Lafayette College – Grants List Active Externally Funded Grants from July 1, 2024 through June 30, 2025

| Funding Agency/Organization | Name | Division | Department | Project Title | Amount | Beginning Date | Ending Date |
|------------------------------------------------|------------------------|---------------|---------------------|--------------------------------------------------------------------|------------|-------------------|----------------|
| | D. Cl. | | I | | | | |
| | Dr. Chun | | C | | | | |
| Air Force Office of | Wai Liew Dr. Robert | Natural | Computer Science | There is Mare To The Data Finding | | | |
| Scientific Research | | Sciences | | There Is More To The Data - Finding The Hidden Pieces of Knowledge | \$ 210,000 | 15 Can 22 | 14 San 36 |
| Scientific Research | Kurt | Sciences | Biology | The filaden Pieces of Knowledge | \$ 210,000 | 15-Sep-23 | 14-Sep-26 |
| Alan '56 & Wendy | Dr. Lisa | Natural | | Genes to behavior: Unlocking the code | | | |
| Pesky Foundation | Gabel | Sciences | Neuroscience | for early detection of reading disorder | \$ 95,350 | 1-Dec-17 | ongoing |
| | Dr. Douglas | | | | | | |
| American Council of | de Toledo | Interdiscipli | International | Chinese Migrants Transformed a | | | |
| Learned Societies | Piza | nary | Affairs | Border Economy | \$ 60,000 | 1-Jul-24 | 30-Jun-25 |
| Bucknell University | | | | IUSE/PFE: RED Innovation: Enabling | | | |
| (subaward - National | Dr. Sarah | Natural | | Convergence in Undergraduate | | | |
| Science Foundation) | Appelhans | Sciences | Psychology | Engineering through Structural Change | \$ 49,413 | 1-Jul-23 | 30-Jun-26 |
| Commonwealth of | | | | | | | |
| Pennsylvania, | | | Civil and | Revision and Flexural Capacity | | | |
| Department of | Dr. David | | Environmental | Validation of Standard PennDOT | | | |
| Transportation | Mante | Engineering | Engineering | Precast Bridge Deck Panel Joint | \$ 308,952 | 1-Aug-22 | 31-Jan-25 |
| Copenhagen | Dr. Caleb | Interdiscipli | International | The paradoxes of climate smart coffee | | | |
| Business School | Gallemore | nary | Affairs | (PACSMAC) | \$ 32,402 | 4-Jan-21 | 31-Mar-26 |
| Copenhagen | | 11011 | | (************************************** | 7, | | |
| Business School | | | | No Trees, No Future - Unlocking the full | | | |
| (funded through the | Dr. Caleb | Interdiscipli | International | potential of conservation finance (CF | | | |
| Packard Foundation) | Gallemore | nary | Affairs | Future) | \$ 27,567 | 1-May-22 | 30-Apr-25 |
| | | | Chemical and | Designing Sustainable Biorefinery | | | |
| | Dr. Lindsay | | Biomolecular | Products and Processes using Green | | | |
| Dreyfus Foundation | Soh | Engineering | Engineering | Chemistry and Engineering | \$ 75,000 | 27-Oct-20 | 1-Dec-26 |
| <u>, </u> | | 5 5 | 5 5 | Characterizing and Modulating | . , | | |
| | Dr. Michael | Natural | | Bacterial Quorum Sensing Systems with | | | |
| Dreyfus Foundation | Bertucci | Sciences | Chemistry | Synthetic Peptides | \$ 75,000 | 11/6/23 | 11/5/28 |

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| Lieber Institute, Inc (subaward - National Institute of Mental Health) | Dr. Henry Hallock | Natural Sciences | Neuroscience | Molecular, cellular and physiological correlates of sustained attention in the locus coeruleus to anterior cingulate cortex circuit | \$ 231,785 | 12-Sep-23 | 11-Sep-25 |
| National Aeronautics and Space Administration | Dr. Stephanie Douglas | Natural Sciences | Physics | The impact of companions on stellar rotation: a case study in the benchmark Praesepe open cluster | \$ 88,579 | 24-Feb-21 | 23-Feb-26 |
| National Institutes of Health - National Institute of General Medical Sciences | Dr. Justin Hines | Natural Sciences | Chemistry | J-Protein Regulation of Yeast Prion Propagation (renewal) | \$ 442,683 | 1-Aug-21 | 31-Aug-25 |
| National Institutes of Health - Eunice Kennedy Shriver National Institute of Child Health & Human Development | Dr. Lauren Myers | Natural Sciences | Psychology | Using structured video chat to improve relationships between young children and remote grandparents | \$ 406,410 | 10-Aug-22 | 31-Jul-25 |
| National Science Foundation | Dr. Melissa Gordon | Engineering | Chemical and Biomolecular Engineering | CAREER: Gas-regulated Mechanochemical Activation for Bioinspired Responses in Polymer Networks | \$ 600,000 | 1-Apr-22 | 31-Mar-27 |
| National Science Foundation (Collaborative with Purdue University, New York University) | Dr. Lindsay Soh | Engineering | Chemical and Biomolecular Engineering | Collaborative Research: ECO-CBET: Integrated Biochemical and Physicochemical Process to Recover Critical Metals from Municipal Solid Waste in Landfills | \$ 191,339 | 1-Aug-24 | 31-Jul-28 |
| National Science Foundation | Dr. Ryan Van Horn | Engineering | Chemical and Biomolecular Engineering | RUI: Role of Crystallinity and Morphology in Degradation and Drug Release of PEO-b-PCL Films | \$ 265,026 | 1-Jun-24 | 31-May- 27 |

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| National Science Foundation | Dr. Michael Bertucci | Natural Sciences | Chemistry | CAREER: Designing Quorum Sensing Modulators for Lactobacillus plantarum to Probe Interspecies and Host- Microbe Interactions | \$ 496,758 | 15-Aug-21 | 31-Jul-26 |
| National Science Foundation | Dr. Melissa Galloway | Natural Sciences | Chemistry | RUI: Chemical phenomena of complex carbonyl-ammonium aqueous aerosol mimics | \$ 327,192 | 1-Aug-22 | 31-Jul-26 |
| National Science Foundation | Dr. Christa Kelleher | Engineering | Civil and Environmental Engineering | Collaborative Research: Where does the water go: Improving understanding of streamaquifer-atmosphere interactions around Beaver Dam Analogues | \$ 278,278 | 1-Jan-21 | 31-May- 25 |
| National Science Foundation (Collaborative with Penn State University) | Dr. Christian Lopez Bencosme | Natural Sciences | Computer Science | Collaborative Research: Adaptable Game-based, Interactive Learning Environments for STEM Education (AGILE STEM) | \$ 149,992 | 15-Sep-23 | 31-Aug-26 |
| National Science Foundation (Collaborative with Illinois State University) | Dr. Tamara Carley | Natural Sciences | Geology and Environm ental Geosciences | Collaborative Research: What lies beneath: An investigation of subglacial silicic magma systems (Vatnajokull, Iceland) | \$ 238,445 | 1-Aug-22 | 31-Jul-26 |
| National Science Foundation (Collaborative with Lehigh University | Dr. Tamara Carley | Natural Sciences | Geology and Environm ental Geosciences | NSF GEO-NERC: Collaborative Proposal: A general model for bubble nucleation and growth in volcanic systems | \$ 157,232 | 1-Aug-22 | 31-Jul-26 |
| National Science Foundation (Collaboration with Michigan State University) | Dr. Farhan Abedin | Natural Sciences | Mathematical Sciences | Collaborative Research: Parabolic Monge-Ampère Equations, Computational Optimal Transport, and Geometric Optics | \$ 184,593 | 15-Jul-23 | 30-Jun-26 |

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| National Science Foundation | Dr. Jeffrey Liebner | Natural Sciences | Mathematical Sciences | REU Site: Undergraduate Research in Mathematics, Applied Mathematics, and Statistics at Lafayette College | carley \$ 334,620 | 1-May-22 | 30-Apr-25 |
| National Science Foundation | Dr. Daniel Turek | Natural Sciences | Mathematical Sciences | Collaborative Research: Enabling Hybrid Methods in the NIMBLE Hierarchical Statistical Modeling Platform | \$ 69,878 | 15-May- 23 | 30-Jun-25 |
| National Science Foundation | Dr. Ryan Rosario | Engineering | Mechanical Engineering | ERI: Mechanical Characterization of the Interfascicular Matrix of Patellar Tendon in Shear and Transverse Tension | \$ 200,000 | 1-May-24 | 30-Apr-26 |
| National Science Foundation | Dr. Brooks Thomas | Natural Sciences | Physics | RUI: Implications of Non-Minimal Dark Sectors | \$ 150,000 | 1-Aug-23 | 31-Jul-26 |
| National Science Foundation | Dr. Christa Kelleher | Engineering | Civil and Environmental Engineering | CAREER: Linking hydrological processes and landscape form to the riverine thermal regime in the Mid-Atlantic US | \$ 489,451 | 3/15/25 | 2/28/30 |
| NCMA Education & Research Foundation | Dr. Michael McGuire | Engineering | Civil and Environmental Engineering | Response of Geogrid-Reinforced Segmental Retaining Walls Subjected to Post and Beam Barrier Loading | \$ 119,514 | 1-Oct-23 | 31-Oct-25 |
| Northeastern University (subaward - National Institute of Neurological Disorders and Stroke) | Dr. Luis Schettino | Natural Sciences | Psychology | Planning and Updating in Frontoparietal Networks for Grasping | \$ 71,080 | 1-Jan-21 | 31-Dec-25 |
| Oregon State University (subaward - National Science Foundation) | Dr. David Nice | Natural Sciences | Physics | The NANOGrav Physics Frontiers Center | \$ 385,761 | 1-Apr-21 | 31-Mar-26 |

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| Organic Syntheses | Dr. Daniel Griffith | Natural Sciences | Chemistry | Tricarbonyl(tropone)iron as a versatile building block for synthesis of diverse, polycyclic, alkaloid-like scaffolds | \$ 16,000 | 1-Jun-23 | 31-Aug-24 |
| Penn State University (subaward - National Aeronautics Space Administration) | Dr. Zoe Boekelheide | Natural Sciences | Physics | Characterization of magnetic particle imaging (MPI) tracers on multiple timescales | \$ 12,000 | 26-Aug-24 | 31-Mar-25 |
| Penn State University (subaward - Commonwealth of PA) | Dr. Carlos Tavares | Social Sciences | Anthropology and Sociology | Constables Education and Training Delivery 2025/26 | \$ 30,000 | 1-Jan-25 | 30-Sep-25 |
| Research Corporation | Dr. Chip Nataro | Natural Sciences | Chemistry | Reaction of palladium dimers with Bis(phosphino) ferrocene ligands with monodentate phosphines | \$ 5,000 | 1-Aug-22 | ongoing |
| Simons Foundation | Dr. Justin Corvino | Natural Sciences | Mathematical Sciences | AMS-Simons Research Enhancement Grant for Primarily Undergraduate Institution (PUI) Faculty | \$ 9,000 | 1-Jul-24 | 30-Jun-27 |
| | | | | Total | \$ 6,875,300 | | |

Key for Title Abbreviations:

ECO-CBET - Environmental Convergence Opportunities in Chemical, Bioengineering, Environmental, and Transport Systems

ERI - Engineering Research Initiation

IUSE/PFE: RED - Improving Undergraduate STEM Education/Professional Formation of Engineers: Revolutionizing Engineering Departments

LEAPS-MPS - Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences

MCA - Mid-Career Advancement

MRI - Major Research Instrumentation

REU - Research Experiences for Undergraduates (from other institutions)

RUI - Research in Undergraduate Institutions