED WIRE, LLC | BRINKER, J. | - | - | - | - | - | (559) | - | (559) | | TRAD |
| 500192-010 | EOS SURFACES | BRINKER, J. | 1,804 | 4,945 | - | - | 6,749 | 1,755 | - | 8,504 | | TRAD |
| 500216-010 | FOX-3 PARTNERS LLC | BRINKER, J. | (550) | (43) | - | - | (592) | (154) | - | (746) | | TRAD |
| 500220-010 | ESKA GRAPHIC BOARD | BRINKER, J. | 84 | - | - | 6 | 90 | 23 | - | 114 | | TRAD |
| 500223-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | (464) | - | - | - | (464) | - | - | (464) | | TRAD |
| 500224-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | - | - | - | 419 | 419 | - | - | 419 | | TRAD |
| 500230-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | - | - | - | 3,673 | 3,673 | - | - | 3,673 | | TRAD |
| 500233-010 | SEACOAST ELECTRIC COMPANY, INC. | BRINKER, J. | - | - | - | 262 | 262 | 68 | - | 330 | | TRAD |
| 500234-010 | BAUER COMPRESSORS, INC. | BRINKER, J. | - | - | - | 793 | 793 | 207 | - | 999 | | TRAD |
| 500236-010 | TABET MANUFACTURING CO. | BRINKER, J. | 696 | 1,800 | - | (0) | 2,496 | 649 | - | 3,145 | | TRAD |
| 500237-010 | STEEL AMERICA | BRINKER, J. | 5,422 | (189) | - | - | 5,233 | 1,361 | - | 6,593 | | TRAD |
| 500239-010 | BAUER COMPRESSORS, INC. | BRINKER, J. | 15,042 | 216 | - | - | 15,258 | 3,967 | - | 19,226 | | TRAD |
| 500240-010 | STIHL INC. | BRINKER, J. | 8,984 | (336) | - | - | 8,649 | 2,249 | - | 10,897 | | TRAD |
| 500242-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | 13,088 | - | - | 3 | 13,091 | - | - | 13,091 | | TRAD |
| 500243-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | 11,188 | 29,570 | - | 1,760 | 42,518 | - | - | 42,518 | | TRAD |
| 500244-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | - | (470) | - | - | (470) | - | - | (470) | | TRAD |
| 500246-010 | BAUER COMPRESSORS, INC. | BRINKER, J. | 629 | 3,200 | - | 616 | 4,445 | 1,155 | - | 5,600 | | TRAD |
| 500249-010 | DAVIS INTERIORS | BRINKER, J. | 1,095 | 3 | - | - | 1,098 | 286 | - | 1,384 | | TRAD |
| 500255-010 | STIHL INC. | BRINKER, J. | 19,322 | 1,313 | - | - | 20,635 | 5,365 | - | 26,000 | | TRAD |
| 500257-010 | SEACOAST ELECTRIC COMPANY, INC. | BRINKER, J. | 1,431 | 553 | - | - | 1,984 | 516 | - | 2,500 | | TRAD |
| 500261-010 | TRUSOLUTIONS, LLC | BRINKER, J. | 502 | 2,671 | - | 1,390 | 4,563 | 1,187 | - | 5,750 | | TRAD |
| 500264-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | 194,201 | 5,799 | - | - | 200,000 | - | - | 200,000 | | TRAD |
| 500265-010 | ESKA GRAPHIC BOARD | BRINKER, J. | 8,421 | 52 | - | - | 8,473 | 2,203 | - | 10,676 | | TRAD |
| 500269-010 | STIHL INC. | BRINKER, J. | 11,919 | 1,428 | - | - | 13,347 | 3,470 | - | 16,817 | | TRAD |
| 500270-010 | STIHL INC. | BRINKER, J. | 2,508 | 361 | - | 1,337 | 4,206 | 1,094 | - | 5,300 | | TRAD |
| 500272-010 | DESCAL-A-MATIC | BRINKER, J. | 4,265 | 83 | - | - | 4,348 | 1,130 | - | 5,478 | | TRAD |
| 500273-010 | STIHL INC. | BRINKER, J. | 8,452 | 287 | - | - | 8,740 | 2,272 | - | 11,012 | | TRAD |
| 500274-010 | STIHL INC. | BRINKER, J. | 4,802 | 278 | - | 714 | 5,794 | 1,506 | - | 7,300 | | TRAD |
| 500275-010 | STIHL INC. | BRINKER, J. | 7,469 | 1,021 | - | - | 8,490 | 2,208 | - | 10,698 | | TRAD |
| 500277-010 | STIHL INC. | BRINKER, J. | 9,282 | 305 | - | - | 9,586 | 2,492 | - | 12,079 | | TRAD |
| 500282-010 | TABET MANUFACTURING CO. | BRINKER, J. | - | 800 | - | - | 800 | 208 | - | 1,008 | | TRAD |
| 500287-010 | GENEDGE ALLIANCE - (FORMERLY PHILPOTT MANUFACTURIN( | BRINKER, J. | - | 1,052 | - | - | 1,052 | - | - | 1,052 | | TRAD |
| 500289-010 | MACK OWENS | BRINKER, J. | 446 | - | - | - | 446 | 116 | - | 562 | | TRAD |
| 500291-010 | KKS GEM, INC | BRINKER, J. | 73 | - | - | - | 73 | 19 | - | 91 | | TRAD |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100415-010 | SMALL BUSINESS ADMINISTRATION | KASZUBOWSKI, M. | - | (9,291) | - | - | (9,291) | (1,858) | - | (11,150) | | TRAD |
| 100415-021 | SMALL BUSINESS ADMINISTRATION | KASZUBOWSKI, M. | - | 16,893 | - | - | 16,893 | 3,379 | - | 20,272 | | TRAD |
| 100415-030 | SMALL BUSINESS ADMINISTRATION | KASZUBOWSKI, M. | 22,926 | 6,379 | - | - | 29,306 | 5,861 | - | 35,167 | | TRAD |
| 100415-040 | SMALL BUSINESS ADMINISTRATION | KASZUBOWSKI, M. | 63,054 | - | - | - | 63,054 | 12,611 | - | 75,665 | | TRAD |
| 100520-010 | SMALL BUSINESS ADMINISTRATION | KASZUBOWSKI, M. | 187,512 | 42,962 | - | - | 230,474 | 10,577 | - | 241,051 | | TRAD |
| 100592-010 | SMALL BUSINESS ADMINISTRATION | KASZUBOWSKI, M. | 25,319 | 5,766 | - | - | 31,085 | 8,082 | - | 39,167 | | TRAD |
| 200167-010 | CRATER PLANNING DISTRICT COMMISSION | KASZUBOWSKI, M. | 2,461 | 769 | - | 8,039 | 11,269 | 2,929 | - | 14,199 | | TRAD |
| 200167-011 | CRATER PLANNING DISTRICT COMMISSION | KASZUBOWSKI, M. | 5,493 | 583 | - | 20,059 | 26,135 | 6,795 | - | 32,930 | | TRAD |
| 200167-912 | CITY OF NORFOLK | KASZUBOWSKI, M. | - | 21,750 | - | - | 21,750 | - | - | 21,750 | | TRAD |
| 200201-010 | CRATER PLANNING DISTRICT COMMISSION | KASZUBOWSKI, M. | 5,931 | 2,389 | - | - | 8,320 | 2,163 | - | 10,483 | | TRAD |
| 200201-011 | CRATER PLANNING DISTRICT COMMISSION | KASZUBOWSKI, M. | 55,056 | 15,205 | - | - | 70,261 | 18,268 | - | 88,529 | | TRAD |
| 200204-010 | GOVERNOR'S OFFICE | KASZUBOWSKI, M. | 190,917 | 131,272 | 44,100 | 10,905 | 377,195 | - | - | 377,195 | | TRAD |
| 200204-011 | GOVERNOR'S OFFICE | KASZUBOWSKI, M. | 15,026 | 5,000 | - | - | 20,026 | - | - | 20,026 | | TRAD |
| 200204-012 | GOVERNOR'S OFFICE | KASZUBOWSKI, M. | 3,513 | 24,000 | - | - | 27,513 | - | - | 27,513 | | TRAD |
| 300126-010 | OLD DOMINION UNIVERSITY | KASZUBOWSKI, M. | 104,691 | 66,039 | - | 795 | 171,525 | - | - | 171,525 | | TRAD |
| 300187-010 | GEORGE MASON UNIVERSITY | KASZUBOWSKI, M. | - | 4,657 | - | - | 4,657 | 931 | - | 5,588 | | TRAD |
| | | | 1,049,089 | 391,288 | 44,100 | 58,258 | 1,542,739 | 116,240 | - | 1,658,975 | 7.53% | |
| Other Miscellaneous Units | | | | | | | | | | | | |
| 100422-010 | * U.S. DEPARTMENT OF JUSTICE | BAUTTI-ROCHE, J. | 15,175 | 2,524 | - | 2,016 | 19,715 | - | - | 19,715 | | TRAD |
| 300373-010 | * VA INSTITUTE OF MARINE SCIENCE | EDDINS, E. | 494 | 900 | - | - | 1,394 | 363 | - | 1,757 | | TRAD |
| 100022-044 | * NASA GODDARD SPACEFLIGHT CENTER | FORBES, B. | - | 212 | - | - | 212 | - | - | 212 | | TRAD |
| 300055-010 | OLD DOMINION UNIVERSITY | GLASGOW, J. | 7,091 | 57,818 | - | - | 64,908 | 5,193 | - | 70,101 | | TRAD |
| 200181-010 | OLD DOMINION UNIVERSITY | HUCKLESS, M. | 2,660 | - | - | - | 2,660 | - | - | 2,660 | | TRAD |
| 300350-010 | OLD DOMINION UNIVERSITY | HUCKLESS, M. | 490 | - | - | - | 490 | - | - | 490 | | TRAD |
| 300051-030 | OLD DOMINION UNIVERSITY | HINES, J. | (7,115) | (61) | - | - | (7,176) | (574) | - | (7,750) | | TRAD |
| 300051-040 | OLD DOMINION UNIVERSITY | HINES, J. | 64,487 | 1,042 | 5,437 | - | 70,967 | 5,242 | - | 76,209 | | TRAD |
| 300051-050 | OLD DOMINION UNIVERSITY | HINES, J. | 179,644 | 4,974 | - | 22,000 | 206,617 | 14,769 | - | 221,387 | | TRAD |
| 100507-010 | * NATIONAL SCIENCE FOUNDATION | JONES, W. | 29,867 | 1,667 | 51,709 | - | 83,243 | 16,713 | - | 99,956 | | TRAD |
| 400096-010 | COUNCIL OF GRADUATE SCHOOLS | LANGLAIS, P. | - | - | - | 10,496 | 10,496 | - | - | 10,496 | | TRAD |
| 300054-010 | OLD DOMINION UNIVERSITY | LOVE, L. | 249,079 | 11,474 | - | 80,442 | 340,995 | 20,844 | - | 361,839 | | TRAD |
| 400276-010 | * BLUE MOON FUND | STEINHILBER, E. | - | 3,948 | - | - | 3,948 | 592 | - | 4,540 | | TRAD |
| 300366-010 | * UNIVERSITY OF NORTH CAROLINA | SILES, M. | 749 | 58 | - | - | 806 | 443 | - | 1,250 | | TRAD |
| 100022-054 | NASA GODDARD SPACEFLIGHT CENTER | SMITH, D. | 626 | 5,379 | - | 108 | 6,113 | - | - | 6,113 | | TRAD |
| 100538-010 | * OFFICE OF NAVAL RESEARCH | WATERS, S. | 14,159 | 2,519 | 390 | 1,456 | 18,524 | 10,841 | - | 29,365 | | TRAD |
| 100022-044 | * NASA GODDARD SPACEFLIGHT CENTER | YOUNG, J. | - | 212 | - | - | 212 | - | - | 212 | | TRAD |
| | | | 557,406 | 92,666 | 57,537 | 116,517 | 824,126 | 74,426 | - | 898,552 | 9.03% | |
| **TOTAL UNIVERSITY ACTIVITY** | | | **$ 3,862,641** | **$ 1,185,690** | **$ 175,614** | **$ 554,259** | **$ 6,404,040** | **$ 1,925,483** | **$ -** | **$ 8,329,508** | **30.07%** | |
| **GRAND TOTAL** | | | **$ 20,460,794** | **$ 5,748,546** | **$ 1,355,198** | **$ 10,815,886** | **$ 38,380,425** | **$ 8,075,851** | **$ -** | **$ 46,456,276** | **21.04%** | |

# SCHEDULE 4

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**

**SPONSORED PROGRAM ACTIVITY BY INDIVIDUAL PROJECT**

(MEASURED BY EXPENDITURES INCURRED)

**FOR FISCAL YEAR 2016**

| | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | SPONSORING AGENCY | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **AFFILIATED ACTIVITY** | | | | | | | | | | | | |
| Virginia Space Grant Consortium | | | | | | | | | | | | |
| 100041-010 | NASA GODDARD SPACEFLIGHT CENTER | CARTER, C. | 29,380 | 27,920 | - | 55,075 | 112,375 | 14,898 | - | 127,273 | | VSGC |
| 100239-010 | NATIONAL SCIENCE FOUNDATION | CARTER, C. | 10,821 | 43,108 | - | 116,999 | 170,927 | 14,021 | - | 184,949 | | VSGC |
| 100018-010 | LANGLEY RESEARCH CENTER | SANDY, M. | 62,067 | 3,426 | - | - | 65,493 | 32,747 | - | 98,239 | | VSGC |
| 100022-040 | NASA GODDARD SPACEFLIGHT CENTER | SANDY, M. | - | - | - | 1,735 | 1,735 | - | - | 1,735 | | VSGC |
| 100022-050 | NASA GODDARD SPACEFLIGHT CENTER | SANDY, M. | 44,225 | 7,722 | - | 74,046 | 125,993 | 25,974 | - | 151,967 | | VSGC |
| 100367-020 | U.S. DEPARTMENT OF EDUCATION | SANDY, M. | 2,703 | 3,619 | - | 6,843 | 13,165 | 506 | - | 13,670 | | VSGC |
| 100502-010 | NASA GODDARD SPACEFLIGHT CENTER | SANDY, M. | 36,869 | 7,911 | - | 163,118 | 207,898 | 11,643 | - | 219,541 | | VSGC |
| 100522-010 | LANGLEY RESEARCH CENTER | SANDY, M. | 13,919 | 68,047 | - | 1,774 | 83,740 | 21,311 | - | 105,052 | | VSGC |
| 100527-010 | NASA GODDARD SPACEFLIGHT CENTER | SANDY, M. | 159,082 | 31,933 | - | 176,843 | 367,858 | 49,664 | - | 417,522 | | VSGC |
| 100573-010 | NASA/HEADQUARTERS | SANDY, M. | 8,530 | 2,949 | - | 296 | 11,775 | 2,985 | - | 14,760 | | VSGC |
| 200005-010 | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | SANDY, M. | 202,694 | 105,084 | - | 108,707 | 416,485 | - | - | 416,485 | | VSGC |
| 200009-010 | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | SANDY, M. | - | - | - | 163,932 | 163,932 | - | - | 163,932 | | VSGC |
| 200009-020 | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | SANDY, M. | 3,214 | 19,972 | - | 77,794 | 100,980 | - | - | 100,980 | | VSGC |
| 300030-010 | UNIVERSITY OF VIRGINIA | SANDY, M. | 71,871 | 45,767 | - | 118,647 | 236,285 | - | - | 236,285 | | VSGC |
| 300040-010 | VA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY | SANDY, M. | 198,066 | 24,651 | - | 34,008 | 256,725 | - | - | 256,725 | | VSGC |
| 300125-010 | OLD DOMINION UNIVERSITY | SANDY, M. | 92,348 | 100,966 | - | 54,459 | 247,773 | - | - | 247,773 | | VSGC |
| 300270-010 | JAMES MADISON UNIVERSITY | SANDY, M. | 496 | - | - | - | 496 | 40 | - | 536 | | VSGC |
| 300342-010 | HAMPTON UNIVERSITY | SANDY, M. | 21,314 | 18,594 | - | 388 | 40,296 | 10,376 | - | 50,672 | | VSGC |
| 400062-010 | NATIONAL SPACE GRANT FOUNDATION | SANDY, M. | - | - | - | (2,300) | (2,300) | - | - | (2,300) | | VSGC |
| 400079-010 | NATIONAL INSTITUTE OF AEROSPACE ASSOCIATES (NIA) | SANDY, M. | 89,813 | 7 | - | - | 89,819 | 23,353 | - | 113,173 | | VSGC |
| 400139-080 | NEW HORIZONS REGIONAL EDUCATION CENTERS | SANDY, M. | 1,540 | 10 | - | 92 | 1,643 | 403 | - | 2,046 | | VSGC |
| 400139-090 | NEW HORIZONS REGIONAL EDUCATION CENTERS | SANDY, M. | 3,912 | 4,548 | - | 2,341 | 10,800 | 2,200 | - | 13,000 | | VSGC |
| 400204-010 | THE NATIONAL ACADEMIES | SANDY, M. | 178,666 | 55,497 | - | 140,418 | 374,581 | 60,882 | - | 435,463 | | VSGC |
| | | | 1,231,531 | 571,730 | - | 1,295,215 | 3,098,477 | 271,002 | - | 3,369,477 | 8.75% | |
| Virginia Tidewater Consortium for Higher Education | | | | | | | | | | | | |
| 100357-010 | U.S. DEPARTMENT OF EDUCATION | DOTOLO, L. | 400,223 | 70,653 | - | 120 | 470,996 | 36,330 | - | 507,326 | | TRAD |
| 200006-010 | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | DOTOLO, L. | - | - | - | 22,202 | 22,202 | - | - | 22,202 | | TRAD |
| 200010-010 | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | DOTOLO, L. | - | - | - | 9,585 | 9,585 | 767 | - | 10,352 | | TRAD |
| 200011-010 | STATE COUNCIL FOR HIGHER EDUCATION IN VA (SCHEV) | DOTOLO, L. | - | - | - | 8,699 | 8,699 | 696 | - | 9,395 | | TRAD |
| 400239-010 | OPPORTUNITY, INC. | DOTOLO, L. | 3,461 | - | - | (0) | 3,461 | 2,095 | - | 5,556 | | TRAD |
| 400252-010 | OPPORTUNITY, INC. | DOTOLO, L. | 63,920 | 2,530 | - | 5,168 | 71,618 | 6,645 | - | 78,263 | | TRAD |
| | | | 467,605 | 73,182 | - | 45,775 | 586,562 | 46,532 | - | 633,094 | 7.93% | |
| **TOTAL AFFILIATED ACTIVITY** | | | **$ 1,699,136** | **$ 644,912** | **$ -** | **$ 1,340,990** | **$ 3,685,038** | **$ 317,534** | **$ -** | **$ 4,002,572** | **8.62%** | |
| **GRAND TOTAL** | | | **$ 22,159,930** | **$ 6,393,458** | **$ 1,355,198** | **$ 12,156,876** | **$ 42,065,462** | **$ 8,393,385** | **$ -** | **$ 50,458,847** | **19.95%** | |

# SCHEDULE 5

# Enterprise Centers Including Projects Reported as

# Activity of an Academic Department

# Fiscal Year 2016

# SCHEDULE 5

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY**
**OF AN ACADEMIC DEPARTMENT**
(MEASURED BY EXPENDITURES INCURRED)
**FOR FISCAL YEAR 2016**

| | | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | DEPT | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **APPLIED RESEARCH CENTER** | | | | | | | | | | | | | | |
| 100221-010 | * | NATIONAL SCIENCE FOUNDATION | BAUMGART, H. | 4054 | 2,013 | 116 | 2,810 | - | 4,939 | 1,128 | - | 6,067 | | ARC |
| 100383-010 | * | U.S. DEPARTMENT OF ENERGY | BAUMGART, H. | 4054 | 6,302 | 582 | - | - | 6,884 | 3,649 | - | 10,533 | | ARC |
| 100473-010 | | NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | BAUMGART, H. | 4054 | 107,158 | 3,677 | - | - | 110,835 | 28,817 | - | 139,653 | | ARC |
| 300028-010 | | UNIVERSITY OF VIRGINIA | BAUMGART, H. | 4054 | 25,272 | 1,312 | - | - | 26,584 | - | - | 26,584 | | ARC |
| 300034-010 | | UNIVERSITY OF VIRGINIA | BAUMGART, H. | 4054 | - | 293 | - | - | 293 | - | - | 293 | | ARC |
| 300035-010 | | UNIVERSITY OF VIRGINIA | BAUMGART, H. | 4054 | 1,524 | 476 | - | - | 2,000 | - | - | 2,000 | | ARC |
| 500121-010 | | MICROXACT, INC. | BAUMGART, H. | 4054 | - | 2,368 | - | - | 2,368 | 616 | - | 2,983 | | ARC |
| 500250-010 | | SUMMIT INFORMATION SOLUTIONS, INC | BAUMGART, H. | 4054 | 24,359 | - | - | - | 24,359 | 6,333 | - | 30,693 | | ARC |
| 500284-010 | | SUMMIT INFORMATION SOLUTIONS, INC | BAUMGART, H. | 4054 | 24,787 | - | - | - | 24,787 | 6,445 | - | 31,232 | | ARC |
| 100221-010 | * | NATIONAL SCIENCE FOUNDATION | ELSAYED-ALI, H. | 4054 | 16,107 | 927 | 22,476 | - | 39,510 | 9,028 | - | 48,537 | | ARC |
| 100476-010 | | LANGLEY RESEARCH CENTER | ELSAYED-ALI, H. | 4054 | 1,271 | 4,719 | - | (0) | 5,990 | 3,175 | - | 9,165 | | ARC |
| 100495-010 | * | NATIONAL SCIENCE FOUNDATION | ELSAYED-ALI, H. | 4054 | - | 32 | - | - | 32 | 17 | - | 48 | | ARC |
| 100567-010 | | LANGLEY RESEARCH CENTER | ELSAYED-ALI, H. | 4054 | 5,118 | - | - | - | 5,118 | 1,331 | - | 6,448 | | ARC |
| 100571-010 | | OFFICE OF NAVAL RESEARCH | ELSAYED-ALI, H. | 4054 | 10,111 | 25,104 | - | - | 35,215 | 11,269 | - | 46,484 | | ARC |
| 200191-010 | * | CENTER FOR INNOVATIVE TECHNOLOGY | ELSAYED-ALI, H. | 4054 | 6,829 | 1,955 | - | - | 8,784 | 2,635 | - | 11,420 | | ARC |
| 400247-010 | | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | ELSAYED-ALI, H. | 4054 | - | 1,100 | - | - | 1,100 | 583 | - | 1,683 | | ARC |
| 400288-010 | | EMBODY | ELSAYED-ALI, H. | 4054 | - | 2,770 | - | - | 2,770 | 1,524 | - | 4,294 | | ARC |
| 500209-010 | | LIFENET | ELSAYED-ALI, H. | 4054 | 287 | 1,682 | - | (0) | 1,969 | 1,044 | - | 3,013 | | ARC |
| 500210-010 | | LIFENET | ELSAYED-ALI, H. | 4054 | 255 | 790 | - | 2 | 1,047 | 555 | - | 1,602 | | ARC |
| 500222-010 | | MORPHIX TECHNOLOGIES | ELSAYED-ALI, H. | 4054 | 489 | - | - | - | 489 | 259 | - | 747 | | ARC |
| 500241-010 | | BNNT, LLC | ELSAYED-ALI, H. | 4054 | 1,178 | - | - | - | 1,178 | 306 | - | 1,484 | | ARC |
| 500253-010 | | LIFENET | ELSAYED-ALI, H. | 4054 | 155 | 850 | - | - | 1,005 | 553 | - | 1,557 | | ARC |
| 500254-010 | | VERTICAL CARBON TECHNOLOGIES, INC. | ELSAYED-ALI, H. | 4054 | 928 | 692 | - | - | 1,619 | 891 | - | 2,510 | | ARC |
| 500276-010 | | LIFENET | ELSAYED-ALI, H. | 4054 | 613 | 1,650 | - | - | 2,263 | 1,245 | - | 3,507 | | ARC |
| 200191-010 | * | CENTER FOR INNOVATIVE TECHNOLOGY | ELSAYED-ALI, H. | 4054 | 5,603 | 2,067 | - | - | 7,670 | 2,301 | - | 9,971 | | ARC |
| 100230-010 | * | NATIONAL SCIENCE FOUNDATION | MARSILLAC, S. | 4054 | 3,123 | 2,279 | - | - | 5,401 | 2,863 | - | 8,264 | | ARC |
| 100383-010 | * | U.S. DEPARTMENT OF ENERGY | MARSILLAC, S. | 4054 | 22,056 | 2,039 | - | - | 24,095 | 12,770 | - | 36,865 | | ARC |
| 100495-010 | * | NATIONAL SCIENCE FOUNDATION | MARSILLAC, S. | 4054 | - | 32 | - | - | 32 | 17 | - | 48 | | ARC |
| 100221-010 | * | NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | 4054 | 2,013 | 116 | 2,810 | - | 4,939 | 1,128 | - | 6,067 | | ARC |
| 100230-010 | * | NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | 4054 | 10,148 | 7,406 | - | - | 17,555 | 9,304 | - | 26,859 | | ARC |
| 100256-010 | * | NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | 4054 | 3,946 | 242 | - | 49,080 | 53,268 | 2,219 | - | 55,487 | | ARC |
| 100383-010 | * | U.S. DEPARTMENT OF ENERGY | NAMKOONG, G. | 4054 | 3,151 | 291 | - | - | 3,442 | 1,824 | - | 5,266 | | ARC |
| 100495-010 | * | NATIONAL SCIENCE FOUNDATION | NAMKOONG, G. | 4054 | - | 116 | - | - | 116 | 61 | - | 177 | | ARC |
| 200191-010 | * | CENTER FOR INNOVATIVE TECHNOLOGY | NAMKOONG, G. | 4054 | 15,935 | 4,562 | - | - | 20,497 | 6,149 | - | 26,646 | | ARC |
| 200191-010 | * | CENTER FOR INNOVATIVE TECHNOLOGY | NAMKOONG, G. | 4054 | 13,074 | 4,823 | - | - | 17,896 | 5,369 | - | 23,265 | | ARC |
| 100495-010 | * | NATIONAL SCIENCE FOUNDATION | RAMJEE, B. | 4054 | - | 32 | - | - | 32 | 17 | - | 48 | | ARC |
| 400110-011 | | JEFFERSON SCIENCE ASSOCIATES, LLC (JEFFERSON LAB) | ELMUSTAFA, A. | 4057 | 23,721 | - | - | - | 23,721 | - | - | 23,721 | | ARC |
| | | | | | 337,525 | 75,097 | 28,095 | 49,082 | 489,799 | 125,423 | - | 615,222 | 25.61% | |

# SCHEDULE 5

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY**
**OF AN ACADEMIC DEPARTMENT**
(MEASURED BY EXPENDITURES INCURRED)
**FOR FISCAL YEAR 2016**

| | | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | DEPT | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **FRANK REIDY RESEARCH CENTER FOR BIOELECTRICS** | | | | | | | | | | | | | | |
| 300281-010 | | UNIVERSITY OF SOUTHERN CALIFORNIA | JIANG, C. | 4054 | 53,336 | 22,382 | - | - | 75,718 | 40,131 | - | 115,849 | | CBE |
| 500226-001 | * | PULSE BIOSCIENCES (ELECTROBLATE) | JIANG, C. | 4054 | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 600186-010 | * | SOUTHAMPTON UNIVERSITY | KONG, M. | 4054 | 207,885 | 69,307 | 668 | 38 | 277,897 | 146,911 | - | 424,809 | | CBE |
| 500226-001 | * | PULSE BIOSCIENCES (ELECTROBLATE) | SCHOENBACH, K. | 4054 | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 100330-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 4054 | 2,345 | 914 | - | - | 3,259 | 1,645 | - | 4,903 | | CBE |
| 100461-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 4054 | 11,570 | 5,165 | 9,347 | - | 26,081 | 8,869 | - | 34,950 | | CBE |
| 100461-011 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 4054 | 16,486 | 2,441 | - | - | 18,926 | 10,031 | - | 28,958 | | CBE |
| 100548-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | XIAO, S. | 4054 | 9,495 | 1,412 | 522 | - | 11,429 | 5,999 | - | 17,428 | | CBE |
| 500212-010 | * | NON-DISCLOSED SPONSORS | XIAO, S. | 4054 | 48 | - | - | 840 | 889 | 471 | - | 1,360 | | CBE |
| 400016-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | ZEMLIN, C. | 4054 | 9,019 | - | - | - | 9,019 | - | - | 9,019 | | CBE |
| 500218-010 | | ATRICURE, INC | ZEMLIN, C. | 4054 | - | 1,054 | - | 1,702 | 2,756 | - | - | 2,756 | | CBE |
| 500226-003 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HARGRAVE, B. | 5056 | 24,446 | 13,366 | - | - | 37,812 | 20,040 | - | 57,852 | | CBE |
| 100579-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, L. | 5056 | 18,911 | 33,430 | - | - | 52,341 | 28,788 | - | 81,128 | | CBE |
| 500226-002 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, L. | 5056 | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 100516-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, R. | 5056 | 92,584 | 67,358 | - | - | 159,942 | 84,769 | - | 244,711 | | CBE |
| 100517-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, R. | 5056 | 54,700 | 3,253 | - | - | 57,952 | 30,715 | - | 88,667 | | CBE |
| 400231-010 | | OLD DOMINION UNIVERSITY | HELLER, R. | 5056 | 115,309 | 15,615 | - | 149,406 | 280,330 | 39,277 | - | 319,607 | | CBE |
| 500110-010 | | VANDALIA RESEARCH, INC. | HELLER, R. | 5056 | - | - | - | 31,698 | 31,698 | 19,019 | - | 50,717 | | CBE |
| 500156-014 | | ONCOSEC MEDICAL, INC. | HELLER, R. | 5056 | - | - | - | 16,839 | 16,839 | 8,925 | - | 25,764 | | CBE |
| 500226-000 | | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, R. | 5056 | - | (49) | - | - | (49) | - | - | (49) | | CBE |
| 500226-001 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, R. | 5056 | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 100517-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | HELLER, R. | 9010 | 40,332 | 12,932 | - | - | 53,264 | 28,230 | - | 81,494 | | CBE |
| 500226-005 | * | PULSE BIOSCIENCES (ELECTROBLATE) | HELLER, R. | 9010 | 3,842 | 2,439 | - | - | 6,282 | 3,455 | - | 9,737 | | CBE |
| 500226-003 | * | PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 9010 | 24,446 | 13,366 | - | - | 37,812 | 20,040 | - | 57,852 | | CBE |
| 500226-003 | * | PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 9010 | 48,892 | 26,731 | - | - | 75,623 | 40,080 | - | 115,704 | | CBE |
| 500226-005 | * | PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 9010 | 3,842 | 2,439 | - | - | 6,282 | 3,455 | - | 9,737 | | CBE |
| 500226-006 | * | PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 9010 | 6,460 | 12,368 | - | - | 18,828 | 10,355 | - | 29,183 | | CBE |
| 500226-008 | * | PULSE BIOSCIENCES (ELECTROBLATE) | BEEBE, S. | 9010 | 7,180 | 3,849 | - | - | 11,029 | 6,066 | - | 17,095 | | CBE |
| 100475-010 | | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | CATRAVAS, J. | 9010 | 103,295 | 9,950 | - | - | 113,245 | 60,020 | - | 173,265 | | CBE |
| 300010-010 | | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 9010 | 92,710 | 36,641 | - | - | 129,351 | 68,556 | - | 197,907 | | CBE |
| 300010-020 | | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 9010 | 65,152 | 24,916 | - | - | 90,068 | 47,736 | - | 137,804 | | CBE |
| 300327-010 | | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 9010 | 44,683 | 38,727 | - | - | 83,410 | 44,207 | - | 127,617 | | CBE |
| 300327-020 | | GEORGIA REGENTS UNIVERSITY | CATRAVAS, J. | 9010 | 40,927 | 6,230 | - | - | 47,157 | 24,993 | - | 72,151 | | CBE |
| 500226-008 | * | PULSE BIOSCIENCES (ELECTROBLATE) | CATRAVAS, J. | 9010 | 7,180 | 3,849 | - | - | 11,029 | 6,066 | - | 17,095 | | CBE |
| 600186-010 | * | SOUTHAMPTON UNIVERSITY | CHEN, H. | 9010 | 89,093 | 29,703 | 286 | 16 | 119,099 | 62,962 | - | 182,061 | | CBE |
| 100517-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | GUO, S. | 9010 | 20,364 | 3,468 | - | - | 23,832 | 12,631 | - | 36,463 | | CBE |
| 500226-001 | * | PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 9010 | 36,642 | 5,892 | 2,499 | - | 45,032 | 22,543 | - | 67,575 | | CBE |
| 500226-005 | * | PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 9010 | 7,685 | 4,879 | - | - | 12,564 | 6,910 | - | 19,474 | | CBE |
| 500226-006 | * | PULSE BIOSCIENCES (ELECTROBLATE) | GUO, S. | 9010 | 2,768 | 5,300 | - | - | 8,069 | 4,438 | - | 12,507 | | CBE |

# SCHEDULE 5

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY**
**OF AN ACADEMIC DEPARTMENT**
(MEASURED BY EXPENDITURES INCURRED)
**FOR FISCAL YEAR 2016**

| | | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | DEPT | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100330-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 9010 | 10,943 | 4,265 | - | - | 15,208 | 7,675 | - | 22,883 | | CBE |
| 100461-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 9010 | 11,570 | 5,165 | 9,347 | - | 26,081 | 8,869 | - | 34,950 | | CBE |
| 100461-011 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 9010 | 16,486 | 2,441 | - | - | 18,926 | 10,031 | - | 28,958 | | CBE |
| 100548-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOV, A. | 9010 | 75,964 | 11,294 | 4,175 | - | 91,433 | 47,992 | - | 139,425 | | CBE |
| 300345-010 | | OLD DOMINION UNIVERSITY | PAKHOMOV, A. | 9010 | 36,719 | 60,378 | - | 76,865 | 173,963 | 58,259 | - | 232,221 | | CBE |
| 500212-000 | | GENERAL DYNAMICS | PAKHOMOV, A. | 9010 | 54,773 | 8,264 | - | - | 63,038 | 34,917 | - | 97,954 | | CBE |
| 500212-010 | * | NON-DISCLOSED SPONSORS | PAKHOMOV, A. | 9010 | 824 | - | - | 14,283 | 15,107 | 8,007 | - | 23,114 | | CBE |
| 500226-002 | * | PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOV, A. | 9010 | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 500226-004 | * | PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOV, A. | 9010 | 55,184 | 21,065 | 8,369 | - | 84,617 | 40,412 | - | 125,029 | | CBE |
| 100330-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOVA, O. | 9010 | 2,345 | 914 | - | - | 3,259 | 1,645 | - | 4,903 | | CBE |
| 100548-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | PAKHOMOVA, O. | 9010 | 9,495 | 1,412 | 522 | - | 11,429 | 5,999 | - | 17,428 | | CBE |
| 300345-012 | | OLD DOMINION UNIVERSITY | PAKHOMOVA, O. | 9010 | 40,475 | 7,311 | - | - | 47,786 | 28,672 | - | 76,458 | | CBE |
| 500212-010 | * | NON-DISCLOSED SPONSORS | PAKHOMOVA, O. | 9010 | 3,438 | 486 | - | 840 | 4,764 | 2,525 | - | 7,289 | | CBE |
| 500226-002 | * | PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOVA, O. | 9010 | 64,873 | 30,495 | 32,851 | - | 128,219 | 50,545 | - | 178,764 | | CBE |
| 500226-004 | * | PULSE BIOSCIENCES (ELECTROBLATE) | PAKHOMOVA, O. | 9010 | 6,417 | 2,449 | 973 | - | 9,839 | 4,699 | - | 14,538 | | CBE |
| 100517-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | SCHOENBACH, K. | 9010 | 20,364 | 3,468 | - | - | 23,832 | 12,631 | - | 36,463 | | CBE |
| 100548-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | SEMENOV, I. | 9010 | 18,991 | 2,824 | 1,044 | - | 22,858 | 11,998 | - | 34,856 | | CBE |
| 500212-010 | * | NON-DISCLOSED SPONSORS | SEMENOV, I. | 9010 | 3,438 | 486 | - | 840 | 4,764 | 2,525 | - | 7,289 | | CBE |
| 500226-002 | * | PULSE BIOSCIENCES (ELECTROBLATE) | SEMENOV, I. | 9010 | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 500226-004 | * | PULSE BIOSCIENCES (ELECTROBLATE) | SEMENOV, I. | 9010 | 2,567 | 980 | 389 | - | 3,936 | 1,880 | - | 5,815 | | CBE |
| 100341-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | STACEY, M. | 9010 | 7,788 | 4,045 | - | 20,428 | 32,261 | 6,269 | - | 38,531 | | CBE |
| 400140-010 | | BREEDEN-ADAMS FOUNDATION | STACEY, M. | 9010 | 7,507 | 5,582 | - | 5 | 13,094 | - | - | 13,094 | | CBE |
| 100474-010 | | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | VERNIER, T. | 9010 | 9,741 | - | - | 182 | 9,922 | 5,844 | - | 15,767 | | CBE |
| 300345-013 | | OLD DOMINION UNIVERSITY | VERNIER, T. | 9010 | 40,162 | 3,685 | - | - | 43,847 | 26,308 | - | 70,154 | | CBE |
| 300345-011 | | OLD DOMINION UNIVERSITY | XIAO, S. | 9010 | 44,925 | 7,662 | 3,189 | - | 55,777 | 31,553 | - | 87,329 | | CBE |
| 300369-010 | | UNIVERSITY OF TEXAS AT ARLINGTON | XIAO, S. | 9010 | 2,411 | 781 | - | - | 3,191 | 1,755 | - | 4,946 | | CBE |
| 500212-010 | * | NON-DISCLOSED SPONSORS | XIAO, S. | 9010 | 3,389 | 486 | - | - | 3,875 | 2,054 | - | 5,929 | | CBE |
| 500226-002 | * | PULSE BIOSCIENCES (ELECTROBLATE) | XIAO, S. | 9010 | 4,055 | 1,906 | 2,053 | - | 8,014 | 3,159 | - | 11,173 | | CBE |
| 100548-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | ZEMLIN, C. | 9010 | 75,964 | 11,294 | 4,175 | - | 91,433 | 47,992 | - | 139,425 | | CBE |
| 500226-007 | * | PULSE BIOSCIENCES (ELECTROBLATE) | ZEMLIN, C. | 9010 | 9,102 | 4,839 | - | - | 13,941 | 7,667 | - | 21,608 | | CBE |
| | | | | | 2,023,626 | 706,695 | 94,064 | 313,983 | 3,138,368 | 1,467,320 | - | 4,605,687 | 46.75% | |

# SCHEDULE 5

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY**
**OF AN ACADEMIC DEPARTMENT**
(MEASURED BY EXPENDITURES INCURRED)
**FOR FISCAL YEAR 2016**

| | | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | DEPT | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **NATIONAL CENTERS FOR SYSTEMS OF SYSTEMS ENGINEERING** | | | | | | | | | | | | | | |
| 100143-003 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | KEATING, C. | 4060 | 6,882 | - | - | - | 6,882 | 4,129 | - | 11,012 | | NCSOSE |
| | | | | | 6,882 | - | - | - | 6,882 | 4,129 | - | 11,012 | 60.00% | |
| **SOCIAL SCIENCE RESEARCH CENTER** | | | | | | | | | | | | | | |
| 200001-010 | | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | - | - | - | - | - | - | - | - | | SSRC |
| 200147-010 | | NEW HAMPSHIRE DEPARTMENT OF HEALTH AND HUMAN SERVICES | VANDECAR-BURDIN, T. | 1060 | 19,673 | 5,525 | - | - | 25,198 | 2,520 | - | 27,718 | | SSRC |
| 200151-010 | | CITY OF NORFOLK | VANDECAR-BURDIN, T. | 1060 | 1,743 | 25 | - | 516 | 2,284 | 594 | - | 2,878 | | SSRC |
| 200197-010 | | CITY OF VIRGINIA BEACH | VANDECAR-BURDIN, T. | 1060 | 694 | - | - | 0 | 694 | 109 | - | 803 | | SSRC |
| 300292-010 | | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | 775 | 922 | - | - | 1,697 | 85 | - | 1,782 | | SSRC |
| 300312-010 | | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | 26,844 | 20,982 | - | - | 47,826 | 2,391 | - | 50,217 | | SSRC |
| 300352-010 | | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | 14,930 | 8,404 | - | - | 23,334 | 1,167 | - | 24,501 | | SSRC |
| 500248-010 | | LUISA DIAZ-KOPE | VANDECAR-BURDIN, T. | 1060 | 2,995 | - | - | - | 2,995 | - | - | 2,995 | | SSRC |
| 500283-010 | | HENRICO CITIZEN (T3 MEDIA LLC) | VANDECAR-BURDIN, T. | 1060 | 841 | - | - | - | 841 | - | - | 841 | | SSRC |
| 600200-010 | | BEIJING INTERNATIONAL STUDIES UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | 594 | - | - | - | 594 | 315 | - | 909 | | SSRC |
| 200221-010 | * | CITY OF SUFFOLK | VANDECAR-BURDIN, T. | 1060 | 244 | - | - | - | 244 | 63 | - | 308 | | SSRC |
| 300333-010 | * | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | 2,484 | 266 | - | - | 2,750 | 220 | - | 2,970 | | SSRC |
| 300346-010 | * | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | 6,401 | 485 | - | 13,391 | 20,277 | - | - | 20,277 | | SSRC |
| 300356-010 | * | OLD DOMINION UNIVERSITY | VANDECAR-BURDIN, T. | 1060 | 11,836 | 202 | - | - | 12,037 | 963 | - | 13,000 | | SSRC |
| | | | | | 90,055 | 36,809 | - | 13,907 | 140,772 | 8,427 | - | 149,199 | 5.99% | |
| **SELF SUPPORTING RESEARCH PROFESSIONALS** | | | | | | | | | | | | | | |
| 100493-010 | * | U.S. ENVIRONMENTAL PROTECTION AGENCY | HILL, V. | 6085 | 4,143 | 87 | - | - | 4,231 | 423 | - | 4,654 | | SSRP |
| 100575-010 | | NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | HILL, V. | 6085 | 4,070 | - | - | - | 4,070 | 2,238 | - | 6,308 | | SSRP |
| 400285-010 | | CONSORTIUM FOR OCEAN LEADERSHIP, INC. | HILL, V. | 6085 | - | 8,994 | - | - | 8,994 | - | - | 8,994 | | SSRP |
| 100215-010 | | NATIONAL SCIENCE FOUNDATION | HILL, V. | 6085 | 134,035 | 15,336 | - | - | 149,370 | 79,166 | - | 228,537 | | SSRP |
| 300265-010 | | UNIVERSITY OF WASHINGTON | HILL, V. | 6085 | 775 | - | - | - | 775 | 388 | - | 1,163 | | SSRP |
| 200166-010 | | HAMPTON ROADS SANITATION DISTRICT COMMISSION | FILIPPINO, K. | 6085 | 36,020 | 522 | - | - | 36,542 | 9,136 | - | 45,678 | | SSRP |
| 100023-010 | * | NATIONAL SCIENCE FOUNDATION | FILIPPINO, K. | 6085 | 4,015 | (145) | - | 50,085 | 53,955 | 6 | - | 53,961 | | SSRP |
| | | | | | 183,058 | 24,795 | - | 50,085 | 257,937 | 91,357 | - | 349,294 | 35.42% | |
| **VIRGINIA COASTAL ENERGY RESEARCH CONSORTIUM** | | | | | | | | | | | | | | |
| 100222-010 | * | NATIONAL SCIENCE FOUNDATION | HATCHER, P. | 6082 | (1,327) | - | - | - | (1,327) | (703) | - | (2,030) | | VCERC |
| 100222-010 | * | NATIONAL SCIENCE FOUNDATION | WOZNIAK, A. | 6082 | (2,576) | - | - | - | (2,576) | (1,365) | - | (3,941) | | VCERC |
| | | | | | (3,903) | - | - | - | (3,903) | (2,069) | - | (5,971) | 53.00% | |
| **MITIGATION & ADAPTION RESEARCH INSTITUTE** | | | | | | | | | | | | | | |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | PLAG, H. | 6086 | 2,995 | 230 | - | - | 3,225 | 1,774 | - | 4,998 | | MARI |
| 100565-010 | | U.S. FISH AND WILDLIFE SERVICES | PLAG, H. | 6086 | 26,665 | 1,252 | - | - | 27,916 | - | - | 27,916 | | MARI |
| | | | | | 29,659 | 1,482 | - | - | 31,141 | 1,774 | - | 32,915 | 5.70% | |

# SCHEDULE 5

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY**
**OF AN ACADEMIC DEPARTMENT**
(MEASURED BY EXPENDITURES INCURRED)
**FOR FISCAL YEAR 2016**

| | | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | DEPT | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| **VIRGINIA MODELING, ANALYSIS AND SIMULATION CENTER** | | | | | | | | | | | | | | |
| 200152-010 | * | CITY OF VIRGINIA BEACH | CETIN, M. | 4053 | 29,512 | 1,360 | - | 240 | 31,112 | 16,362 | - | 47,474 | | |
| 100105-050 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 828 | - | - | 48,310 | 49,138 | 290 | - | 49,427 | | VMASC |
| 100105-051 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 578 | - | - | 20,635 | 21,213 | 202 | - | 21,415 | | VMASC |
| 100105-052 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 337 | - | - | 88,724 | 89,061 | 118 | - | 89,179 | | VMASC |
| 100105-053 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 184 | - | - | 38,164 | 38,348 | 64 | - | 38,412 | | VMASC |
| 100105-054 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 184 | - | - | 59,830 | 60,013 | 64 | - | 60,077 | | VMASC |
| 100105-055 | * | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 147 | - | - | - | 147 | 52 | - | 199 | | VMASC |
| 100105-056 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 133,641 | - | - | - | 133,641 | 46,774 | - | 180,415 | | VMASC |
| 100105-057 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 31,149 | (1,793) | - | - | 29,357 | 10,275 | - | 39,631 | | VMASC |
| 100105-058 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 42,026 | - | - | - | 42,026 | 14,709 | - | 56,735 | | VMASC |
| 100105-060 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 121,478 | - | - | - | 121,478 | 42,517 | - | 163,995 | | VMASC |
| 100105-061 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 8,038 | 60,051 | - | - | 68,089 | 23,831 | - | 91,920 | | VMASC |
| 100105-062 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 11,512 | 25,000 | - | 66,721 | 103,233 | 12,779 | - | 116,012 | | VMASC |
| 100105-063 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 67,436 | 8,110 | - | - | 75,546 | 26,441 | - | 101,987 | | VMASC |
| 100105-064 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 1,772 | 25,000 | - | 90,605 | 117,377 | 9,370 | - | 126,748 | | VMASC |
| 100105-065 | * | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 17,063 | - | - | - | 17,063 | 5,972 | - | 23,034 | | VMASC |
| 100105-066 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 15,181 | - | - | - | 15,181 | 5,313 | - | 20,494 | | VMASC |
| 100105-067 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 3,370 | 25,000 | - | 297,581 | 325,951 | 9,929 | - | 335,880 | | VMASC |
| 100105-068 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 2,996 | 25,000 | - | 56,891 | 84,887 | 9,799 | - | 94,685 | | VMASC |
| 100105-069 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 76,943 | - | - | - | 76,943 | 26,930 | - | 103,873 | | VMASC |
| 100105-070 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 3,370 | 25,000 | - | 21,580 | 49,950 | 9,929 | - | 59,879 | | VMASC |
| 100457-010 | | MODELING AND SIMULATION COORDINATION OFFICE | SOKOLOWSKI, J. | 4075 | 98,748 | - | - | - | 98,748 | 7,321 | - | 106,069 | | VMASC |
| 100467-000 | | NAVAL SURFACE WARFARE CENTER | SOKOLOWSKI, J. | 4075 | (2,041) | (1,312) | - | - | (3,353) | (2,012) | - | (5,365) | | VMASC |
| 100500-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | - | 1,751 | - | 1,289 | 3,040 | 882 | - | 3,922 | | VMASC |
| 100553-010 | | NORFOLK NAVAL SHIPYARD | SOKOLOWSKI, J. | 4075 | - | 43 | - | 632 | 675 | - | - | 675 | | VMASC |
| 100561-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | - | 4,386 | - | - | 4,386 | 1,404 | - | 5,790 | | VMASC |
| 100590-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 4075 | 691 | 11,670 | - | - | 12,361 | 4,450 | - | 16,811 | | VMASC |
| 300336-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 4075 | 19,445 | - | - | - | 19,445 | - | - | 19,445 | | VMASC |
| 300337-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 4075 | 2,178 | - | - | - | 2,178 | - | - | 2,178 | | VMASC |
| 400193-000 | | NONE | SOKOLOWSKI, J. | 4075 | - | 69,905 | - | 10,182 | 80,087 | - | - | 80,087 | | VMASC |
| 100334-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | BEHR, J. | 9010 | 6,018 | (214) | - | - | 5,804 | 3,076 | - | 8,881 | | VMASC |
| 100515-010 | * | U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT | BEHR, J. | 9010 | 19,027 | 7,182 | - | - | 26,209 | 13,891 | - | 40,099 | | VMASC |
| 200158-010 | * | CITY OF PORTSMOUTH | BEHR, J. | 9010 | 6,086 | 19 | - | 3,364 | 9,469 | 5,019 | - | 14,488 | | VMASC |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | BEHR, J. | 9010 | 2,246 | 173 | - | - | 2,419 | 1,330 | - | 3,749 | | VMASC |
| 100488-010 | * | NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | COLLINS, A. | 9010 | 39,666 | 1,541 | - | - | 41,207 | 21,840 | - | 63,047 | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | COLLINS, A. | 9010 | 14,756 | 680 | - | 120 | 15,556 | 8,181 | - | 23,737 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | COLLINS, A. | 9010 | 8,399 | 3,920 | - | - | 12,318 | 6,529 | - | 18,847 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | COLLINS, A. | 9010 | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 300258-010 | * | UNIVERSITY OF MARYLAND | COLLINS, A. | 9010 | 7,029 | 437 | - | - | 7,466 | 3,957 | - | 11,422 | | VMASC |
| 300367-010 | | EASTERN VIRGINIA MEDICAL SCHOOL | COLLINS, A. | 9010 | 33,850 | - | - | - | 33,850 | 18,617 | - | 52,467 | | VMASC |
| 100072-010 | * | ARMY MEDICAL RESEARCH AND MATERIALS COMMAND | CROLL, M. | 9010 | - | 318 | - | - | 318 | 191 | - | 509 | | VMASC |
| 100143-004 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | CROLL, M. | 9010 | 8,614 | - | - | - | 8,614 | 5,599 | - | 14,212 | | VMASC |
| 100105-059 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | DIALLO, S. | 9010 | 7,820 | - | - | (1) | 7,819 | 2,737 | - | 10,556 | | VMASC |
| 100482-010 | * | NAVAL AIR WARFARE CENTER TSD | DIALLO, S. | 9010 | 4,327 | 867 | - | - | 5,194 | 3,116 | - | 8,310 | | VMASC |
| 400253-010 | * | BOSTON VA RESEARCH INSTITUTE, INC | DIALLO, S. | 9010 | 13,201 | 3,080 | - | - | 16,281 | 2,442 | - | 18,723 | | VMASC |
| 100334-010 | * | U.S. PUBLIC HEALTH SERVICE (INCLUDING NIH) | DIAZ, R. | 9010 | 6,018 | (209) | - | - | 5,809 | 3,079 | - | 8,888 | | VMASC |
| 100515-010 | * | U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT | DIAZ, R. | 9010 | 19,027 | 7,182 | - | - | 26,209 | 13,891 | - | 40,099 | | VMASC |
| 200158-010 | * | CITY OF PORTSMOUTH | DIAZ, R. | 9010 | 5,907 | 19 | - | 3,265 | 9,191 | 4,871 | - | 14,062 | | VMASC |

# SCHEDULE 5

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY**
**OF AN ACADEMIC DEPARTMENT**
(MEASURED BY EXPENDITURES INCURRED)
**FOR FISCAL YEAR 2016**

| | | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | DEPT | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 100488-010 | * | NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | EZELL, B. | 9010 | 52,888 | 2,055 | - | - | 54,943 | 29,120 | - | 84,062 | | VMASC |
| 200190-010 | | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | EZELL, B. | 9010 | 30,884 | 1,594 | - | - | 32,478 | 17,213 | - | 49,692 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | EZELL, B. | 9010 | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 400253-010 | * | BOSTON VA RESEARCH INSTITUTE, INC | DIALLO, S. | 9010 | 13,201 | - | - | - | 13,201 | 1,980 | - | 15,181 | | VMASC |
| 400289-010 | * | BATTELLE CORPORATION | EZELL, B. | 9010 | 33,023 | 396 | - | - | 33,419 | 18,381 | - | 51,800 | | VMASC |
| 400284-010 | * | THE GENEVA FOUNDATION | GORE, R. | 9010 | 17,427 | 343 | - | - | 17,770 | 9,773 | - | 27,543 | | VMASC |
| 400289-010 | * | BATTELLE CORPORATION | GORE, R. | 9010 | 33,023 | 396 | - | - | 33,419 | 18,381 | - | 51,800 | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | FOYTIK, P. | 9010 | 14,756 | 680 | - | 120 | 15,556 | 8,181 | - | 23,737 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | FOYTIK, P. | 9010 | 8,399 | 3,920 | - | - | 12,318 | 6,529 | - | 18,847 | | VMASC |
| 200189-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | FOYTIK, P. | 9010 | 2,738 | - | - | - | 2,738 | 1,451 | - | 4,190 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | FRYDENLUND, E. | 9010 | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | GARCIA, H. | 9010 | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 300319-010 | * | OLD DOMINION UNIVERSITY | GARCIA, H. | 9010 | 3,749 | - | - | 680 | 4,429 | - | - | 4,429 | | VMASC |
| 400244-010 | * | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | GARCIA, H. | 9010 | 13,617 | 906 | - | - | 14,523 | 3,776 | - | 18,299 | | VMASC |
| 100515-010 | * | U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT | GILES, B. | 9010 | 9,513 | 3,591 | - | - | 13,104 | 6,945 | - | 20,050 | | VMASC |
| 200158-010 | * | CITY OF PORTSMOUTH | GILES, B. | 9010 | 5,907 | 19 | - | 3,265 | 9,191 | 4,871 | - | 14,062 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | GILES, B. | 9010 | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 300319-010 | * | OLD DOMINION UNIVERSITY | GILES, B. | 9010 | 1,499 | - | - | 272 | 1,771 | - | - | 1,771 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | GORE, R. | 9010 | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 100576-010 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | GORE, R. | 9010 | 5,906 | - | - | (0) | 5,905 | 3,839 | - | 9,744 | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | JORDAN, C. | 9010 | 14,756 | 680 | - | 120 | 15,556 | 8,181 | - | 23,737 | | VMASC |
| 200184-010 | * | CITY OF PORTSMOUTH | JORDAN, C. | 9010 | 2,413 | - | - | 0 | 2,413 | 1,279 | - | 3,692 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | JORDAN, C. | 9010 | 4,199 | 1,960 | - | - | 6,159 | 3,264 | - | 9,423 | | VMASC |
| 400253-010 | * | BOSTON VA RESEARCH INSTITUTE, INC | LYNCH, C. | 9010 | 13,201 | 3,080 | - | - | 16,281 | 2,442 | - | 18,723 | | VMASC |
| 300328-010 | | NORFOLK STATE UNIVERSITY | PADILLA, J. | 9010 | 95,866 | 6,438 | - | - | 102,304 | 54,221 | - | 156,524 | | VMASC |
| 300366-010 | * | UNIVERSITY OF NORTH CAROLINA | PADILLA, J. | 9010 | 749 | 58 | - | - | 806 | 443 | - | 1,250 | | VMASC |
| 100072-010 | * | ARMY MEDICAL RESEARCH AND MATERIALS COMMAND | PAPELIS, Y. | 9010 | - | 1,272 | - | - | 1,272 | 763 | - | 2,036 | | VMASC |
| 100143-002 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | PAPELIS, Y. | 9010 | 5,268 | - | - | - | 5,268 | 3,161 | - | 8,430 | | VMASC |
| 100143-004 | * | SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) | PAPELIS, Y. | 9010 | 17,227 | - | - | - | 17,227 | 11,198 | - | 28,425 | | VMASC |
| 100499-010 | * | LANGLEY RESEARCH CENTER | PAPELIS, Y. | 9010 | 32,038 | 673 | - | - | 32,711 | 17,337 | - | 50,048 | | VMASC |
| 100521-010 | * | AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) | PAPELIS, Y. | 9010 | 16,140 | 757 | - | - | 16,896 | 5,914 | - | 22,810 | | VMASC |
| 300337-010 | * | OLD DOMINION UNIVERSITY | PAPELIS, Y. | 9010 | 17,571 | 2,122 | - | - | 19,693 | - | - | 19,693 | | VMASC |
| 400149-020 | * | OPPORTUNITY, INC. | PAPELIS, Y. | 9010 | - | (105) | - | - | (105) | (11) | - | (116) | | VMASC |
| 400149-030 | * | OPPORTUNITY, INC. | PAPELIS, Y. | 9010 | 6,368 | 169 | - | 112 | 6,650 | 654 | - | 7,304 | | VMASC |
| 100072-010 | * | ARMY MEDICAL RESEARCH AND MATERIALS COMMAND | PARODI, A. | 9010 | - | 3,817 | - | - | 3,817 | 2,290 | - | 6,108 | | VMASC |
| 300303-010 | * | OLD DOMINION UNIVERSITY | PARODI, A. | 9010 | (74) | - | - | - | (74) | - | - | (74) | | VMASC |
| 400284-010 | * | THE GENEVA FOUNDATION | PARODI, A. | 9010 | 52,280 | 1,030 | - | - | 53,310 | 29,320 | - | 82,630 | | VMASC |

# SCHEDULE 5

**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**ENTERPRISE CENTERS INCLUDING PROJECTS REPORTED AS ACTIVITY**
**OF AN ACADEMIC DEPARTMENT**
(MEASURED BY EXPENDITURES INCURRED)
**FOR FISCAL YEAR 2016**

| | | | | | PROJECT DIRECT COST | | | | | PROJECT IDC AND FEES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT NUMBER | | | PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR | DEPT | PERSONNEL AND FRINGE BENEFITS | SUPPLIES, CONTRACTUAL, GENERAL, & TRAVEL | EQUIPMENT | SUBCONTRACTS, CONSTRUCTION, TUITION & OTHER | TOTAL DIRECT COSTS | REIMBURSED INDIRECT COSTS | TOTAL SPECIAL FEES | TOTAL PROJECT COSTS | EFFECTIVE INDIRECT COST RATE | CENTER |
| 400240-003 | | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | RECHOWICZ, K | 9010 | 5,754 | - | - | (0) | 5,754 | 1,496 | - | 7,250 | | VMASC |
| 400244-010 | * | COMMONWEALTH CENTER FOR ADVANCED MANUFACTURING | RECHOWICZ, K | 9010 | 20,426 | 1,358 | - | - | 21,784 | 5,664 | - | 27,448 | | VMASC |
| 400149-020 | * | OPPORTUNITY, INC. | REED, P. | 9010 | - | (53) | - | - | (53) | (5) | - | (58) | | VMASC |
| 200152-010 | * | CITY OF VIRGINIA BEACH | ROBINSON, M. | 9010 | 73,779 | 3,400 | - | 600 | 77,779 | 40,905 | - | 118,685 | | VMASC |
| 200184-010 | * | CITY OF PORTSMOUTH | ROBINSON, M. | 9010 | 7,239 | - | - | 1 | 7,239 | 3,837 | - | 11,077 | | VMASC |
| 200187-010 | * | CITY OF PORTSMOUTH | ROBINSON, M. | 9010 | 20,997 | 9,799 | - | - | 30,796 | 16,322 | - | 47,117 | | VMASC |
| 200189-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | ROBINSON, M. | 9010 | 8,215 | - | - | - | 8,215 | 4,354 | - | 12,569 | | VMASC |
| 200215-010 | * | VIRGINIA DEPARTMENT OF EMERGENCY MANAGEMENT | ROBINSON, M. | 9010 | 2,842 | 200 | - | - | 3,041 | 1,673 | - | 4,714 | | VMASC |
| 300234-010 | * | UNIVERSITY OF IDAHO | ROBINSON, M. | 9010 | 51 | 179 | - | - | 229 | 122 | - | 351 | | VMASC |
| 300234-017 | * | UNIVERSITY OF IDAHO | ROBINSON, M. | 9010 | 1,551 | (0) | - | - | 1,551 | 822 | - | 2,372 | | VMASC |
| 300234-070 | * | UNIVERSITY OF IDAHO | ROBINSON, M. | 9010 | 7,541 | 439 | - | 7,258 | 15,237 | 4,229 | - | 19,466 | | VMASC |
| 300258-010 | * | UNIVERSITY OF MARYLAND | ROBINSON, M. | 9010 | 28,114 | 1,749 | - | - | 29,863 | 15,827 | - | 45,690 | | VMASC |
| 100105-064 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 9010 | 2,162 | - | - | 190,658 | 192,820 | 757 | - | 193,576 | | VMASC |
| 100105-066 | | NAVSUP FLEET LOGISTICS CENTER NORFOLK | SOKOLOWSKI, J. | 9010 | 45,203 | 3,225 | - | - | 48,428 | 16,950 | - | 65,378 | | VMASC |
| 100151-010 | | OFFICE OF THE SECRETARY OF DEFENSE | SOKOLOWSKI, J. | 9010 | - | - | - | (503) | (503) | (50) | - | (554) | | VMASC |
| 300336-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 9010 | 554 | - | - | 1 | 555 | - | - | 555 | | VMASC |
| 300337-010 | * | OLD DOMINION UNIVERSITY | SOKOLOWSKI, J. | 9010 | 1,727 | 472 | - | - | 2,198 | - | - | 2,198 | | VMASC |
| 300341-010 | | VIRGINIA COMMONWEALTH UNIVERSITY | WEINBERG, S. | 9010 | 35,475 | 5,315 | - | - | 40,790 | 21,618 | - | 62,408 | | VMASC |
| | | | | | 1,683,218 | 366,695 | - | 1,010,714 | 3,060,627 | 812,568 | - | 3,873,196 | 26.55% | |
| | | | | | **4,320,461** | **1,210,091** | **122,159** | **1,437,771** | **7,090,482** | **2,507,156** | **-** | **9,630,552** | **35.36%** | |

# SCHEDULE 6

## Sponsored Program Activity

## Proposals Submitted and Awards Funded

## Fiscal Year 2016 through Fiscal Year 2012

**SCHEDULE 6**
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**
**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012**

| | PROPOSALS SUBMITTED | | | | | AWARDS FUNDED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 |
| **COLLEGE OF ARTS & LETTERS** | | | | | | | | | | |
| Art | $ - | $ - | $ - | $ - | $ 2,000 | $ - | $ - | $ - | $ - | $ - |
| Communication & Theatre Arts | 43,829 | 252,579 | 620,942 | 666,900 | 658,122 | 30,340 | 22,500 | - | - | 36,914 |
| English | 712,206 | 125,456 | 43,063 | 131,445 | 172,993 | 1,000 | 46,956 | 28,939 | 1,000 | 5,190 |
| Foreign Languages & Literatures | - | 89,078 | 213,307 | 264,126 | 286,320 | - | - | 6,494 | - | - |
| History | 6,300 | 100,000 | 53,782 | - | 282,471 | - | - | 44,487 | 54,770 | 54,119 |
| Music | - | 4,600 | - | - | - | - | - | - | - | - |
| Philosophy & Religious Studies | 67,565 | 77,305 | 135,017 | 750 | 6,000 | 18,612 | - | - | - | 6,000 |
| Political Science & Geography | 186,390 | 836,072 | 581,193 | 433,142 | 273,642 | 81,285 | 17,500 | 56,737 | 137,564 | 69,104 |
| Social Science Research Center | 461,893 | 3,345,297 | 266,380 | 344,229 | 170,087 | 206,114 | 60,000 | 204,366 | 198,595 | 192,514 |
| Sociology & Criminal Justice | 3,878,504 | 3,127,178 | 4,977,302 | 3,531,183 | 3,565,580 | 442,507 | 2,000 | - | 21,344 | 28,032 |
| Dean's Office | 58,025 | - | 1,650 | 1,500 | 23,000 | - | - | 27,827 | 32,843 | 33,452 |
| College Total | $ 5,414,712 | $ 7,957,564 | $ 6,892,636 | $ 5,373,275 | $ 5,440,213 | $ 779,858 | $ 148,956 | $ 368,850 | $ 446,116 | $ 425,325 |
| % Change from prior year | -31.96% | 15.45% | 28.28% | -1.23% | -11.14% | 423.55% | -59.62% | -17.32% | 4.89% | -48.40% |
| Average yearly increase ( decrease) | -2.31% | | | | | -1.08% | | | | |
| **COLLEGE OF BUSINESS AND PUBLIC ADMINISTRATION** | | | | | | | | | | |
| Management | $ 2,500 | $ - | $ - | $ 143,983 | $ 25,000 | $ 2,500 | $ - | $ - | $ - | $ 25,000 |
| Economics | 473,697 | 10,834 | 149,497 | 138,278 | 217,927 | 83,615 | 85,997 | 50,000 | 21,264 | 57,000 |
| Finance | - | 614,859 | 13,501 | | | - | - | - | | |
| Information Systems/Decision Science | 2,222,702 | 2,783,518 | 2,082,405 | 865,639 | 2,082,854 | 18,612 | 186,997 | 190,589 | - | - |
| Marketing | 286,630 | - | 139,708 | | | 14,999 | - | - | | |
| Public Service | 569,923 | 363,993 | 493,384 | 366,125 | 10,311 | 77,738 | - | - | 100,610 | 10,311 |
| College Total | $ 3,555,452 | $ 3,773,205 | $ 2,878,495 | $ 1,514,025 | $ 2,336,092 | $ 197,464 | $ 272,994 | $ 240,589 | $ 121,874 | $ 92,311 |
| % Change from prior year | -5.77% | 31.08% | 90.12% | -35.19% | -11.49% | -27.67% | 13.47% | 97.41% | 32.03% | -71.33% |
| Average yearly increase ( decrease) | 6.94% | | | | | -7.73% | | | | |

**SCHEDULE 6**
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**
**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012**

| | PROPOSALS SUBMITTED | | | | | AWARDS FUNDED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 |
| **COLLEGE OF EDUCATION** | | | | | | | | | | |
| Center of Educational Partnerships | $ 7,772,693 | $ 4,552,356 | $ 13,872,006 | $ - | $ - | $ 725,198 | $ 296,328 | $ 303,028 | $ - | $ - |
| Communication Disorders and Special Education | 7,622,526 | 8,570,881 | 9,160,608 | 9,107,728 | 5,943,532 | 3,539,575 | 3,386,586 | 3,445,431 | 3,711,358 | 3,259,642 |
| Counseling and Human Services | 645,822 | 1,754,803 | 1,082,910 | 183,230 | 1,425,579 | 73,835 | 176,362 | 142,154 | 129,517 | 339,320 |
| Educational Foundations and Leadership | 2,382,606 | 1,224,373 | 4,477,339 | 154,489 | 614,091 | 75,768 | 153,738 | 164,121 | 373,272 | 404,244 |
| Foundations and Special Programs | - | - | - | - | 2,499,569 | - | - | - | 12,862 | 2,513,493 |
| Human Movement Sciences | 1,927,374 | 255,247 | 2,039,566 | 1,981,547 | 1,565,251 | 34,441 | 82,648 | 196,134 | 133,708 | 86,846 |
| STEM Education and Professional Studies | 3,048,362 | 3,165,398 | 4,836,792 | 4,243,227 | 7,649,832 | 470,534 | 251,662 | 636,790 | 537,396 | 5,805,751 |
| Teaching and Learning | 3,040,287 | 1,799,602 | 3,237,050 | 1,306,713 | 1,939,159 | - | 790,864 | 761,182 | 491,280 | 314,973 |
| Dean's Office | 823,334 | 872,701 | 272,536 | 2,512,082 | 19,782,746 | 776,000 | 472,536 | 412,038 | 615,489 | 18,429,015 |
| College Total | $ 27,263,004 | $ 22,195,361 | $ 38,978,807 | $ 19,489,016 | $ 41,419,758 | $ 5,695,350 | $ 5,610,724 | $ 6,060,878 | $ 6,004,882 | $ 31,153,283 |
| % Change from prior year | 22.83% | -43.06% | 100.00% | -52.95% | 78.32% | 1.51% | -7.43% | 0.93% | -80.72% | 429.60% |
| Average yearly increase ( decrease) | 3.47% | | | | | -0.64% | | | | |
| **COLLEGE OF ENGINEERING & TECHNOLOGY** | | | | | | | | | | |
| Center for Advanced Engineering Environments | - | - | - | - | - | - | 590,469 | 1,009,393 | | - |
| Civil & Environmental Engineering | 9,094,065 | 5,166,059 | 3,214,466 | 8,536,172 | 4,881,800 | 1,726,005 | - | - | 757,245 | 844,041 |
| Electrical & Computer Engineering | 13,939,958 | 17,739,574 | 15,923,596 | 14,083,036 | 24,536,911 | 2,289,620 | 2,509,953 | 2,791,842 | 2,861,655 | 3,424,884 |
| Engineering Career Management Center | - | - | - | - | 10,000 | - | - | - | | 10,000 |
| Engineering Management and Systems Engineering | 2,742,809 | 5,619,632 | 1,891,456 | 2,763,197 | 1,336,310 | 157,466 | 810,804 | 195,111 | 372,042 | 723,907 |
| Engineering Technology | 6,568,428 | 5,376,504 | 4,672,026 | 4,139,876 | 1,597,989 | 1,669,592 | 383,531 | 158,290 | 283,030 | 887,780 |
| Mechanical & Aerospace Engineering | 5,971,306 | 12,040,934 | 7,632,052 | 7,692,370 | 5,556,802 | 1,366,851 | 1,429,282 | 809,129 | 951,108 | 591,550 |
| Modeling, Simulation & Visualization Engineering | 26,217,111 | 9,431,733 | 22,293,259 | 5,077,335 | 9,729,742 | 2,249,559 | 3,555,337 | 3,745,625 | 1,408,708 | 479,129 |
| National Centers Systems of Systems Engineering | - | - | - | 438,809 | - | - | - | - | 357,304 | 27,075 |
| Dean's Office | 996,955 | 13,677,760 | 6,332,123 | 836,629 | 432,856 | 334,999 | 50,000 | 110,000 | 57,261 | 85,224 |
| College Total | $ 65,530,632 | $ 69,052,195 | $ 61,958,978 | $ 43,567,424 | $ 48,082,409 | $ 9,794,091 | $ 9,329,377 | $ 8,819,390 | $ 7,048,353 | $ 7,073,590 |
| % Change from prior year | -5.10% | 11.45% | 42.21% | -9.39% | -13.55% | 4.98% | 5.78% | 25.13% | -0.36% | -10.27% |
| Average yearly increase ( decrease) | 3.56% | | | | | 4.85% | | | | |

**SCHEDULE 6**
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**
**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012**

| | PROPOSALS SUBMITTED | | | | | AWARDS FUNDED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 |
| **COLLEGE OF HEALTH SCIENCES** | | | | | | | | | | |
| Community & Environmental Health | $ 1,552,092 | $ 2,382,036 | $ 996,695 | $ 1,212,534 | $ 538,529 | $ 106,949 | $ 86,680 | $ 129,951 | $ 506,107 | $ 83,556 |
| Dental Hygiene | 1,085,532 | 680,315 | 641,555 | 255,746 | 261,896 | 35,322 | 84,050 | 37,692 | 140,942 | 5,005 |
| Medical Diagnostic & Translation Sciences | 3,651,458 | 12,477,283 | 12,748,599 | 1,722,427 | 5,345,670 | 2,147,602 | 1,461,533 | 500,044 | 992,787 | 1,672,699 |
| Nursing | 4,407,576 | 2,524,806 | 3,077,080 | 4,229,650 | 4,817,710 | 1,801,399 | 1,248,605 | 608,348 | 820,280 | 555,091 |
| Physical Therapy | 1,417,021 | 634,050 | 1,769,146 | 954,085 | 1,034,839 | 12,779 | 209,912 | 162,539 | 254,513 | 150,911 |
| Dean's Office | 579,594 | 1,109,558 | 76,419 | - | - | - | 15,000 | 57,773 | 28,465 | - |
| College Total | $ 12,693,272 | $ 19,808,047 | $ 19,309,494 | $ 8,374,442 | $ 11,998,643 | $ 4,104,051 | $ 3,105,780 | $ 1,496,347 | $ 2,743,094 | $ 2,467,262 |
| % Change from prior year | -35.92% | 2.58% | 130.58% | -30.21% | 7.27% | 32.14% | 107.56% | -45.45% | 11.18% | 28.39% |
| Average yearly increase ( decrease) | 2.70% | | | | | 22.71% | | | | |
| **COLLEGE OF SCIENCES** | | | | | | | | | | |
| Biological Sciences | $ 19,806,536 | $ 20,545,968 | $ 24,134,374 | $ 10,128,824 | $ 5,325,038 | $ 2,372,424 | $ 1,582,361 | $ 1,128,100 | $ 1,735,051 | $ 1,321,654 |
| Center for Coastal Physical Oceanography | 4,265,269 | 5,606,910 | 5,599,819 | 4,439,394 | 3,594,568 | 640,905 | 356,119 | 391,085 | 182,833 | 2,292,725 |
| Chemistry and Biochemistry | 124,085,044 | 13,398,330 | 127,289,760 | 30,062,563 | 101,038,641 | 1,935,570 | 2,827,521 | 2,055,441 | 5,092,803 | 215,038 |
| Computer Science | 7,474,239 | 12,097,893 | 14,572,710 | 10,939,445 | 7,961,175 | 2,293,408 | 3,424,949 | 653,188 | 550,503 | 1,346,785 |
| Mathematics and Statistics | 3,494,460 | 3,722,864 | 3,522,753 | 3,984,100 | 3,624,977 | 406,255 | 485,547 | 872,259 | 769,616 | 692,762 |
| Ocean, Earth & Atmospheric Sciences | 19,028,932 | 13,837,812 | 15,085,778 | 12,008,009 | 14,550,385 | 3,700,789 | 2,942,012 | 1,718,930 | 4,961,211 | 4,257,127 |
| Physics | 14,332,714 | 6,155,595 | 16,123,862 | 13,900,363 | 16,821,400 | 3,325,122 | 3,768,552 | 4,417,928 | 3,394,163 | 3,449,043 |
| Psychology | 1,958,008 | 12,080,538 | 8,060,032 | 4,334,235 | 9,800,833 | 1,822,824 | 865,194 | 1,397,956 | 1,677,716 | 1,133,371 |
| Dean's Office | - | 361,500 | - | 15,790 | - | - | - | 5,366 | 6,607 | 6,528 |
| College Total | $ 194,445,201 | $ 87,807,410 | $ 214,389,088 | $ 89,812,723 | $ 162,717,018 | $ 16,497,298 | $ 16,252,254 | $ 12,640,253 | $ 18,370,503 | $ 14,715,033 |
| % Change from prior year | 121.45% | -59.04% | 138.71% | -44.80% | 71.84% | 1.51% | 28.58% | -31.19% | 24.84% | -19.96% |
| Average yearly increase ( decrease) | 21.07% | | | | | -2.05% | | | | |

**SCHEDULE 6**
**OLD DOMINION UNIVERSITY RESEARCH FOUNDATION**
**SUMMARY OF PROPOSAL AND AWARD ACTIVITY**
**FISCAL YEAR 2016 THROUGH FISCAL YEAR 2012**

| | PROPOSALS SUBMITTED | | | | | AWARDS FUNDED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 | FY 16 | FY 15 | FY 14 | FY 13 | FY 12 |
| **OFFICE OF RESEARCH AND OTHER UNITS** | | | | | | | | | | |
| VMASC: Virginia Modeling, Analysis & Simulation Center | $ 21,340,031 | $ 30,809,977 | $ 18,066,607 | $ 19,345,791 | $ 9,490,476 | $ 1,524,927 | $ 1,506,024 | $ 2,127,012 | $ 3,934,928 | $ 7,332,597 |
| Frank Reidy Research Center for Bioelectrics | 24,452,423 | 26,309,702 | 19,511,697 | 11,335,871 | 6,683,144 | 3,792,085 | 2,122,087 | 3,851,893 | 389,680 | 1,316,061 |
| ODU Business Gateway | 3,086,737 | 2,912,549 | 10,044,214 | 2,082,237 | 1,060,000 | 1,826,114 | 815,531 | 1,755,592 | 1,319,813 | 310,000 |
| Micellaneous Units | 6,127,395 | 983,823 | 527,557 | 1,016,962 | 1,003,451 | 581,113 | 506,581 | 708,657 | 806,790 | 649,059 |
| Total Office of Research and Other Units | $ 55,006,587 | $ 61,016,051 | $ 48,150,075 | $ 33,780,861 | $ 18,237,072 | $ 7,724,240 | $ 4,950,223 | $ 8,443,154 | $ 6,451,211 | $ 9,607,717 |
| % Change from prior year | -9.85% | 26.72% | 42.54% | 85.23% | -26.17% | 56.04% | -41.37% | 30.88% | -32.85% | -11.83% |
| Average yearly increase ( decrease) | 24.53% | | | | | -5.82% | | | | |
| Total University Activity | $ 363,908,861 | $ 271,609,834 | $ 392,557,573 | $ 201,911,766 | $ 290,231,204 | $ 44,792,351 | $ 39,670,309 | $ 38,069,461 | $ 41,186,033 | $ 65,534,520 |
| % Change from prior year | 33.98% | -30.81% | 94.42% | -30.43% | 33.02% | 12.91% | 4.21% | -7.57% | -37.15% | 42.11% |
| Average yearly increase ( decrease) | 13.36% | | | | | -6.33% | | | | |
| **AFFILIATED ACTIVITY** | | | | | | | | | | |
| Applied Research Center - ARC | $ - | $ - | $ - | $ - | $ 17,683 | $ - | $ - | $ - | $ - | $ 17,683 |
| Mid-Atlantic Institute for Space & Technology | - | - | - | - | 25,720 | - | - | - | | 28,220 |
| VA Commercial Space Flight Authority | - | - | - | 122,082 | 10,125,000 | - | 12,071,426 | 17,383,775 | 68,889,898 | 10,739,429 |
| VA Space Grant Consortium | 4,874,897 | 6,988,483 | 3,735,036 | 7,096,444 | 1,312,378 | 1,877,883 | 3,299,640 | 5,822,264 | 5,620,555 | 3,573,754 |
| VA Tidewater Consortium for Higher Education | 2,390,142 | 10,542,015 | - | 944,035 | 9,718,349 | 605,170 | 577,534 | 455,057 | 723,170 | 927,958 |
| Total Non-University Activity | $ 7,265,039 | $ 17,530,498 | $ 3,735,036 | $ 8,162,561 | $ 21,199,130 | $ 2,483,053 | $ 15,948,600 | $ 23,661,096 | $ 75,233,623 | $ 15,287,045 |
| % Change from prior year | -58.56% | 369.35% | -54.24% | -61.50% | 153.04% | -84.43% | -32.60% | -68.55% | 392.14% | -59.10% |
| Average yearly increase ( decrease) | -13.15% | | | | | -16.75% | | | | |
| **GRAND TOTAL** | $ 371,173,899 | $ 289,140,332 | $ 396,292,609 | $ 210,074,327 | $ 311,430,334 | $ 47,275,404 | $ 55,618,908 | $ 61,730,557 | $ 116,419,656 | $ 80,821,565 |
| **% CHANGE FROM PRIOR YEAR** | 28.37% | -27.04% | 88.64% | -32.55% | 37.46% | -15.00% | -9.90% | -46.98% | 44.05% | 75.26% |
| Average yearly increase ( decrease) | 12.77% | | | | | -8.30% | | | | |