2019 – 2020

Research and Scholarship
Source: Web of Science
2019-2020 By the Numbers

Total # of Proposals and Awards

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<th># of Awards</th>
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Total $ Amount Proposals and Awarded

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2019-2020 By the Numbers
Awards (Grants and Contracts)

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<th>Unit</th>
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<tr>
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<td><strong>TOTAL AWARDS</strong></td>
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Research Expenditures
### Faculty Proposals Submitted

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<th>NSF</th>
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<th>NEA/NEH</th>
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<th>100K-500K</th>
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Impact of Internal Funding Program (Faculty Opportunity Fund)
External Funding from Faculty Opportunity Fund Awardees

Return on Internal Funding
$1: $2.41

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Proposal Success: 32%

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# External Partnerships and Intellectual Property

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<td>Material Transfer Agreement (MTA)</td>
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<td>Data Use Agreement (DUA)</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>51</strong></td>
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*Agreements with incoming funds to Chapman (e.g. sponsored research agreements, services agreements, and subaward agreements, etc.)*

## Intellectual Property

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## Patents Filed in FY2020

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| Detection of Pathogenic Bacteria through Antimicrobial Peptide-based Glass Fiber Filter Biosensor Platforms (Conversion to US application) | 1. Kamaljit Kaur  
2. Hanieh Hossein-Nejad-Ariani | School of Pharmacy                      |
| Targeting Primary Cilia with Nanoparticles (provisional application)  | 1. Surya Nauli  
2. Rajasekhar Pala               | School of Pharmacy                      |
| Heel Your Gait (provisional application)                             | 1. Marybeth Grant-Beuttler  
2. Rahul Soangra                 | Crean College of Health and Behavioral Sciences |
| Designing Peptide/Lipid-Associated Nucleic Acids (PLANAs) for nucleic acid delivery (provisional application) | 1. Hamidreza Montazeri  
2. Keykavous Parang  
3. Abdulaziz Alasmari  
4. Ryley Hall                 | School of Pharmacy                      |
| Condensed matter system with ideal diamagnetic response at room temperature (provisional application) | 1. Armen Gulian  
2. Sara Chahid  
3. Rajendra Dulal  
4. Yasushi Kawashima  
5. Serafim Teknowijoyo | Schmid College of Science and Technology |
FISCAL YEAR 19-20 AWARDS

Argyros School of Business and Economics

Economic Science Institute

Hillard Kaplan
National Institutes of Health
$195,568
Arizona State University: Research Supplements to Promote Diversity (AG054442-01)

Hillard Kaplan
National Institutes of Health
$382,250

Josef Tracy
Johns Hopkins University
$10,000
Loss-framed Contracts to Increase Productivity in Real-Effort Tasks

Bart Wilson
The International Foundation for Research in Experimental Economics
$13,819
Summer Scholars Program and High School Workshop

Bart Wilson
Thomas W. Smith Foundation
$41,456
Summer Scholars Program and High School Workshop

Abel Winn
The International Foundation for Research in Experimental Economics
$22,367
25th Annual Graduate Student Workshop in Experimental Economics
Attallah College of Educational Studies

Thompson Policy Institute

Don Cardinal
Regional Center of Orange County
$23,596
Educational Expertise to RCOC and Consult with School Districts

Jeanne Carriere
University of California Irvine
$125,000
Family and School Together

Audri Gomez
Regional Center of Orange County
$17,000
RCOC Leadership Survey

Audri Gomez
Bill and Melinda Gates Foundation
$417,230
Technical Assistance Support for California Special Education Residency Projects

Audri Gomez
Children's Hospital of Orange County
$969,383
Technical Assistance Support for California Special Education Residency Projects

Crean College of Health and Behavioral Sciences

Jason Douglas
Loyola Marymount University - UCOP
$16,664
A Community Based Approach to Tobacco Control

Susan Duff
National Institute on Disability, Independent Living, and Rehabilitation Research - Thomas Jefferson University
$11,046
Spinal Cord Injury Model Systems Program: Regional Spinal Cord Injury Center of the Delaware Valley
Susan Duff  
American Physical Therapy Association  
$24,763  
*An Individualized Multimodal Intervention for Bone and Muscle Health in Pre-Adolescents with Cerebral Palsy: Promoting Healthy Transitions into Adulthood*

Laura Glynn  
University of California Irvine - National Institutes of Health  
$311,256  
*Project 3: Conte Center Project Renewal*

Laura Glynn  
University of California Irvine - National Institutes of Health  
$483,660  
*Project 2: Fragmented Early-Life Experiences, Aberrant Circuit Maturation, and Emotional Vulnerabilities*

Marybeth Grant-Beuttler  
Children’s Hospital of Orange County  
$22,500  
*Longitudinal Assessment of Atypical TPP1 Enzyme Deficiency Patients*

Tara Gruenewald  
Johns Hopkins University – National Institutes of Health  
$20,218  
*Long-term Effects of a Community-based Volunteer Trial on Lifestyle Activity and Risk for Alzheimer's Disease*

Mary Kennedy  
California Scottish Rite Foundation  
$62,544  
*Scottish Rite Childhood Language Center*

Jennifer Robinette  
National Institutes of Health  
$273,891 ($9,583 + $25,474 + 238,834)  
*Neighborhood Adversity and Sensitivity to Stress: A gene X Environment Interaction Study*

Joanne Smith  
National Institutes of Health  
$130,162  
*The Influence of Brain Organization and Postural Behavior on Progression of Back Pain Symptoms in Young Adults*

**Brain Institute**
Uri Maoz  
John E. Fetzer Memorial Trust  
$43,915  
Research Agreement: Book Project Funding

Fowler School of Law

Tamara Alexander  
County of Riverside  
$75,509  
*Dispute Resolution Programs Act - Riverside*

Thomas Bell  
Crypto Investments Ltd.  
$68,300  
*Free Society Project*

Wendy Seiden  
The State Bar of California  
$37,160  
*Equal Access Fund IOLTA Formula Grant*

Wendy Seiden  
OC Community Foundation  
$60,000  
*Aitken Family Protection Clinic*

Wendy Seiden  
The State Bar of California  
$100,000  
*IOLTA Fund Grant*

George Willis  
Internal Revenue Service  
$44,100  
*IOLTA Fund Grant*

Schmid College of Science

Douglas Fudge  
National Science Foundation  
$28,000  
*Collaborative: RUI: Biogenesis and Evolution of Hagfish Slime and Slime Glands*
Douglas Fudge  
ALION Science and Technology  
$44,098

Douglas Fudge  
Serco Inc.  
$136,862 ($61,472 + $75,390)

Gregory Goldsmith  
Northern Arizona University – NASA  
$38,807  
*Testing How Plant Structure and Function Will Impact WUE and Water Stress Along Tropical Forest Transition Zones*

Christopher Kim  
National Science Foundation  
$9,600  
*REU-Site: Summer Undergraduate Research Fellowships in Earth and Environmental Sciences (SURFEES)*

Andrew Lyon  
National Institutes of Health  
$21,965  
*Platelet-Like Particles for Augmenting Hemostasis*

Maduka Ogba  
Pomona College – National Institutes of Health  
$46,000  
*Sulfur-Fluorine Exchange Reactions (SuFEx) toward Nitrogen-Based Sulfur(VI) Compounds*

Cedric Owens  
National Science Foundation  
$1,780  
*RUI: Nitrogenase and Friends: Uncovering How Diazotrophs Regulate and Maintain Nitrogenase Activity Under Unfavorable Environmental Conditions*

Jerry LaRue  
American Chemical Society  
$2,028  
*Hot Electron Chemistry on Transition Metal Coated Gold Nanoparticles*

Anuradha Prakash  
LT Food USA  
$1,151  
*Spray Dryer Trial*
Anuradha Prakash
Msat Consulting
$6,444 ($1,694 + $2,255 + $2.495)
Msat Consulting Projects

Anuradha Prakash
Ninth Avenue Foods
$4,295
Ninth Avenue Oat Milk and Almond Creamer

Anuradha Prakash
U.S. Department of Agriculture
$142,893
Irradiation as an Alternative to Methyl Bromide Fumigation and DPA treatment of 'Granny Smith' Apples

Chelsea Parlett
National Science Foundation
$46,000

Justin Dressel
National Science Foundation
$107,000
NSF-BSF: Efficiently Modeling Continuous Quantum Measurements of High-Dimensional Multi-Qubit

Center of Excellence in Earth Systems Modeling & Observations (CEESMO)
Emmanuel Dinnat
NASA
$20,793
Improvement of Sea Surface Salinity Satellite Retrievals

Shenyue Jia
TreePeople
$18,000
Developing a Map Viewer for Tree Canopy at Parcel Level for Los Angeles County

Institute for Quantum Studies
Armen Gulian
Office of Naval Research
$174,359
Systematic Search for Very High-Temp Superconductivity in Carbon-Related Compounds, Including Materials via Nonequilibrium Phase Diagram Routes

Armen Gulian
Office of Naval Research
$59,988
*Simulation and Experimental Realization of Vector-Potential Sensors by Quasilegal Superconducting Objects*

**Armen Gulian**
Office of Naval Research
$85,000
*Simulation and Experimental Realization of Vector-Potential Sensors by Quasilegal Superconducting Objects*

**Armen Gulian**
Office of Naval Research
$120,000
*Expansion Proposal to the ONR Grant N00014-18-1-2636: Systematic Search for Very High-Temperature Superconductivity via Nonequilibrium Phase Diagram Routes*

**Jeff Tollaksen**
John E. Fetzer Memorial Trust
$45,000
*Phase II of IQS Project for Fetzer-Franklin Fund*

**Matthew Leifer**
Silicon Valley Community Foundation
$10,350
*Reasoning in a Quantum World*

**Office of Provost**

**Julye Bidmead**
Shinnyo-en Foundation
$53,000
*Post-Undergraduate Fellowship Program*

**School of Pharmacy**

**Craig Cheetham**
Kaiser Permanente Research
($5,488)
*Moderate Hypertension in Pregnancy (MOHIP): Safety and Effectiveness of Treatment*
$84,380
Moderate Hypertension in Pregnancy (MOHIP): Safety and Effectiveness of Treatment

Innokентий Масленников
Nitto Avecia Pharma, Inc
$4,085
Characterization of Samples Using Nuclear Magnetic Resonance (NMR) and Other Techniques

Hamидреza Монтазери-Алиабади
PhRMA Foundation
$100,000
Peptide/Lipid-Associated Nucleic Acids (PLANAs) for in Vivo Delivery of Nucleic Acids

Surya Nauli
Masimo Corporation
$170,000
Mechanical Drugs: Harnessing Cancer Aggressiveness to Overcome Its Resistance

Surya Nauli
American Heart Association
$200,000
Cilia and Aneurysms

Rennolds Ostrom
Thomas Jefferson University – National Institutes of Health
$32,534
G Protein-Coupled Receptor Regulation in Airway Myocytes

Rennolds Ostrom
National Institutes of Health
$309,926
Molecular Signal Transduction of cAMP Compartments

Hamидреza Монтазери-Алиабади и Keykavous Parang
AJK BioPharmaceutical LLC
$17,250
Design and Evaluation of Peptide-Based Platforms for Oligonucleotide Delivery

Keykavous Parang and Hamидреza Монтазери-Алиабади
AJK BioPharmaceutical LLC
$45,369
Design and Evaluation of Peptide-Based Platforms for Oligonucleotide Delivery

Keykavous Parang
AJK BioPharmaceutical LLC
$90,738
Amendment to FE Service Agreement

Simin Rahighi
University of California Irvine
$4,000
Research Facility Use Agreement

Ajay Sharma
Akrivista LLC
$7,955
Further Evaluation of Anti-Inflammatory Properties of Ophthalmic Formulation A1 Using Human Corneal and Conjunctival Epithelial Cells

Rakesh Tiwari
AJK Biopharmaceutical LLC
$30,000
development, Synthesis, and Evaluation of Antibiotic-Cyclic Peptide Conjugates Against Multidrug-Resistant Bacterial Pathogens

Rakesh Tiwari
Aingeal Therapeutics
$31,727
Development of a Lead Cyclic-PDZ-Enhancer Drug for Anxiety and Depression

Jennifer Totonchy
National Institutes of Health
$319,647
Identifying Susceptibility Factors for KSHV Infection in Human Tonsil

Siu-Fun Wong
Oregon Health and Science University
$25,000
SWOG NCORP Research Base

Siu-Fun Wong
Oregon Health and Science University
$49,316 (24,658 + $24,658)
SWOG Network Group Operations Center of the NCTN

Sun Yang
Amgen, Inc.
$165,000
School of Pharmacy Fellowship Program

Wilkinson College of Arts, Humanities, and Social Sciences
**Alexander Bay**  
The Japan Foundation Center for Global Partnership  
$49,960  
*Case Studies Japan: Research Trip to Japan for Interdisciplinary Scholars and Graduate Students*

**Charissa Threat**  
National Endowment for the Humanities  
$25,200  
*Searching for Colored Pin-Up Girls: Race, Gender, and Sexuality during World War II*

**Chris Bader**  
Pennsylvania State University – Lily Endowment, Inc.  
$19,248  
*Increasing the Content, Features and Outreach of the ARDA.com, 2017-2021*

**Lori Cox Han**  
American Political Science Association  
$25,050  
*Presidents and Executive Politics Biannual Conference*