



# **TABLE OF CONTENTS**

#### **Trends Over Time** 2 External Grant Funding, FY87-FY20 3 Grants Awarded, FY15-FY20 4 **External Funding Impact** 5 **FY20 External Grant Activity** 8 **External Proposal Submissions** 9 Grants Funded 10 Grants Funded by Awardee 13 **Grants Management: Active Faculty Projects** 17 FY19-20 Institutional Grant Activity 23 Statement of Purpose 24 Subawards by Division: Faculty of the Future 25 Justice, Equality, and Community 26 Stories Yet to be Told 27 Subawards by Department: Faculty of the Future 28 Justice, Equality, and Community 29 Stories Yet to be Told 30 Institutional Grants by Awardee Justice, Equality, and Community 31 Stories Yet to be Told 34 Faculty of the Future 35 Other Institutional Grants 36

Summer 2020 Student Research	39
Summer Student Researchers, 2010-2020	40
By Discipline and Academic Department	41
By External and Internal Funding Sources	42
Summer 2020 Student Researchers: Sciences	43
Summer 2020 Student Researchers: Social Sciences	45
Summer 2020 Student Researchers: Fine Arts and Humanities	46
Summer 2020 Student Researchers: Interdisciplinary	46
Featured Faculty Projects	
Joseph Ewoodzie	1
Tabitha Peck	6
Nicole Snyder	7
Bryan Thurtle-Schmidt	11
Anthony Kuchera	12
Gayle Kaufman	15
Lia Newman	16
Mitch Anstey	21
Wolfgang Christian and Mario Belloni	22
Michelle Kuchera and Raghu Ramanujan	37
Heather Smith	38
Kata Chillag	47
Sarah Waheed	48

#### Joseph Ewoodzie, Jr.

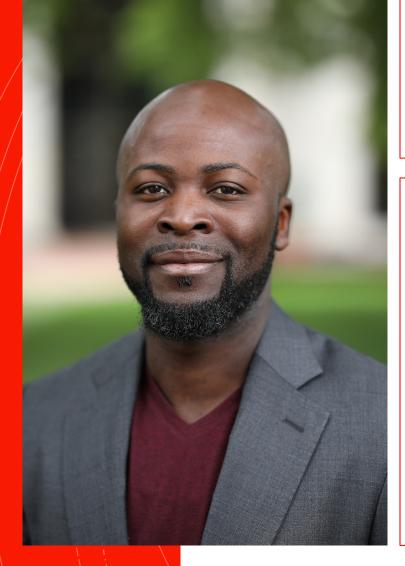
#### National Science Foundation

Malcolm O. Partin Assistant Professor of Sociology, Joseph Ewoodzie, Jr. has been awarded a National Science Foundation CAREER - Faculty Early Career Development Program grant (<u>1944961</u>).

The \$400,000 grant is in support of the project titled, "Transnational Lives in the U.S." This 5-year project aims to use the experiences of Ghanaian migrants to the U.S. to investigate gaps in current transnational literature along three main lines of inquiry: motivations, processes and consequences.

Along with undergraduate student researchers, Professor Ewoodzie will use a mixed methods approach that will include: collecting data from a historical letter archive of over 2,000 letters; oral histories of families who began traveling to the U.S. in the early 1980s; and ethnographic studies in Atlanta, GA, Bronx, NY and Accra, Ghana. During two years of the project, Professor Ewoodzie also plans to teach a seminar on Globalization and Social Change titled, "The African Migration Experience" which will culminate in a two-week trip to Ghana for up to twelve students.

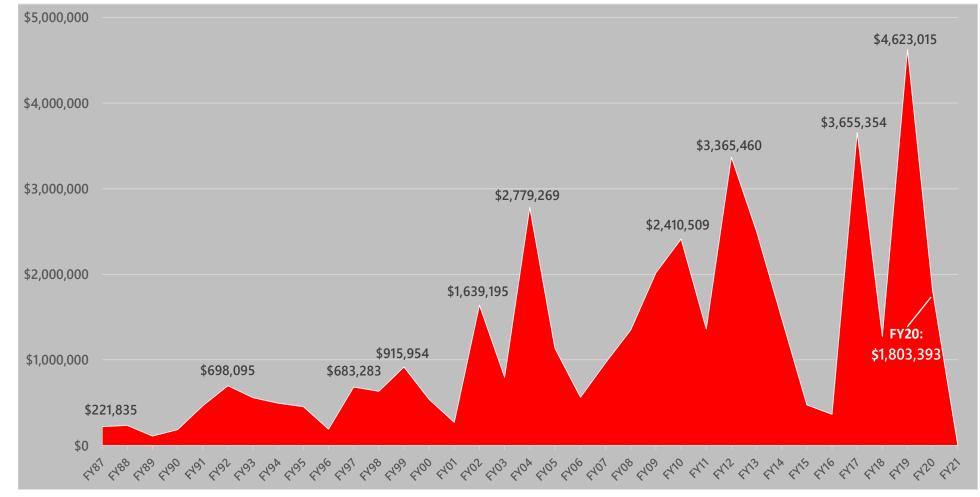
The CAREER is NSF's most prestigious research award, with the vast majority of awardees hailing from large researchintensive universities. Professor Ewoodzie's accomplishment is especially notable since it follows his successful 2018 NSF REU grant (<u>1757506</u>), "Collaborative REU Site: Examining the Intersection of Food, Housing and Healthcare," in the Beatties Ford Road Corridor, Charlotte, NC.



# **TRENDS OVER TIME**

FY20 Year in Review | External Grant Funding | 2

## **EXTERNAL GRANT FUNDING FY87-FY20: \$41,228,923**



Troughs represent in-between years in the federal grant award cycle for large grants that typically run 3-5 years. To bridge these cycling troughs, the Office of Grants and Contracts is encouraging broader faculty participation in the federal grants process and strategic scheduling of submissions.

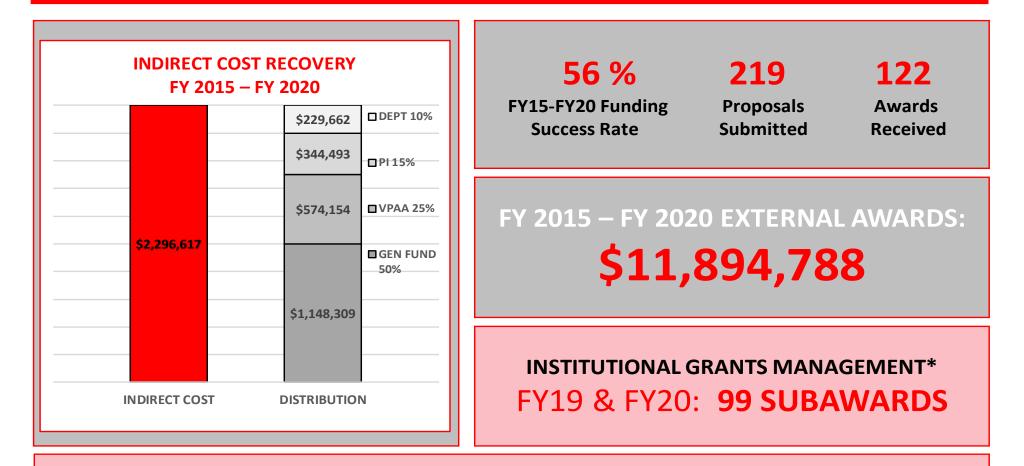
# GRANTS AWARDED FY15-20

	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	TOTALS
Grants Awarded July 1 to June 30	24	20	20	19	14	25	122
Direct Costs	\$412,430	\$357,109	\$3,065,016	\$1,112,720	\$3,253,969	\$1,396,927	\$9,598,171
Indirect Costs	\$61,264	\$5,000	\$590,338	\$164,503	\$1,069,046	\$406,466	\$2,296,617
TOTAL AWARD DOLLARS	\$473,694	\$362,109	\$3,655,354	\$1,277,223	\$4,323,015	\$1,803,393	\$11,894,788

Indirect Costs are reimbursements from funders to cover research-related overhead expenses incurred by the college.

FY20 Year in Review | External Grant Funding | 4

# **EXTERNAL FUNDING IMPACT**



\*The Office of Grants and Contracts conducts post-award grants management for Davidson College Initiatives subawards funded through: Andrew W. Mellon Foundation: Justice, Equality & Community (\$1,200,000) and Stories Yet to be Told (\$250,000); The Duke Endowment: Faculty of the Future (\$2,000,000) and Deliberative Citizenship Initiative (\$256,000); Howard Hughes Medical Institute (HHMI): Fostering Inclusivity and Respect in Science - FIRST (\$1,000,000).

FY20 Year in Review | External Grant Funding | 5

### Tabitha Peck

#### National Science Foundation

Assistant Professor of Mathematics and Computer Science, Tabitha Peck has been awarded a National Science Foundation CAREER – Faculty Early Career Development Program grant (<u>1942146</u>).

The \$549,997 grant is in support of the project titled "Virtual Body Ownership Illusions for Bias Reduction and Fostering Inclusivity in STEM Classrooms." The goal of this 5-year project is to create an environment where STEM education is available for all students and that no student has to face prohibitive barriers to major in a STEM discipline.

One of the outcomes of the project will be a publicly accessible open-source VR application that can be inexpensively deployed on commercially available VR hardware with curriculum guidelines for distribution across the world. The research will involve collaborations with UNC Charlotte and Alamance Community College and will fund the participation of 15 undergraduate research students from Davidson who will develop VR applications, run experiments, write research papers, attend international research conferences, and present research findings.

Additionally, Professor Peck has assembled a robust advisory board consisting of Dr. Robert Bodenheimer of Vanderbilt University, Dr. Benjamin Lok of the University of Florida, and Drs. Jess Good, Barbara Lom, Fuji Lozada and Kristi Multhaup of Davidson College.

The CAREER is NSF's most prestigious research award, with the vast majority of awardees being at large research-intensive universities. Professor Peck's accomplishment is especially notable since it follows her successful collaboration with North Carolina State University on the 2018 NSF grant (<u>1760831</u>), "Pre-service Educators Reimagining Core Experiences in Physics Teaching."





#### **Nicole Snyder**

#### Research Corporation for Science Advancement

Associate Professor of Chemistry and Assistant Dean for Research and Creative Works, Nicole Snyder has been awarded a COVID-19 Initiative grant by the Research Corporation for Science Advancement (RCSA).

RCSA awarded \$55,000 to each of seven research teams selected for the <u>COVID-19 Initiative: Detecting and Mitigating</u> <u>Epidemics</u>. Professor Snyder was awarded for the project titled, "Glycomimetics for Inhibiting SARS-CoV-2 Entry" (27368), with collaborators Mario Schelhaas, of Westfälische Wilhelms University, Münster, Germany, and Laura Hartmann of Heinrich Heine University, Düsseldorf, Germany.

In addition to the significance of the award, Dr.Snyder is the only principal investigator from a primarily undergraduate institution awarded this highly competitive grant.

Professor Snyder actively involves her students in her research and has several other current external awards that provide students with training in carbohydrate chemistry, polymer chemistry, molecular spectroscopy, and biochemical and biophysical techniques that enhance their education and prepare them for a competitive international workforce.

Professor Snyder's grants include: an NIH AREA (<u>R15GM119067</u>) in collaboration with the University of South Carolina Upstate; an NSF RUI (<u>1708546</u>) that has supported the development of a course in Glycomics; and an NSF IRES (<u>1854028</u>) that engages Davidson students in an international cohort research experience at the Heinrich Heine University in Düsseldorf, Germany.

# FY20 EXTERNAL GRANT ACTIVITY

FY20 Year in Review | External Grant Activity | 8

## EXTERNAL PROPOSAL SUBMISSIONS FY20

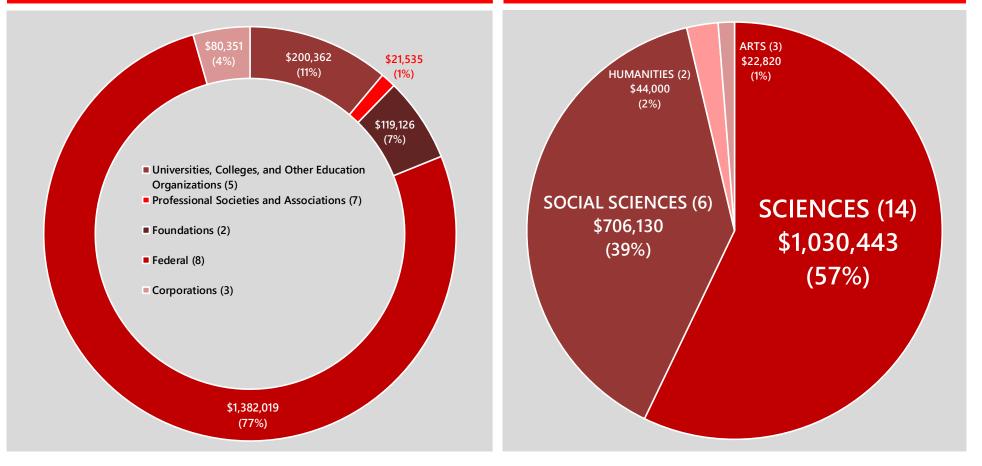
APP	APPLICATIONS SUBMITTED				LICA		NS I	BY DI	SCIP	LINE	
Types of Funding Sources	Number of Submissions	Amount Solicited	% of Total Solicited		_						
Federal	21	\$5,557,482	74.40%	Arts	3						
Foundations	6	\$1,433,301	19.19%	Humanities	4						
Universities, Colleges and Other Education Organizations	6	\$281,355	3.77%	numanities							
Corporations	5	\$161,672	2.16%	Social Sciences	12						
Professional Societies and Associations	7	\$21,535	0.29%								
Local Agencies	1	\$14,247	0.19%	Sciences	27						
TOTALS	46	\$7,469,592	100.00%		0	5	10	15	20	25	30

FY20 Year in Review | External Grant Activity | 9

## **GRANTS FUNDED FY20:** \$1,803,393

#### **AWARDS BY FUNDING SOURCE**

#### **AWARDS BY DISCIPLINE**



#### Bryan Thurtle-Schmidt



#### National Institutes of Health

Assistant Professor of Biology Bryan Thurtle-Schmidt has been awarded a National Institutes of Health AREA: Academic Research Enhancement Award (<u>R15GM132786</u>).

The \$346,277 grant funds the project "Mechanisms of Transport by SLC4 Borate Transporters," with Davidson College student participation in three years of biomedical research. Experiments will focus on dissecting the transport mechanism of SLC4 borate proteins to understand related diseases at a molecular level and enhance development of new treatments.

"AREA awards provide funding for small-scale, new, or ongoing health-related meritorious research projects, enhancing the research environment at eligible institutions and exposing students to research opportunities." NIH typically funds less than 20% of the AREA proposals received for this highly competitive award.

In addition to the NIH AREA, Professor Thurtle-Schmidt also has support for his research from a Life Sciences Research Foundation fellowship.

#### Anthony Kuchera

#### National Science Foundation

Assistant Professor of Physics, Anthony Kuchera has been awarded a National Science Foundation grant (2011398).

The \$176,680 Collaborative Research at Primarily Undergraduate Institutions (RUI) award titled "Study of Exotic Nuclear and Neutron Detector Response," is a 3-year collaboration between Dr.Kuchera and Dr.Warren Rogers of Indiana Wesleyan University, who received a similar award. Both professors are members of the Modular Neutron Array (MoNA) Collaboration which consists of faculty from primarily undergraduate institutions and Michigan State University.

The grant provides funding for 6 Davidson research students who will work alongside the collaborative team consisting of professors, graduate students, and postdocs. The students will be involved at every step of the research project, including weekly video conferences, participation in experiments, and attending professional conferences. There are typically limited opportunities for students to learn nuclear science in the classroom – particularly for undergraduate students in a small liberal arts setting – and this opportunity for training in research at state-of-the-art national facilities has the potential for producing the next generation of nuclear scientists who are also widely educated in the broader context of the humanities and social sciences.

The collaborative team will perform experiments using the Modular Neutron Array at the National Superconducting Cyclotron Laboratory (NSCL) in Michigan - the largest radioactive beam facility in the United States - as well as at Los Alamos Neutron Science Center (LANSCE) at Los Alamos National Laboratory in New Mexico. The focus of the project is to study the properties of atomic nuclei that have many more neutrons than protons.

Professor Kuchera is the only pre-tenure (and youngest) faculty member of the Modular Neutron Array (MoNA) collaboration at NSCL and serves as Executive Director.



#### GRANTS FUNDED BY AWARDEE FY20: \$1,803,393

<b>PI</b> <sup>1</sup>	DEPARTMENT	PROPOSAL TITLE	AGENCY NAME	AGENCY PROGRAM	TOTAL AWARD
Co-PI	DEPARTMENT	Period of Performance	AGENCY NAME	AGEINCY PROGRAIVI	IOTAL AWARD
Antsey, Mitch	Chemistry	Electrochemical Energy Storage through Ligand-Based Charge Manipulation 10/01/2019 – 09/30/2021	Sandia National Laboratories	Contract	\$50,000
Antsey, Mitch	Chemistry	Radialene Radicals for Redox Flow Batteries 03/01/2020 – 02/28/2020	University of North Carolina at Charlotte	NSF Chemistry Program	\$35,088
Bory, Alison	Dance	ACS Dance Consortium 07/01/2019 – 07/31/2020	Associated of Colleges of the South	W&L Subaward	\$1,800
Chartier, Tim	Mathematics and Computer Science	Research on Sports Analytics 02/01/2020 – 05/31/2020	edjSports	Data Analytics	\$7,351
Chillag, Kata <i>Freij, Maysoun</i>	Health and Human Values	International Medical Graduates at the Crossroads: Ethics of Immigration Policy and Health Care in Underserved Areas 01/01/2020 – 12/31/2020	The Greenwall Foundation	Making a Difference	\$97,093
Cho, John	Anthropology	Lifestyle Politics: South Korea Gay Men and the Internet 02/01/2020 – 01/31/2021	The Academy of Korean Studies	Korean Studies Grant 2020: Scholarly Book Publication	\$17,000
Dietrick, Joelle <i>Mundy, Owen</i>	Art and Digital Studies <i>Digital Studies</i>	Tally 08/01/2019 – 01/31/2020	UC Berkeley Center for Long-Term Cybersecurity	Daylight Lab	\$15,000
Ewoodzie, Joseph	Sociology	CAREER: Transnational Lives in the U.S. 05/01/2020 – 04/30/2024	National Science Foundation	CAREER	\$400,000
Gouri Suresh, Shyam	Economics	Education Service Agreement 06/15/2020 – 04/30/2024	Pioneer Academics	Service Contract	\$18,000
Kaufman, Gayle	Sociology	Collaborative Research: RUI: Marriage attitudes post- Marriage Equality	National Science Foundation	Facilitating Research in	\$154,856
Compton, D'Lane	University of New Orleans, Department of Sociology	09/01/2019 – 08/31/2022		Undergraduate Institutions	\$134,000
Kuchera, Anthony	Physics	Collaborative Research: RUI: Study of exotic nuclei and neutron detector response	National Science Foundation	Facilitating Research in	\$176,680
Rogers, Warren	Department of Physics, Indiana Weslyan University	06/15/2020 – 05/31/2020		Undergraduate Institutions (RUI)	\$176,000

Collaborative Grants: Inter- and intra-institutional collaborations, cross-disciplinary research, integration of research and education, public outreach, and participation of underrepresented groups are some of the funder priorities in recent funding trends.

<sup>1</sup>PI : The Principal Investigator (PI) is the primary individual, usually a faculty member, in charge of a research grant, cooperative agreement, contract, or other externally-funded project.

<sup>2</sup>No specified amount given. Will support expenses for 40 early career mathematicians to attend MRC conference on Rhode Island.

PI <sup>1</sup>	DEPARTMENT	PROPOSAL TITLE	AGENCY NAME	AGENCY PROGRAM	TOTAL AWARD
Co-PI	DEFACTIVIENT	Period of Performance	AGEINCT MAIVIE	AGENCI PROGRAM	
Kuchera, Michelle	Physics	FRIB Visiting Scholar Program 07/15/2019 – 06/30/2020	Facility for Rare Isotope Beams (at Michigan State University)	Visiting Scholar Program for Experimental Science	\$5,000
Kuchera, Michelle	Physics	QCD theory and machine learning for global analysis 05/01/2020 – 07/31/2021	Old Dominion University Research Foundation (ODU)	The Center for Nuclear Femtography (CNF)/ Southeastern	\$22,03
Leyva, Diana	Psychology	Evaluation of the Effectiveness of the Food for Thought (FFT) Program 10/01/2019 – 09/30/2021	University of Pittsburgh	Start-up Funds	\$113,274
Multhaup, Kristi <i>Isakoglou, Foivos '20</i>	Psychology <i>Psychology, Student</i>	The Role of Empathy in Responses to Literary Fiction 12/13/2019 – 12/12/2020	Psi Chi	2019-20 Spring Undergraduate Research Grant	\$3,00
Newman, Lia <i>Harry, Elizabeth</i>	Art Gallery Art Gallery	Digital access to college's permanent art collection 04/07/2020 – 12/31/2020	Associated Colleges of the South	Emergency RFP for 2020 Pandemic- Related Grants	\$6,020
Peck, Tabitha	Mathematics and Computer Science	CAREER: Virtual Body Ownership Illusions for Bias Reduction and Fostering Inclusivity in STEM Classrooms 09/01/2020 – 08/31/2025	National Science Foundation	Faculty Early Career Development Program (CAREER)	\$549,997
Ramanujan, Raghu <i>Kuchera, Michelle</i>	Mathematics and Computer Science <i>Physics</i>	Constructing Prototypes for a Universal Monte Carlo Event Generator (UMCEG) 01/01/2020 – 09/30/2020	Thomas Jefferson National Accelerator Facility (Jlab)	Department of Energy Grant - subcontract	\$21,480
Ramanujan, Raghu <i>Kuchera, Michelle</i>	Mathematics and Computer Science <i>Physics</i>	QCD Theory and Machine Learning for Global Analysis 09/30/2018 – 12/31/2019	Southern Universities Research Association (SURA)	Old Dominion University Research Foundation (subaward)	\$3,41
Sarafova, Sophia Watt, Aren '20 Soden, Katie '21	Biology Biology Biology	2020 AAI Undergraduate Faculty Travel Grant 05/08/2020 – 05/12/2020	The American Association of Immunologists	Undergraduate Faculty Travel Grant	\$2,50
Smith, Heather	Mathematics & Computer Science	Simons Travel Grant 07/01/2019 – 06/30-2021	American Mathematical Society (AMS)	Simons Foundation Travel Program	\$4,80
Smith, Heather	Mathematics & Computer Science	Summer Research Conference on "Trees in Many Contexts" 06/01/2020 – 07/31/2020	American Mathematical Society (AMS)	Mathematics Research Communities (MRC)	\$0
Snyder, Nicole <i>Hartmann, Laura</i> Schelhass, Mario	Chemistry Department of Chemistry, Heinrich-Heine- Universität, Düsseldorf, Germany Institute of Cellular Virology, University of Münster, Germany	Glycomimetics for Inhibiting SARS-CoV-2 Entry 06/15/2020 – 06/14/2021	Research Corporation for Science Advancement (RCSA)	COVID-19 Initiative: Detecting and Mitigating Epidemics	\$55,000
Waheed, Sarah	History	Chand Bibi Sultan: Why a Medieval Muslim Queen from Southern India Matters Today 01/01/2021 – 06/30/2021	Fulbright Scholar Program	Fulbright-Nehru Academic and Professional Excellence Award	\$24,00
Waheed, Sarah	History	AIPS Senior Fellow 07/01/2021 – 06/30/2022	American Institute of Pakistan Studies	AIP Senior Fellow	\$20,00
				FY20 Awards Total	\$1,803,393

## Gayle Kaufman



#### National Science Foundation

Nancy and Erwin Maddrey Professor of Sociology and Gender and Sexuality Studies, Gayle Kaufman has been awarded a National Science Foundation grant (<u>1850239</u>).

The \$355,097 Collaborative RUI: Research in Undergraduate Institutions award is a collaboration with with Associate Professor D'Lane Compton of the University of New Orleans and funds "Marriage Attitudes in the 21st Century."

The three-year project will explore marriage attitudes and decision-making of heterosexuals and LGBTQ adults in the post-marriage equality era. Six Davidson College student researchers will train in research design, ethics, data management and manuscript preparation as part of this funded project.

Professor Kaufman is an expert in the areas of gender equality and parental leave policy and recently published her second book, *Fixing Parental Leave* (NYU Press, 2020), which draws on research from Sweden and the U.K. to offer potential policy solutions for the U.S. Professor Kaufman involves students in her research and has published four articles co-authored with undergraduate students in the past five years.

#### Lia Newman



Director and Curator of the Van Every/Smith Galleries, Lia Newman has been awarded a grant from the Associated Colleges of the South (ACS) through the COVID-19 Emergency RFP Round, to provide digital access to the college's permanent art collection.

The collection includes over 3,900 works by such artists as Rembrandt, Picasso, Matisse, de Kooning, Motherwell, Bearden, Kollwitz, and Hockney, and only a small number are highlighted on the Galleries' web site. The ACS grant will allow the creation of an expanded online database so that students and faculty who have current needs related to the collection can have access to the artworks.

While the short-term goal is access for courses that are being taught online due to COVID-19, having the expanded permanent art collection online will be a resource to faculty and students both at Davidson and other ACS schools beyond the period of the pandemic.

The Van Every/Smith Galleries play a fundamental role in the pedagogical life of Davidson College and the surrounding community. The Galleries provide a challenging forum for the on-going presentation, interpretation, and discussion of primarily contemporary artworks in all media, nurturing individual thinking, developing visual literacy, and inspiring a lifelong commitment to the arts.



#### FY20 GRANTS MANAGEMENT: ACTIVE FACULTY PROJECTS

PI		PROPOSAL TITLE		TOTAL AWARD
Co-Pl	DEPARTMENT	Period of Performance	AGENCY NAME	ALL YEARS
Antsey, Mitch	Chemistry	Electrochemical Energy Storage through Ligand-Based Charge Manipulation	NTESS: Sandia National Laboratories	\$50,000.00
Anderson, Travis	Sandia National Labs	03/09/2018 - 09/30/2019		
Antsey, Mitch	Chemistry	Electrochemical Energy Storage through Ligand-Based Charge Manipulation 10/01/2019 - 09/30/2021	NTESS: Sandia National Laboratories	\$50,000.00
Antsey, Mitch	Chemistry	Radialene Radicals for Redox Flow Batteries 03/01/2020 - 02/28/2023	University of North Carolina - Charlotte	\$35,088.00
Benson, Devyn	Africana Studies/Latin American Studies	Black Consciousness in Cuba: The Untold Revolution, 1968- 1978 07/01/2019 - 06/30/2020	National Endowment for the Humanities	\$60,000.00
Blauch, David	Chemistry	MRI: Acquisition of a Liquid Chromatograph-Mass		
Hauser, Cindy	Chemistry	Spectrometer to Support Student/Faculty Research and	National Science Foundation	\$299,917.00
Snyder, Nicole	Chemistry	Research Training		\$255,517.00
Striplin, Durwin	Chemistry	09/01/2016 - 08/31/2019		
Bory, Alison	Dance	ACS Dance Consortium 07/01/2019-07/31/2020	Associated of Colleges of the South	\$1,800.00
Campbell, Malcolm <i>Heyer, Laurie</i>	Biology Mathematics & Computer Science	Collaborative Research: RUI: BIOMAPS: Broadening the Application of Programmed Evolution for Metabolic Engineering 09/01/2016 - 08/31/2019	National Science Foundation	\$616,012.00
Campbell, Malcolm	Biology	Collaborative Research: RUI: Broadening the Application of Programmed Evolution for Metabolic Engineering	National Science Foundation	\$14,030.00
Heyer, Laurie	Mathematics & Computer Science	05/24/2018 - 08/31/2021		
Chartier, Tim	Mathematics & Computer Science	Research on Sports Analytics 02/01/2020 - 05/31/2020	edjSports	\$7,351.00
Chillag, Kata	Health & Human Values	International Medical Graduates at the Crossroads: Ethics of Immigration Policy and Health Care in Underserved Areas 01/01/2020 - 12/31/2020	The Greenwall Foundation	\$97,093.00

LEGEND

AWARDED FY20

ACTIVE FY20

**CLOSED FY20** 

PI	DEPARTMENT	PROPOSAL TITLE	AGENCY NAME	TOTAL AWARD
Co-PI	DEPARTMENT	Period of Performance	AGENCT NAME	ALL YEARS
Cho, John	Anthropology	Lifestyle Politics: South Korea Gay Men and the Internet 02/01/2020 - 01/31/2021	The Academy of Korean Studies	\$17,000.00
Churchill, Suzanne	English	Mina Loy: Navigating the Avant-Garde 10/01/2017 - 03/31/2020	National Endowment for the Humanities	\$74,960.00
Dietrick, Joelle <i>Mundy, Owen</i>	Art and Digital Studies Art and Digital Studies	Tally 08/01/2019 - 01/31/2020	UC Berkeley Center for Long-Term Cybersecurity	\$15,000.00
Ewoodzie, Joseph	Sociology	Collaborative REU Site: Examining the Intersection of Food, Housing and Healthcare in the Beatties Ford Road Corridor, Charlotte, NC	National Science Foundation	\$222,660.00
Baron, Patrick	Health & Human Values	04/15/2018 - 05/31/2021		
Ewoodzie, Joseph	Sociology	Untold Narratives: Motivations, Processes and Consequences of Coming to America 07/01/2019 - 06/30/2020	Ford Foundation	\$45,000.00
Ewoodzie, Joseph	Sociology	CAREER: Transnational Lives in the U.S. 05/01/2020 - 04/30/2024	National Science Foundation	\$400,000.00
Gonzalez, Melissa	Spanish/Gender and Sexuality Studies	New Directions Fellowship: Melissa Gonzalez 06/01/2019 - 12/31/2020	The Andrew W. Mellon Foundation	\$300,000.00
Good, Jess	Psychology	RUI: The Impact of Classroom Diversity Philosophies on the STEM Performance of Women and Underrepresented 05/01/2017 - 04/30/2021	National Science Foundation	\$404,974.00
Gouri Suresh, Shyam	Economics	Education Service Agreement 06/15/2020 - 09/15/2021	Pioneer Academics	\$18,000.00
Hauser, Cindy	Chemistry	Impact of waterpipe configuration on the size distribution and number density of smoke particles and targeted chemical analysis of particle profiles that diminish alveolar cell health	National Institutes of Health	\$446,697.00
Bernd, Karen	Biology	09/01/2016 - 08/31/2019		
Kabala, Jakub	History and Digital Studies	Dumbarton Oaks Fellowship 09/09/2019 - 05/08/2020	Dumbarton Oaks	\$35,000.00
Kaufman, Gayle	Sociology	Collaborative Research: RUI: Marriage attitudes post- Marriage Equality	National Science Foundation	\$154,856.00
Compton, D'Lane	University of New Orleans	09/01/2019 - 08/31/2022		
Kuchera, Anthony	Physics	Collaborative Research: RUI: Study of exotic nuclei and neutron detector response 06/15/2020 - 05/31/2023	National Science Foundation	\$176,680.00
Kuchera, Michelle	Physics	Constructing prototypes for a universal Monte Carlo event generator (UMCEG) 01/21/2019 - 09/30/2019	Thomas Jefferson National Accelerator Facility (JLab)	\$19,926.00
Kuchera, Michelle	Physics	FRIB Visiting Scholar Program 07/15/2019 - 06/30/2020	Facility for Rare Isotope Beams (at Michigan State University)	\$5,000.00
Kuchera, Michelle	Physics	QCD theory and machine learning for global analysis 05/01/2020 - 07/31/2021	Old Dominion University Research Foundation (ODU)	\$22,033.00

PI	DEPARTMENT	PROPOSAL TITLE	AGENCY NAME	TOTAL AWARD
Co-PI		Period of Performance		ALL YEARS
Leyva, Diana	Psychology	Evaluation of the Effectiveness of the Food for Thought (FFT) Program 05/01/2018 - 04/30/2021	Brady Education Foundation	\$315,768.00
Leyva, Diana	Psychology	A Model of Reading Engagement (MORE) 06/01/2018 - 05/31/2020	Harvard Graduate School of Education/Dr. James Kim	\$32,748.00
Leyva, Diana	Psychology	Evaluation of the Effectiveness of the Food for Thought (FFT) Program 10/01/2019 - 09/30/2021	University of Pittsburgh	\$113,274.00
Marti, Gerardo <i>Mulder, Mark</i>	Sociology <i>Calvin College</i>	The Latino Protestant Church in the United States: Liturgy, Mission, and Congregational Practices 09/01/2013 - 12/31/2020	Lilly Endowment Inc.	\$399,998.00
Mossinghoff, Michale	Mathematics and Computer Science	Collaborations in Number Theory, Analysis and Combinatorics 09/01/2016 - 08/31/2021	Simons Foundation	\$35,000.00
Multhaup, Kristi <i>Isakoglou, Foivos</i>	Psychology <i>Psychology</i>	The Role of Empathy in Responses to Literary Fiction 12/13/2019 - 12/12/2020	Psi Chi	\$3,000.00
Newman, Lia	Van Every/Smith Galleries	Exhibition entitled "Yinka Shonibare: The American Library," and accompanying programs 07/01/2018 - 06/30/2021	North Carolina Arts Council	\$14,700.00
Newman, Lia <i>Harry, Elizabeth</i>	Art Gallery Art Gallery	Digital access to college's permanent art collection 04/07/2020 - 12/31/2020	Associated Colleges of the South	\$6,020.00
Peck, Tabitha	Mathematics & Computer Science	PERCEPT: Preservice Educators Reimagining Core Experiences in Physics Teaching 05/01/2018 - 04/30/2021	National Science Foundatoin	\$129,033.00
Peck, Tabitha	Mathematics & Computer Science	CAREER: Virtual Body Ownership Illusions for Bias Reduction and Fostering Inclusivity in STEM Classrooms 09/01/2020 - 08/31/2025	National Science Foundation	\$549,997.00
Ramanujan, Raghu <i>Kuchera, Michelle</i>	Mathematics & Computer Science Physics	QCD Theory and Machine Learning for Global Analysis 04/01/2019 - 09/30/2019	Southern Universities Research Association (SURA)	\$20,791.00
Ramanujan, Raghu <i>Kuchera, Michelle</i>	Mathematics & Computer Science Physics	Constructing prototypes for a universal Monte Carlo event generator (UMCEG) 01/01/2020 - 09/30/2020	Thomas Jefferson National Accelerator Facility (Jlab)	\$21,486.00
Ramanujan, Raghu Kuchera, Michelle	Mathematics & Computer Science Physics	QCD Theory and Machine Learning for Global Analysis 09/30/2019 - 12/31/2019	Southern Universities Research Association (SURA)	\$3,415.00
Ringle, Bill	Anthropology	RUI: Construction, Cultivation, and Emerging Complexity in the Puuc Hills of Yucatan, Mexico 05/01/2017 - 04/30/2021	National Science Foundation	\$260,887.00
Sarafova, Sophia	Biology	2020 AAI Undergraduate Faculty Travel Grant 05/08/2020 - 05/12/2020	The American Association of Immunologists	\$2,500.00
Smith, Heather	Mathematics & Computer Science	Simons Travel Grant 07/01/2019 - 06/30/2021	American Mathematical Society (AMS)	\$4,800.00

PI	DEPARTMENT	PROPOSAL TITLE	AGENCY NAME	TOTAL AWARD
Co-PI	DEPARTMENT	Period of Performance	AGENCT NAME	ALL YEARS
Smith, Heather	Mathematics & Computer Science	Summer Research Conference on "Trees in Many Contexts" 06/01/2020 - 07/31/2020	American Mathematical Society (AMS)	\$0.00
Smith, Kevin	Biology	CAREER: Experimenting with Extinction: An Undergraduate- Intensive Research Program in Experimental Conservation 05/01/2017 - 04/30/2022	National Science Foundation	\$770,270.00
Smith, Kevin	Biology	CAREER: An Undergraduate-Intensive Research Program in Experimental Conservation Ecology 05/01/2019 - 04/30/2020	National Science Foundation	\$7,050.00
Smith, Mark	Psychology	Social Contact and MdMA Use 04/01/2018 - 03/31/2020	National Institutes of Health	\$136,406.00
Smith, Mark	Psychology	The Influence of Gonadal Hormones on Opioid Use 09/30/2018 - 07/31/2023	National Institutes of Health	\$1,609,799.00
Smith, Mark	Psychology	Social Influences on Drug-Seeking Behavior 09/30/2018 - 07/31/2023	National Institutes of Health	\$1,696,276.00
Snyder, Nicole	Chemistry	Precision Glycopolymer Bacteriochlorin Conjugates for Probing HA-CD44 Interactions	National Institutes of Health	\$406,485.00
Ruppel, Joshua	University of South Carolina-Upstate	09/15/2016 - 03/30/2021		
Snyder, Nicole	Chemistry	RUI: The Role of Trehalose-Based Oligosaccharides and Glycomacromolecules on Protein Stability 09/01/2017 - 08/31/2021	National Science Foundation	\$294,000.00
Snyder, Nicole	Chemistry	Davidson in Duesseldorf: Glycopolymer Research in Duesseldorf, Germany 09/01/2019 - 08/31/2022	National Science Foundation	\$299,915.00
Snyder, Nicole	Chemistry	Glycomimetics for Inhibiting SARS-CoV-2 Entry		
Hartmann, Laura Schelhass, Mario	Department of Chemistry, Heinrich-Heine- Universität, Düsseldorf, Germany Institute of Cellular Virology, University of Münster, Germany	06/15/2020 - 06/14/2021	Research Corporation for Science Advancement (RCSA)	\$55,000.00
Thurtle-Schmidt, Bryan	Biology	Mechanisms of Transport by SLC4 Borate Transporters 05/01/2019 - 04/30/2022	National Institutes of Health	\$346,277.00
Totten, Darian	Classics	Life on the Lagoon: Reconstructing the Biography of Human- Landscape Dynamics on the Salpi Lagoon, Italy 06/01/2017 - 05/30/2021	National Endowment for the Humanities	\$200,000.00
Waheed, Sarah	History	Chand Bibi Sultan: Why a Medieval Muslim Queen from Southern India Matters Today 07/01/2021 - 06/30/2022	Fulbright Scholar Program	\$24,000.00
Waheed, Sarah	History	AIPS Senior Fellowship 07/01/2021 - 06/30/2022	American Institute of Pakistan Studies	\$20,000.00



#### Mitch Anstey

#### National Science Foundation

Assistant Professor of Chemistry, Mitch Anstey has been awarded a National Science Foundation Chemical Structure, Dynamics & Mechanisms grant (1955619).

Professor Anstey joins collaborators Dr. Chris Bejger of the University of North Carolina at Charlotte, and Dr. Todd Coolbaugh of Johnson C. Smith University, on the \$456,394 grant to the University of North Carolina at Charlotte, for the project titled "CAS: Radialene Radicals: Aqueous Soluble Organics for Energy Storage."

The three-institution team will engage undergraduate student researchers to examine redox flow batteries (RFBs) for electrochemical energy storage, to develop low cost and environmentally friendly energy storage devices.

In addition to NSF funded research, Professor Anstey has provided interdisciplinary science experiences for Davidson student researchers on projects funded annually since 2016 by Sandia National Laboratories. Read more about the Anstey Research Group <u>here</u>.





## Wolfgang Christian and Mario Belloni

#### American Physical Society

Professor Emeritus of Physics, Wolfgang Christian and Professor and Chair of Physics, Mario Belloni have received the <u>Excellence in</u> <u>Physics Education Award</u> from the <u>American Physical Society</u>.

The <u>Open Source Physics Project</u> (OSP) team was recognized for their "sustained commitment to computational physics education through creating and disseminating programming environments, books, software, simulations, and other tools to support computational thinking, and for research, establishing the value of these tools and the best practices for their use."

The Open Source Physics Team members are: Wolfgang Christian (Project PI), Lyle Barbato, Mario Belloni, Douglas Brown, Thomas Colbert, Anne J. Cox, Melissa Dancy, Francisco Esquembre, Kyle Forinash, Michael R. Gallis, Felix J. Garcia, Harvey Gould, William Junkin, Bruce Mason, Todd Timberlake, Aaron Titus, Jan Tobochnik, & Loo Kang Wee.

The OSP Project began with a 2002 National Science Foundation (NSF) grant awarded to Davidson Professors Christian and Belloni to develop interactive Java applet-based curricular material known as Physlets. A second NSF grant (NSF DUE <u>0442581</u>) awarded in 2005, "OPTIC: Open Physics Technology for Interactive Curricula," supported rewriting Physlet code into an open source library, for a Java edition of *An Introduction to Computer Simulation Methods*. Interest in computational physics attracted additional educational authors, tools and simulations resulting in an OSP-based digital library serving over 200,000 users. Additional information may be found <u>here</u>.

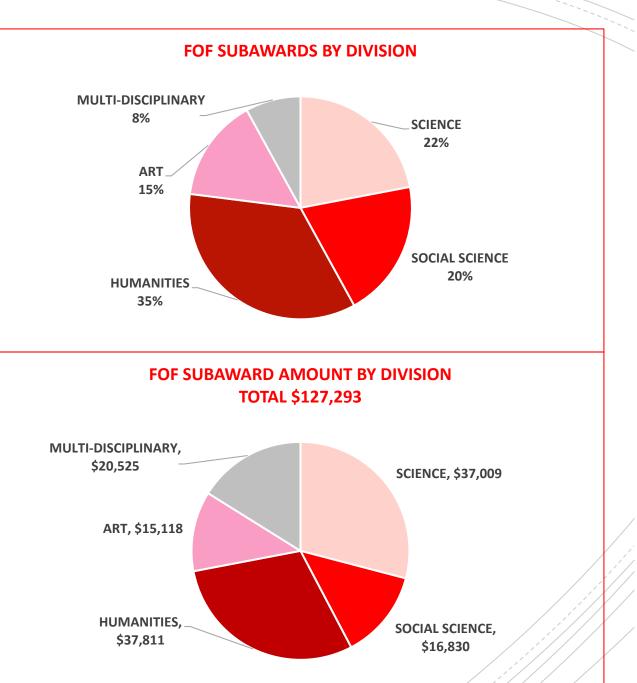
# FY19-FY20 INSTITUTIONAL GRANTS MANAGEMENT

#### Statement of Purpose

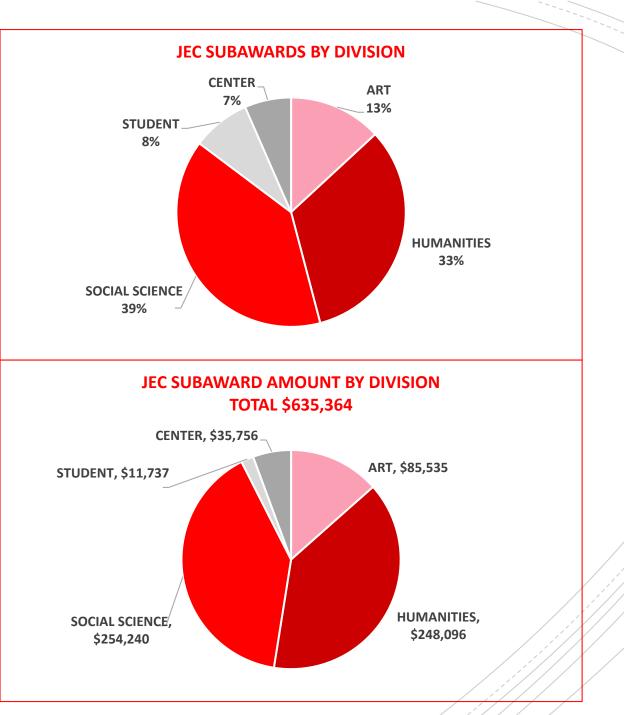
Over the last three years, Davidson College has successfully attained multiple institutional grants supporting college initiatives. Recognizing that large, multi-year, programmatic grants require close administration and grants management, the Office of Grants and Contracts began supporting post-award management of Davidson College Initiative grants in FY 2019. Performing Grants Accounting and Project Management, the Office of Grants and Contracts delivers institutional oversight, compliance and stewardship for funders and Davidson.

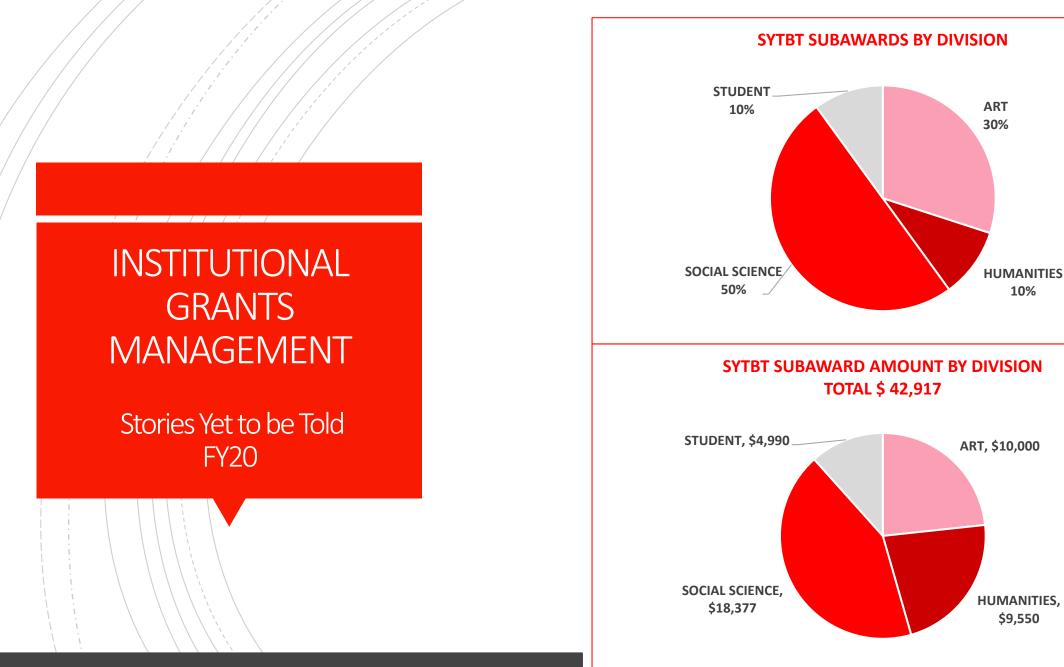
COLLEGE INITIATIVE	FUNDER	PERFORMANCE PERIOD	AWARD AMOUNT
Faculty of the Future	The Duke Endowment	07/01/2017 - 06/30/2021	\$2,000,000
Deliberative Citizenship Initiative	The Duke Endowment	07/01/2020 - 06/30/2022	\$ 256,000
Justice, Equality & Community	Andrew W. Mellon Foundation	01/01/2017 - 06/30/2021* COVID-19 no-cost extension	\$1,200,000
Stories Yet to be Told: Race, Racism & Accountability	Andrew W. Mellon Foundation	01/01/2020 - 12/31/2021	\$ 250,000
Fostering Inclusivity & Respect in Science - FIRST	Howard Hughes Medical Institute (HHMI)	9/01/2018 – 8/31/2023	\$1,000,000

Faculty of the Future FY19 & FY20

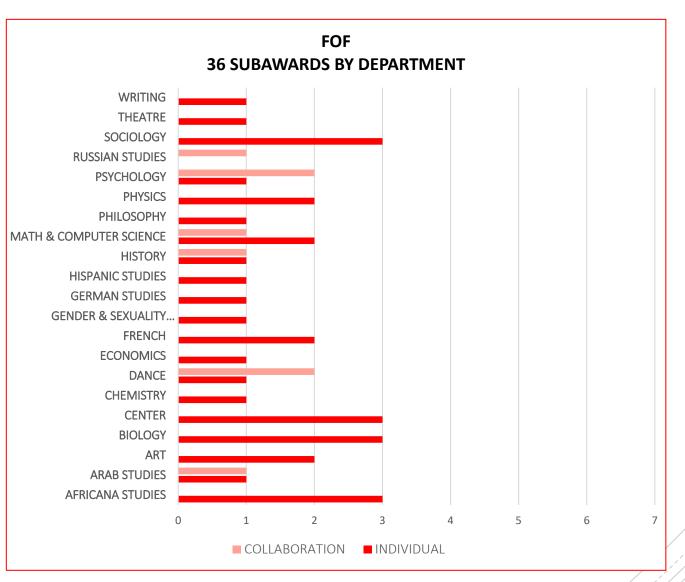


Justice, Equality & Community FY19 & FY20



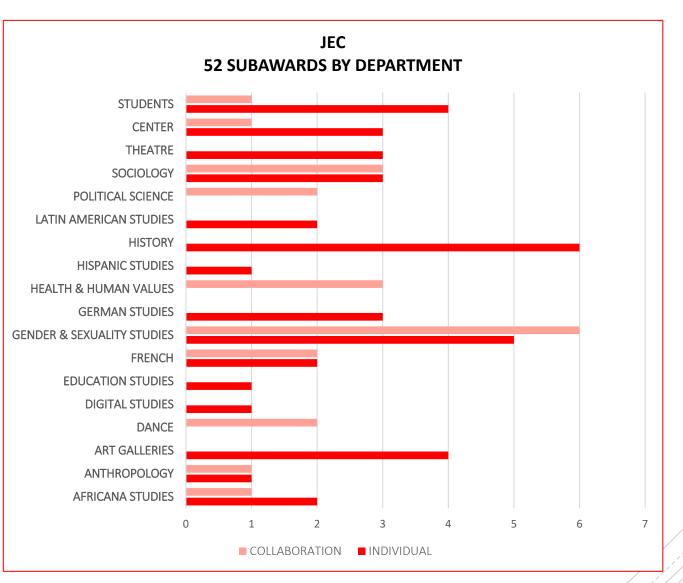


Faculty of the Future FY19 & FY20



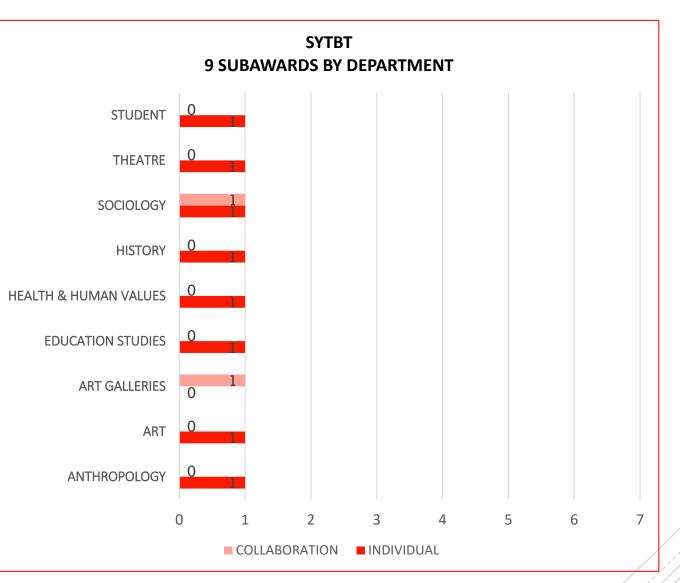
Collaboration indicates a single subaward led by two PIs from one or more departments.

Justice, Equality & Community FY19 & FY20



Collaboration indicates a single subaward lead by two PIs from one or more departments.

Stories Yet to be Told FY20



Collaboration indicates a single subaward lead by two PIs from one or more departments,

#### **INSTITUTIONAL GRANTS**

#### Justice, Equality, and Community

SUBAWARDEE NAME	DEPARTMENT	PROPOSAL TITLE	SUBAWARD AMOUNT	STUDENTS
Dennie, Nneka	Africana Studies	Curricular Development: AFR 329: Women and Slavery in the Black Atlantic	\$15,500	8
Harper-Shipman, Takiyah	Africana Studies	Collaborative: Farming as Resistance - Reading and Service Collective	\$7,442	0
Bowles, Laurian	Anthropology	Practitioner in Residence: Dana Saxon	\$14,030	0
Newman, Lia	Art Galleries	Practitioner in Residence: Public Humanities Practitioner in Residence Bethany Collins *	\$30,330	2
Newman, Lia	Art Galleries	Practitioner in Residence: Ali Fitzgerald	\$3,600	0
Newman, Lia	Art Galleries	Practitioner in Residence: Yinka Shonibare	\$8,970	0
Newman, Lia	Art Galleries	Practitioner in Residence: Hiwa K	\$14,200	0
Rapley, Leah	Civic Engagement	Collaborative: Enrichment Programs for the CDF Freedom Schools Program at Davidson College	\$19,256	0
Sample, Mark	Digital Studies	Curricular Development: Games for Humanities	\$16,600	2
Fache, Caroline	French & Francophone Studies	Curricular Development: Black Davidson	\$6,279	3
Fache, Caroline	French & Francophone Studies	Curricular Development: Africana Studies Workshop	\$25,500	0
Horowitz, Katie	Gender & Sexuality Studies	Practitioners in Residence: Amber Johnson and Wriply Bennet	\$29,500	0
González, Melissa	Gender & Sexuality Studies	Curricular Development: GSS/LAS 394 Latinx Sexual Dissidence: Guerilla Translation	\$8,080	0
González, Melissa	Gender & Sexuality Studies	Curricular Development: GSS Teaching Seminar	\$8,000	0
González, Melissa	Gender & Sexuality Studies	Collaborative: Phase One of the North Carolina Women's, Gender and Sexuality Studies Departments	\$4,500	0
González, Melissa	Gender & Sexuality Studies	Collaborative: Breaking cages, Building community, Queering Justice: A Symposium on Abolition and Queer/Trans Liberation	\$11,500	0

Individual grant

Grant related course or activity

Collaborative grant

\* COVID-19 impact

SUBAWARDEE NAME	DEPARTMENT	PROPOSAL TITLE	SUBAWARD AMOUNT	STUDENTS
Denham, Scott	German Studies	Collaborative: Oral History of Holocaust Survivor Irving Bienstock as Collaborative Public History and Teaching Resource	\$5,563	2
Denham, Scott	German Studies	Curricular Development: HIS 396 History of Jews and Jewish Identities at Davidson College	\$7,500	2
ang Hilgartner, Judith	Hispanic Studies	Collaborative: José Kozer Residency*	\$500	(
Stremlau, Rose	History	Practitioner in Residence: Andrew W. Mellon Visiting Professor of Justice, Equality and Community in Anthropology Courtney Lewis	\$73,080	(
Stremlau, Rose	History	Curricular Development: Understanding Native Foodways	\$11,862	
Tilburg, Trish	History	Curricular Development: HIS 424: The Global French Revolution	\$1,800	(
Waheed, Sarah	History	Curricular Development: Migrations, Massacres, and Memories: Partition of India and Pakistan	\$6,200	C
Wertheimer, John	History	Curricular Development: HIS454: Filming Southern Legal History	\$10,000	2
Wertheimer, John	History	Curricular Development: HIS455: Filming Southern Legal History	\$5,000	2
Mangan, Jane	Latin American Studies	Curricular Development: HIS 259: US Latino History	\$5,100	4
Crandall, Britta	Latin American Studies	Collaborative: Community Sculptural Walk at Davidson K-8 *	\$8,500	(
Martinez, Amanda	Sociology	Curricular Development: Davidson Microaggressions Project	\$11,650	12
Martinez, Amanda	Sociology	Curricular Development: Davidson Microaggressions Project	\$9,800	(
Marti, Gerardo	Sociology	Curricular Development: Race, Religion & Power	\$6,650	(
Kandhari, Yashita '22	Student	Curricular Development: Demands Met and Voices Lost: Reshaping Institutional Narratives of Change	\$2,749	2
Krutcovich, Dahlia '21	Student	Collaborative: The Intersections of Racism and Anti-Semitism: Alums Speak Back	\$1,000	·
Montero-Colbert, Arianna '19	Student	Curricular Development: Demands Met and Voices Lost: Reshaping Institutional Narratives of Change	\$4,523	4
Reed, Bry '20	Student	Curricular Development: Brave Summer: An Exploration of Black Femmes Throughout History	\$3,465	1
Green, Sharon	Theatre	Curricular Development: Gender, Race, and Representation in Theatre Departments' Production Seasons	\$2,000	4
Green, Sharon	Theatre	Curricular Development: Best Practices and Protocols for Staging Theatrical Intimacy	\$3,500	(
McCrae, Byron	VP Student Life Dean of Students	Collaborative: Racial Equity Training *	\$6,500	C

SUBAWARDEE NAME	DEPARTMENT	PROPOSAL TITLE	SUBAWARD AMOUNT	STUDENTS
Grinage, Leslie	Assoc. Dean of Students	Collaborative: Davidson does Charlotte - Levine Museum	\$10,000	515 first-year students - orientation trip to CLT
Marsicano, Chris	Educational Studies	Curricular Development: Jim Crow on the Shankill Road	\$16,500	16 students - class trip
Denham, Scott	German Studies	Curricular Development: Interlinked Memory Studies Courses (Kristi Multhaup (psychology), Hilton Kelly (educational studies and Africana studies), Scott Denham (German studies), Alan-Michael Parker (English) and Dasa Mortensen (history)).	\$14,470	70 students multi-class trip
Kaliski, Stephen	Theatre	Curricular Development: Greek Play Development Program	\$17,340	7 students - class trip
Fache, Caroline	French & Francophone Studies	Practitioner in Residence: Amandine Gay	\$7,200	0
Stern, Kristen	French & Francophone Studies			
Horowitz, Katie	Gender & Sexuality Studies	Collaborative: Bringing Restorative Justice to Davidson	\$21,560	0
Buchanan, Sarah	Assoc. Dean of Students			
Harper-Shipman, Takiyah	Africana Studies	Collaborative: 2019-20 Sapelo Island Community Service Project	\$20,000	3
Baron, Patrick	Health & Human Values			
Bory, Alison	Dance	Collaborative: Building a Regional Network of Scholar-Educators for	\$5,595	0
Chapman, Dasha	Dance	Critical Dance Studies: Crafting Responsive Curriculum, Developing	دود,ده	U
González, Melissa	Gender & Sexuality Studies	Collaborative: Fitting in, Sticking Out: Queer (In)Visibilities and the	\$8,500	2
Branson, Scott	Gender & Sexuality Studies	Perils of Inclusion	\$0,500	2
Horowitz, Katie	Gender & Sexuality Studies	Curricular Development: SOC The Feminization of Poverty	\$9,500	0
Delia Deckard, Natalie	Gender & Sexuality Studies		\$9,500	U
González, Melissa	Gender & Sexuality Studies	Collaborative: Charlotte Immigration Project	\$4,970	1
Green, Carlina '20	Student		φ <del>-</del> ,510	
Shaw, Brian	Political Science	Collaborative: Curricular Development: POL 206 Populism, Democracy	\$3,000	0
Ahrensdorf, Peter	Political Science	& Inequality	\$3,000	Ū
Ewoodzie, Joseph	Sociology	Practitioner in Residence: Zhun Lee	\$46,500	0
Ruhlen, Rebecca	Anthropology		4.0,000	•
Ewoodzie, Joseph	Sociology	Collaborative: Beatties Ford Road Project	\$20,000	3
Baron, Patrick	Health & Human Values		+_0,000	-
Ewoodzie, Joseph	Sociology	Examining Social Roots	\$20,000	3
Baron, Patrick	Health & Human Values			
	TOTALS	Funding	\$635,364	
		Students paid from grant		81
		Student participants in grant related course, activity		608

### **INSTITUTIONAL GRANTS**

#### **Stories Yet to be Told**

SUBAWARDEE NAME	DEPARTMENT	PROPOSAL TITLE	SUBAWARD AMOUNT	STUDENTS
Chillag, Kata	Health & Human Values	Systematic Racism, Public Health, and COVID-19	\$5,000	2
Stremlau, Rose	History	Inclusive Histories of Davidson College	\$9,550	1
Kandhari, Yashita '22	student	A History of Asians and Asian Studies at Davidson	\$4,990	2
Costa, Ann Marie	Theatre	Visual Landscape for Black Lives Matter project	\$5,000	0
Bowles, Laurian	Anthropology	ANT 257: African Routes, American Soils *	\$4,650	11 students - course
Starr, Tyler	Art	ART 331: Artist's Books	\$5,000	12 students - course
Kelly, Hilton	Educational Studies	AFR 495: Picturing Black Study @ Davidson College: An Africana Studies Capstone Project	\$2,007	7 students - senior capstone course
Marti, Gerardo	Sociology	SOC 105: Race, Religion, and Donald J. Trump	\$1,720	25 students - course assignment
Martinez, Amanda Newman, Lia	Sociology Art Galleries	Davidson Microagressions Project and Art Collaboration	\$5,000	8
		Funding	\$42,917	
	TOTALS	Students paid from grant		13
		Student participants in grant related course, activity		55

Individual grant

Grant related course or

activity

Collaborative grant

\* COVID-19 impact

#### **INSTITUTIONAL GRANTS**

#### **Faculty of the Future**

SUBAWARDEE NAME	DEPARTMENT	PROPOSAL TITLE	SUBAWARD AMOUNT	STUDENTS
Bertholf, Garry	Africana Studies	Book Manuscript	\$3,500	0
Dennie, Nneka	Africana Studies	restricted fund for research	\$1,678	0
Harper-Shipman, Takiyah	Africana Studies	Manuscript editing	\$1,630	0
NCFFD	annual dues	Institutional membership annual dues	\$10,000	0
Joubin, Rebecca	Arab Studies	Arab Studies Journal	\$5,250	1
C3 Art History Symposium	Art	Symposium	\$3,500	0
St. Clair, Katie	Art	shipping costs for art installation	\$1,970	0
Barsoum, Mark	Biology	ACRCMS Conference	\$21,500	6
Hales, Karen	Biology	Cold Springs Harbor Coding Course *	\$4,000	0
Smith, Kevin	Biology	workshops, travel *	\$3,500	0
Anstey, M	Chemistry	Chemistry panel dinner	\$384	0
Bory, Alison	Dance	AGA Collaborative Project *	\$3,500	0
Eshleman, Kristen	Director of Innovation Initiatives	Davidson in Silicon Valley *	\$10,000	6
Jha, Jaya	Economics	R Programming for Data Science Workshop *	\$3,600	1
Fache, Caroline	French & Francophone Studies	Digital Pedagogy Lab Workshop	\$270	0
Mohammed, Shanaaz	French & Francophone Studies	Conference, travel	\$650	0
Horowitz, Katie	Gender & Sexuality Studies	Love Under Capitalism - seminar *	\$3,610	0
Frazier-Rath, Emily	German Studies	German C1 Certification project	\$800	0
Jimenez, Abril	Hispanic Studies	Second Language and Heritage Development - Portugal conference *	\$1,560	0
Wiemers, Alice	History	Book Manuscript Workshop	\$3,330	0
Peck, Tabitha	Mathematics & Computer Science	IEEE VR Conference, presentation, travel	\$3,114	5
Smith, Heather	Mathematics & Computer Science	Women in Math Conference	\$700	0
Layman, Daniel	Philosophy	PPE Program Development - Conference, presentation, travel *	\$1,400	2
Kuchera, Michelle	Physics	conference, presentation, travel	\$2,000	0
Thompson, Kristen	Physics	conference, presentation, travel	\$1,811	0
Sockol, Laura	Psychology	conference, presentation, travel *	\$1,370	0

Individual grant

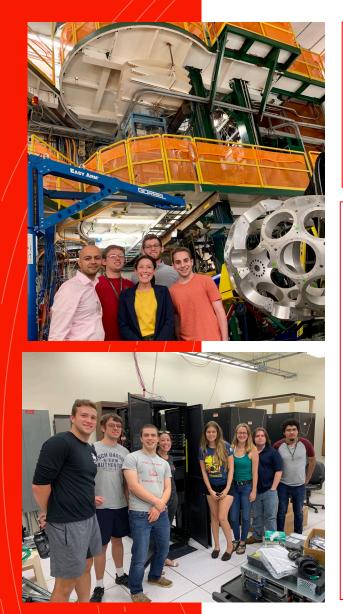
**Collaborative grant** 

\* COVID-19 impact

SUBAWARDEE NAME	DEPARTMENT	PROPOSAL TITLE	SUBAWARD AMOUNT	STUDENTS
Ewoodzie, Joseph	Sociology	Travel reimbursement - Ford Foundation Fellowship meeting	\$300	0
Martinez, Amanda	Sociology	NCA Chairs' Summer Institute 2019	\$1,050	0
Martinez, Amanda	Sociology	NCORE 2020 Conference *	\$3,500	0
Green, Sharon	Theatre	Ireland research trip	\$5,200	0
FOC Luncheons	V Victor	Faculty of Color Luncheons	\$525	0
Rippeon, Andrew	Writing	Publication costs - indexing	\$1,520	0
Joubin, Rebecca	Arab Studies	Theory & Practice of Literary Translation Journal	¢4.333	12
Race, Megan	Russian Studies	Theory & Practice of Literary Translation Journal	\$4,223	12
Bory, Alison	Dance	Dancing Around Paca	\$948	0
Chapman, Dasha	Dance	Dancing Around Race	2340	0
Stremlau, Rose	History	On Ed Draigat, workshan	¢13.000	0
Multhaup, Kristi	Psychology	OpEd Project - workshop	\$12,000	0
Good, Jessica	Psychology	Virtual Body-Swap Illusions - Conference, presentation, travel *	\$3,400	0
Peck, Tabitha	Mathematics & Computer Science	virtual Body-Swap musions - conference, presentation, traver	\$5,400	U
	ΤΟΤΛΙΟ	Funding	\$127,293	
	TOTALS	Students paid from grant		33

#### **OTHER INSTITUTIONAL GRANTS**

FUNDING SOURCE	SUBAWARDEE NAME	DEPARTMENT	PROPOSAL TITLE	SUBAWARD AMOUNT	STUDENTS
The Duke Endowment	Bullock, Graham	Politial Science	Deliberative Citizenship Initiative	\$256,000	3
Howard Hughes Medical Institution	Lom, Barbara	Biology	Fostering Inclusivity and Respect in Science Together (FIRST)	\$1,000,000	0
		ΤΟΤΑΙ Ο	Funding	\$1,256,000	
		TOTALS	Students paid from grant		3



#### Michelle Kuchera and Raghu Ramanujan

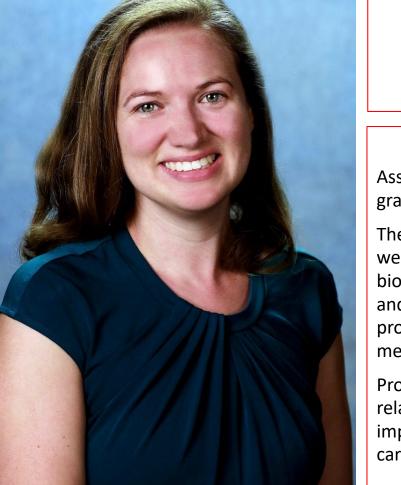
#### National Science Foundation

Assistant Professor of Physics, Michelle Kuchera and Associate Professor of Mathematics and Computer Science, Raghu Ramanujan have received a National Science Foundation Research in Undergraduate Institutions (RUI) grant (2012865). The three-year project titled, "Machine Learning Approaches for Accelerating Scientific Discovery in Nuclear Physics," enables collaboration between theoretical and experimental nuclear physicists and computer scientists to aid in scientific discoveries using state-of-the-art machine learning methods at the Facility for Rare Isotope Beams, Argonne National Laboratory, Thomas Jefferson National Accelerator Facility, and the upcoming Electron Ion Collider.

The grant provides Davidson students who have an interest in physics, computer science, or mathematics with the opportunity to make significant contributions to national efforts which investigate fundamental properties of matter. To accomplish this, they work closely with world-renowned scientists at large-scale research facilities, which complements the experiences students enjoy at a small liberal arts institution. The students will also have the opportunity to visit these laboratories and present their work to a national audience at professional scientific conferences.

This NSF-funded project is an integral part of the ALPhA group (Algorithms for Learning in Physics Applications), an ongoing research collaboration headed by Professors Kuchera and Ramanujan and driven by Davidson students. In addition to providing interdisciplinary research experiences that bridge nuclear physics, artificial intelligence, and data science, the project seeks to create an environment where students from different backgrounds – including women and students from traditionally underrepresented groups – can explore and launch their careers in scientific research.

### **Heather Smith**



#### American Mathematical Society

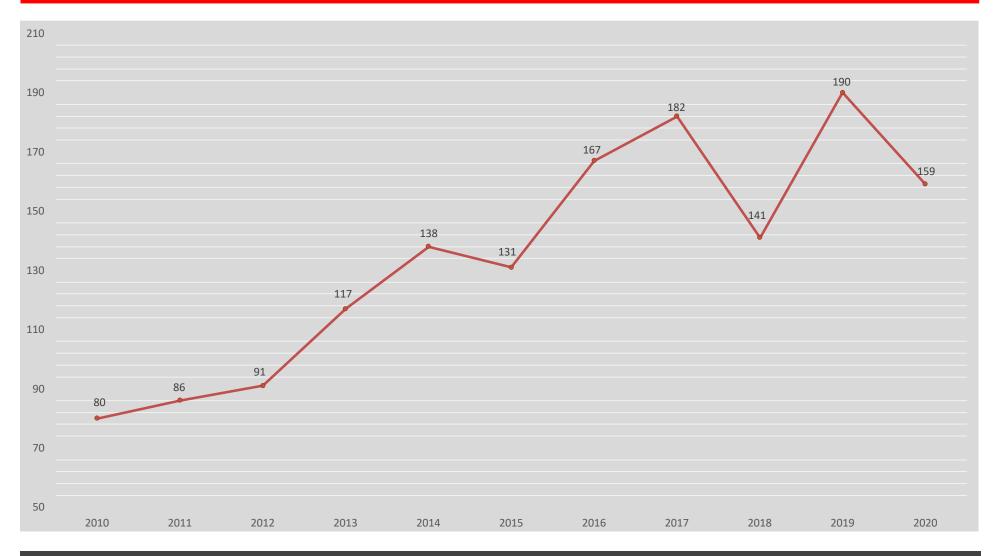
Assistant Professor of Mathematics and Computer Science, Heather Smith was awarded two grants from the American Mathematical Society (AMS).

The AMS Mathematics Research Communities (MRC) has funded "Trees in Many Contexts," a week-long summer 2021 workshop on graph theoretic trees with a focus on applications to biology and chemistry. Along with collaborators Miklos Bona, Eva Czabarka, Stephan Wagner and Hua Wang, Professor Smith will engage 40 early career mathematicians in research problems in a context that develops collaborative research skills while networking and receiving mentoring.

Professor Smith has additionally received an AMS-Simons Foundation Travel Grant for researchrelated travel through June 2021. The AMS-Simons Travel Grants Program acknowledges the importance of research interaction and collaboration in mathematics, particularly for early career mathematicians. The program also includes a structured mentoring component.

# SUMMER 2020 STUDENT RESEARCH

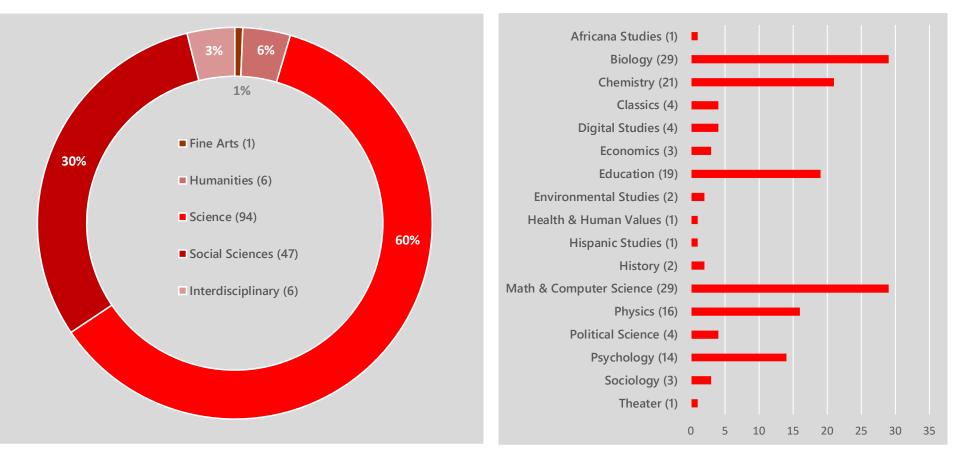
### SUMMER STUDENT RESEARCHERS 2010-2020: 1,482 Students



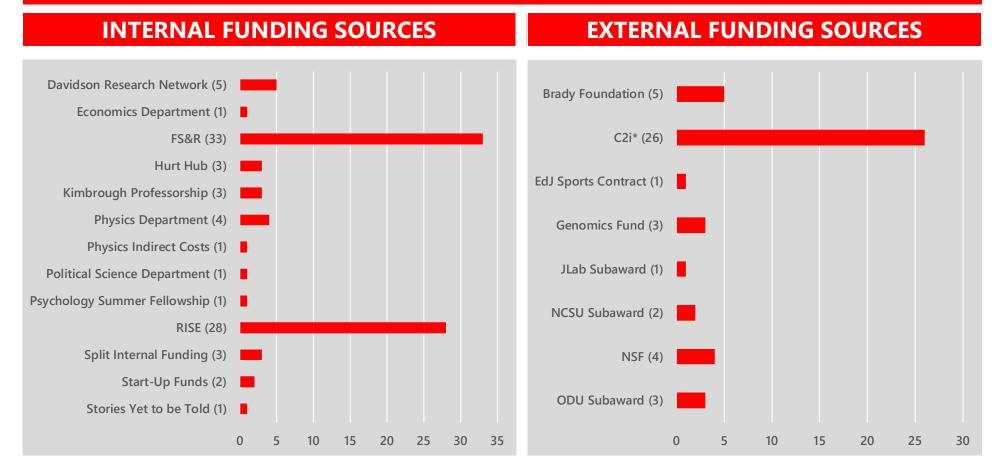
### SUMMER 2020 STUDENT RESEARCHERS Total: 159 Students

#### **BY DISCIPLINE**

#### **BY ACADEMIC DEPARTMENT**



### SUMMER 2020 STUDENT RESEARCHERS Total: 159 Students



\*College Crisis Initiative (C2i) Data Dashboard Project

#### **SUMMER 2020 STUDENT RESEARCHERS**

#### **Sciences: 94 Students**

Faculty Name	Department	Funding Source	Number of Students
Anstey, Mitch	Chemistry	DRI	1
Anstey, Mitch	Chemistry	FS&R	1
Barsoum, Mark	Biology	RISE	13
Belloni, Mario	Physics	FS&R	1
Belloni, Mario	Physics	Physics Department	4
Belloni, Mario	Physics	RISE	1
Bernd, Karen	Biology	DRI	1
Boye, Dan	Physics	FS&R	1
Campbell, Malcolm	Biology	Brown/Genomics/Indirect Costs	1
Chartier, Tim	Mathematics & Computer Science	EdjSports	1
Chartier, Tim	Mathematics & Computer Science	RISE	2
El Bejjani, Rachid	Biology	Genomics	2
Hauser, Cindy	Chemistry	FS&R	1
Hauser, Cindy	Chemistry	RISE	1
Heyer, Laurie	Mathematics & Computer Science	College Crisis Initiative (C2i) Data Dashboard Project	7
Heyer, Laurie	Mathematics & Computer Science	Hurt Hub	3
Heyer, Laurie	Mathematics & Computer Science	Kimbrough Professorship	3
Key, Hannah	Chemistry	DRI	2
Key, Hannah	Chemistry	Genomics/FS&R	1
Key, Hannah	Chemistry	RISE	2
Kuchera, Anthony	Physics	FS&R	1

Faculty Name	Department	Funding Source	Number of Students
Kuchera, Anthony	Physics	Physics Indirect Cost	1
Kuchera, Michelle	Physics	FS&R	1
Kuchera, Michelle	Physics	Thomas Jefferson National Acceloratorr Lab (JLab)	1
Kuchera, Michelle	Physics	Old Dominion University (ODU)	3
Lom, Barbara	Biology	DRI	1
Lom, Barbara	Biology	RISE	1
Mendez, Hammurabi	Mathematics & Computer Science	DRI	1
Mendez, Hammurabi	Mathematics & Computer Science	FS&R	1
Peck, Tabitha	Mathematics & Computer Science	DRI	1
Peck, Tabitha	Mathematics & Computer Science	FS&R	1
Peck, Tabitha	Mathematics & Computer Science	North Carolina State University (NCSU)	2
Peck, Tabitha	Mathematics & Computer Science	RISE	2
Ramanujan, Raghu	Mathematics & Computer Science	Start-up Funds	1
Smith, Kevin	Biology	National Science Foundation	4
Smith, Kevin	Biology	RISE	2
Snyder, Nicole	Chemistry	DRI	4
Snyder, Nicole	Chemistry	FS&R	4
Snyder, Nicole	Chemistry	Genomics	1
Stanback, Mark	Biology	DRI	1
Striplin, Durwin	Chemistry	FS&R	2
Thompson, Kristen	Physics	RISE	1
Thurtle-Schmidt, Debbie	Biology	FS&R	1
Wadgymar, Susana	Biology	FS&R	1
Wiedemann, Alex	Mathematics & Computer Science	DRI	1
Wiedenbeck, Bryce	Mathematics & Computer Science	DRI	2
Wiedenbeck, Bryce	Mathematics & Computer Science	FS&R	1
Williams, Trey	Chemistry	FS&R	1
Yukich, John	Physics	FS&R	1

## SUMMER 2020 STUDENT RESEARCHERS Social Sciences: 47 Students

Faculty Name	Department	Funding Source	Number of Students
Bersch, Katherine	Political Science	FS&R	1
Chillag, Kata	Health & Human Values	Start-up Funds	1
Cools, Angela	Economics	Economics Department	1
Crowder-Meyer, Melody	Political Science	FS&R	2
Eiler, Brian	Psychology	DRI	1
Eiler, Brian	Psychology	FS&R	1
Ewoodzie, Joseph	Sociology	DRI	3
Good, Jessica	Psychology	DRI	1
Jha, Jaya	Economics	FS&R	1
Leyva, Diana	Psychology	Brady Foundation	5
Marsicano, Chris	Education	College Crisis Initiative (C2i) Data Dashboard Project	19
Multhaup, Kristi	Psychology	DRI	1
Multhaup, Kristi	Psychology	RISE	1
O'Keefe, Siobhan	Economics	DRI	1
Ramirez, Julio	Psychology	DRI	2
Sockol, Laura	Psychology	Psychology Summer Fellowship	1
Sockol, Laura	Psychology	RISE	1
Stanback, Mark	Biology	FS&R	1
Stremlau, Rose	History	Stories Yet to be Told	1
Toska, Silvi	Political Science	Political Science Department	1
Wiemers, Alice	History	FS&R	1

### SUMMER 2020 STUDENT RESEARCHERS Fine Arts and Humanities: 7 Students

Faculty Name	Department	Funding Source	Number of Students
Tripathi, Anita	Theater	FS&R	1
Benson, Devyn	Africana Studies	FS&R	1
Cheshire, Keyne	Classics	FS&R	4
Gonzalez, Melissa	Hispanic Studies	DRI	1

## SUMMER 2020 STUDENT RESEARCHERS Interdisciplinary: 6 Students

Faculty Name	Department	Funding Source	Number of Students
Bratt, Anika	ENV	DRI	1
Bratt, Anika	ENV	FS&R	1
Dietrick, Joelle	Digital Studies	DRI	1
Mundy, Owen	Digital Studies	DRI	1
Mundy, Owen	Digital Studies	FSF/Dietrick Professorship	1
Mundy, Owen	Digital Studies	RISE	1

# Kata Chillag



Hamilton McKay Professor in Biosciences and Human Health, Kata Chillag has received a <u>Making a</u> <u>Difference Grant from the Greenwall Foundation</u>.

The one-year \$97,093 grant supports the project "International Medical Graduates at the Crossroads: Ethics of Immigration Policy and Health Care in Underserved Areas." The bioethical research project focuses on West Virginia, a state with a high rate of international medical graduates (IMGs), low immigrant population and limited ethnic diversity to explore the impact of policy changes, the acceptance of IMG healthcare providers, and their experiences working in an underserved region during this period of changing immigration policy and increased anti-immigrant sentiments.

The project team, led by Professor Chillag, includes Dr. Maysoun Freij, Senior Research Scientist with the National Opinion Research Center (NORC) at the University of Chicago; Dr. Elizabeth Fenton, a philosopher and bioethicist at the University of Otago, New Zealand; and Dr. Cristian Sirbu, clinician and psychology researcher with the Charleston Area Medical Center, Charleston, WV.







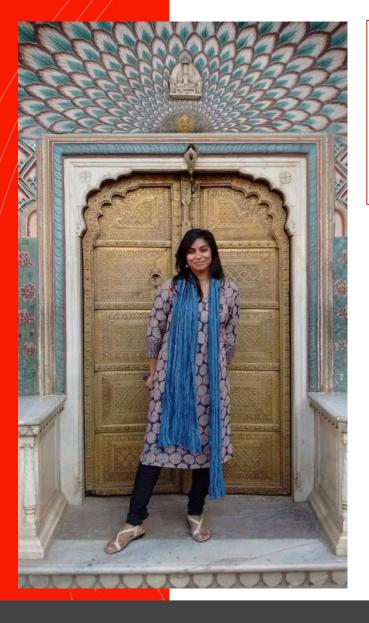
#### Fulbright Fellowship

Assistant Professor of History and Director of Davidson in India, Sarah Waheed has received a Fulbright-Nehru Academic and Professional Excellence Award.

The Fulbright fellowship funds six months of research in India for the project "Chand Bibi Sultan: Why a Medieval Muslim Queen from Southern India Matters Today."

In researching the life of a 16<sup>th</sup> century queen, Professor Waheed intends to highlight the prominent role of women leaders "challenging the narratives of an India long characterized by perpetual Hindu-Muslim conflict, where Muslim women, if they figure in them at all, largely exist on the margins or 'behind the veil' as oppressed victims of enduring patriarchy."

In addition to the Fulbright fellowship, Professor Waheed has also been awarded an American Institute of Pakistan Studies fellowship in support of her research on the impact of the coronavirus on women, workers, and religious minorities in Pakistani cities.





#### OFFICE OF GRANTS AND CONTRACTS

Phone I 704-894-2523 Mailing Address I Box 7149 I Davidson, NC 28035-7149 Shipping Address I 209 Ridge Rd. I Davidson, NC 28035 Recent Grant Awards Blog I https://ctl.davidson.edu/category/grants-and-contracts/ogc/#

#### STAFF

Mary Muchane, Ph.D. I Director I mamuchane@davidson.edu Rachael Murdock, M.A. I Assistant Director I ramurdock@davidson.edu Janet Werner, MBA I Grants Specialist I jawerner@davidson.edu LuAnne Sledge, B.A. I Grants Accountant I lusledge@davidson.edu