

| Summer PURA Cohort 2022      |      |          |   |                                     | *Hodson Summer PURA |  |
|------------------------------|------|----------|---|-------------------------------------|---------------------|--|
| Recipient                    | Year | Division | Proposal Title  | Mentor                              | Division            |  |
| Lucie Afko                   | 2023 | KSAS     | Redesign of CLASS's 40 GHz telescope's optical chain and focal plane  | Tobias Marriage, Rahul Datta        | KSAS                |  |
| Michael Ahmadi*              | 2023 | KSAS     | Understanding IL-1R's role in host defense against S. aureus bloodstream infections   | Yulia Wang, Nathan Archer           | SoM                 |  |
| Hananeh "Hanan" Akbari*      | 2023 | KSAS     | ANKRD26's Pathway to Polyploidy in Chronic Liver Disease  | Valentina Sladky, Andrew Holland    | SoM                 |  |
| Chintam "Sai" Chandan Reddy* | 2023 | KSAS     | Understanding the Antidepressant Effects of Ketamine: The Role of the mGluR5-Homer1a-Pin1 Complex                                       | Paul Worley                         | SoM                 |  |
| Aamilah Chowdhury*           | 2024 | WSE      | Novel Composite Matrix for Engineered Heart Tissues   | Leslie Tung                         | SoM                 |  |
| Aalia Crouch                 | 2024 | KSAS     | Determining the causal role of pLTN in space-specific control of spatial attention  | Ninad Kothari, Shreesh Mysore       | KSAS                |  |
| Benjamin "Ben" Eke           | 2023 | KSAS     | Use of Human Milk Oligosaccharides to Attenuate Brain Inflammation in Human Cerebral Organoid Model of Necrotizing Enterocolitis        | Raheel Ahmad, David Hackam          | SoM                 |  |
| Martina Gjyzari*             | 2023 | KSAS     | Exploring the relationship between patients' satisfaction of their recovery from their stroke and their long-term recovery              | Elisabeth Marsh                     | SoM                 |  |
| Garrett Goldin               | 2023 | KSAS     | Action Generation as an Integral Component of the Intuitive Physics Engine  | Jason Fischer                       | KSAS                |  |
| Annie Ho*                    | 2023 | KSAS     | Intersectin-1 and Endophilin A1 Participate in Phase Separation Dynamics for Synaptic Vesicle Replenishment                             | Tyler Ogunmowo, Shigeki Watanabe    | SoM                 |  |
| Swati Kumar*                 | 2024 | KSAS     | Investigating the Efficacy of NLY01 in Promoting Remyelination in Experimental Models of Multiple Sclerosis                             | Marjan Gharagozloo, Peter Calabresi | SoM                 |  |
| Kathy Liu*                   | 2024 | WSE      | Engineering a Regulatory T Cell-Specific Fusion Protein for Targeted Treatment of Duchenne Muscular Dystrophy                           | Derek Van Dyke, Jamie Spangler      | WSE                 |  |
| Yiqi "Andrew" Liu*           | 2023 | KSAS     | CMB Diffused-foreground Separation Using the Needlet Internal Linear Combination Method   | Tobias Marriage, Ivan Padilla       | KSAS                |  |
| Erica Lopez-Haz              | 2023 | WSE      | Machine Learning meets High-Resolution Mass Spectrometry: Identification and Quantification of Anthropogenic Chemicals in Animal Manure | Chris Brueck, Carsten Prasse        | WSE                 |  |
| Emely Loscalzo               | 2023 | KSAS     | Signal Processing in Big Brown Bats   | Cynthia Moss, Angeles Salles        | KSAS                |  |
| Youssef Maroud*              | 2024 | KSAS     | Improvements To IVCN Corneal Image Data Analysis  | Samuel Yiu, Minjie Chen             | SoM                 |  |
| Rachel Miller*               | 2023 | KSAS     | All about that basin: Reconstructing sediment sources in a Cambrian basin in southwest Mongolia through a detrital zircon study         | Emmy Smith, Mary Lonsdale           | KSAS                |  |

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|----------------------------|------|-----------|---|---------------------------------|-----------|
| Syed Xinan "Xinan" Rahman* | 2025 | WSE       | Autonomous UAV Wildfire FETCH (Forecasting Energy Transmission-Catalyzed Harm)  | Gregory Falco                   | WSE       |
| Evelyn Shiang              | 2023 | KSAS      | Discerning unintentional pediatric scald burns from child abuse in the US: A systematic review  | Wendy Shields                   | BSPH      |
| Haichun "Helen" Sun*       | 2024 | KSAS      | Measuring and Analyzing Eye Movements of the Blind using a Virtual Reality Headset  | Gislin Dagnalie                 | SoM       |
| Junxiang "Jim" Wang*       | 2023 | WSE       | Design of a Motion Measurement and Compensation System for PET Imaging Studies  | Peter Kazanzides                | WSE       |
| Kevin Wang*                | 2024 | KSAS      | Assessing Antigenic Distinction of Novel Mosaic VSGs found in Trypanosoma brucei  | Monica Mugnier                  | BSPH      |
| Emma Whitehead             | 2023 | WSE       | Immunomodulation of Macrophage Phenotype and Foreign Body Response by Oxygen-Delivering Scaffolds for Bone Regeneration   | Srujan Singh, Warren Grayson    | WSE, SoM  |
| Jun Bo "Jaxon" Wu*         | 2023 | KSAS, WSE | Assessing the impact of International Classification of Diseases coded social determinants of health on individual health outcomes of Medicaid enrollees              | Chintan Pandya                  | BSPH      |
| Yiyang Xu*                 | 2023 | KSAS      | Homotopy Type Theory in Philosophical Perspective: Reading Hegel and Wittgenstein Type-theoretically  | David Jaz Myers, Emily Riehl    | KSAS      |
| Xin "Jason" Zhang*         | 2023 | WSE       | Synthesis and Characterization of Mn1-xFexP Single Crystals for Spintronic Applications   | Tyrel McQueen, Brandon Bukowski | KSAS, WSE |
| Yuan "Daisy" Zhou          | 2025 | KSAS      | Emotional eating and binge eating patients have an abnormal deep cerebellar activity that ultimately affects the reward and emotion pathway in response to food cues. | Susan Carnell                   | SoM       |

## Summer PURA Cohort 2021

| Recipient                | Year | Division | Proposal Title   | Mentor/s                              | Division |
|--------------------------|------|----------|--|---------------------------------------|----------|
| Gohta Aihara             | 2023 | WSE      | "Understanding the Role of TCR Mechanotransduction in the Induction of CD4+ T Cell Cytotoxicity"                                 | Ariel Isser, Jonathan Schneck         | SoM      |
| Srihitha Akula           | 2023 | KSAS     | "Role of Malvolio in Drosophila Development"   | Deborah Andrew                        | SoM      |
| Melanie Alfonzo Horowitz | 2022 | KSAS     | "Assessing Interaction Stabilities Between EGFR Dimers"  | Kalina Hristova                       | WSE      |
| Sreenivas Eadara         | 2023 | KSAS     | "Investigation of the Lin28/Let-7 Pathway in Neuropathic Pain through Inducible Gain-of-Function"                                | Mollie Meffert                        | SoM      |
| Kylie Fuller             | 2023 | KSAS     | "Isolating the role of the auditory cortex in sensorimotor learning"   | Kishore Kuchobhotla                   | KSAS     |
| Julissa Garcia           | 2022 | KSAS     | "Testing Models for Viral Inhibition of SARS-CoV-2 by ZMPSTE24"  | Eric Spear, Susan Michaelis           | SoM      |
| Dennis Gong              | 2022 | WSE      | "Macrophage Gene Delivery Using Targeted Polymeric Nanoparticles"  | Savannah Est-Witte, Jordan Green      | SoM      |
| Benjamin Huang           | 2022 | WSE      | "Smart Ureteral Stent for Monitoring Stent Encrustation and Intrarenal Pressure"   | Dan Stoianovici, Jared Winoker        | SoM      |
| Harmon Khela             | 2022 | KSAS     | "Oct4 and Sox2 drive the immunosuppressive phenotype of glioma stem cells (GSCs)"  | John Laterra, Hernando Bertoni-Lopez  | SoM      |
| Jabari "Jay" Lawrence    | 2024 | WSE      | "The Design and Construction of a Jet Array for Use in a Water Tunnel Examining Fish-Eddy Interactions"                          | Rui Ni                                | WSE      |
| Hojun Lee                | 2022 | WSE      | "Computational Simulation of Heart Sound Propagation in Subjects with Different Body Habitus and Gender"                         | Rajat Mittal                          | WSE      |
| Michael Liew             | 2023 | KSAS     | "Bridging transcriptional and morphological cell types to understand the cellular organization of motor corticothalamic neurons" | Alina Spiegel, Solange Brown          | SoM      |
| Joanna Maressa           | 2022 | WSE      | "3D tissue-engineered model of the blood-brain barrier during metastatic cancer"   | Raleigh Linville, Peter Searson       | SoM, WSE |
| Saumya Nimmagadda        | 2022 | KSAS     | "Testing immunosuppression as a means of accelerating retinal ganglion cell regeneration in the zebrafish"                       | Kevin Emmerich, Jeff Mumm             | SoM      |
| Emmanuel Osikpa          | 2022 | KSAS     | "Impact of Changes to Visual Experience on the Development of Motion Vision Processing in the Behaving Ferret"                   | Kristina Nielsen                      | SoM      |
| Zachary Reeves           | 2022 | KSAS     | "Investigating the Frequency of Carbon-Enhanced Stars in Globular Clusters Vs. in the Field"                                     | Kevin Schlaufman                      | KSAS     |
| William Shao             | 2022 | WSE      | "On the fly" AI modeling of crystal growth from the melt"  | Aaron Chen, Paulette Clancy           | WSE      |
| Mira Stone               | 2022 | KSAS     | "Houses with Blue Doors: A Creative Examination of South Asian Diaspora & Othering "   | Kate Keleher                          | KSAS     |
| Sarah Syed               | 2023 | KSAS     | "Identifying the Role of Microglia Trophocytosis in Maintaining Excitatory Synapses"   | Jacqueline Griswold, Shigeki Watanabe | SoM      |

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|------------------------|------|------|--|-------------------------|------|
| Michael Xiang          | 2022 | KSAS | "An Investigation into Alcohol and Epoxide Directed Fluorinations: Utilizing Light and Electricity to Develop Safe, Site-Selective, and Efficient Radical Fluorination Strategies for Bioorganic Molecules " | Thomas Lectka           | KSAS |
| Margaret "Maggie" Yang | 2024 | KSAS | "Defining the role of C1orf116 as a metastasis suppressor in prostate cancer"  | Sarah Amend, Ken Pienta | SoM  |

## Summer PURA Cohort 2020

| Recipient             | Year | Division | Proposal Title   | Mentor/s                        | Division |
|-----------------------|------|----------|--|---------------------------------|----------|
| Ria Arora             | 2022 | KSAS     | Investigating Sex Differences in the Schizophrenia Transcriptome across Multiple Brain Regions   | Kynon Jade                      | SoM      |
| Tihitina Aytenfisu    | 2021 | KSAS     | Designing MANAbodies to Recognize MHC-I+R140Q-IDH2 Complex in Acute Myeloid Leukemia   | Sandra Gabelli                  | SoM      |
| Devanik Biswas        | 2022 | KSAS     | Evaluating the Biomarker Potential of c-Abl Pathway Molecules using Neuronal-Enriched L1CAM-Positive Exosomes  | Saurav Brahmachari              | SoM      |
| Lauren Brewster       | 2021 | KSAS     | Relationship between Cochlear Damage, Stress, and Anxiety Behaviors in Noise-Induced Hearing Loss  | Amanda Lauer                    | SoM      |
| Pedro Castineira      | 2021 | KSAS     | Understanding the Mechanism of Receptor Tyrosine Kinase Activation with Crosslinking Mass Spectrometry   | Stephen Fried                   | KSAS     |
| Yeeun "Lina" Choi     | 2021 | KSAS     | Nucleolar proteomic profiling of genetically engineered colon organoids  | Tatiana Larman                  | SoM      |
| Matthew Figdore       | 2021 | WSE      | Gene Co-expression Network Development using Single-Cell RNA-Sequencing Data   | Alexis Battle                   | WSE      |
| Anthony Garcia        | 2023 | KSAS     | Characterization of a Novel SUMO-1 Dependent Cytosolic Protein Quality Control Pathway   | Michael Matunis                 | BSPH     |
| Alice Han             | 2022 | KSAS     | The Role of WAKE and Dlg in Circadian Regulation of Sleep  | Mark Wu                         | SoM      |
| Carmen Jung           | 2021 | KSAS     | Investigating the cellular regulation of mutant ribosomal protein RPL10  | Kamena Kostova                  | Carnegie |
| Yun-Huai "Wade" Kuo   | 2021 | WSE      | Engineering Bispecific Antibodies to Synergistically Inhibit Tumor Metastasis  | Jamie Spangler                  | WSE      |
| Michael Lan           | 2021 | WSE      | Design of a Peripheral Nerve Conduit from Electrospun Polycaprolactone Nanofibers, Hyaluronic Acid, and Chondroitin Sulfate Proteoglycans to Reduce Pain from Symptomatic Neuromas | Hai-Quan Mao                    | WSE      |
| Adrian Lee            | 2022 | KSAS     | Investigating the Contribution of Astrocyte Metabolic Alterations to Cognitive Dysfunction through Electrophysiological and Morphological Analysis                                 | Juhyun Kim                      | SoM      |
| Michael Leff          | 2021 | KSAS     | Aromatics and Incense in Levantine Cultic Ritual   | Theodore Lewis                  | KSAS     |
| Brian Li              | 2022 | KSAS     | Recalibration of temporal encoding in the hippocampus.   | Manu Madhav                     | WSE      |
| Renee Nerenberg       | 2022 | WSE      | Understanding and treating blood-brain barrier dysfunction during Huntington's disease   | Peter Searson, Raleigh Linville | WSE      |
| Alan Poe              | 2021 | WSE      | Mechanisms of Lysyl Oxidase Like 2 (LOXL2) regulation by Factor Xa processing  | Lakshmi Santhanam               | SoM      |
| Jonas "Wesley" Ravich | 2022 | KSAS     | Enhancing Natural Killer Cell Stimulation and Specificity to Acute Myeloid Leukemia  | Challie Bonifant                | SoM      |

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|-----------------|------|------|--|------------------------------|------|
| Maya Sitaram    | 2022 | WSE  | Developing Machine Learning Algorithms for Surgical Skill Prediction to Assess the Benefit of Force-Feedback Systems in Robotic Surgery Training | Jeremy Brown                 | WSE  |
| Kevin Sompel    | 2021 | WSE  | Ionic Remodeling of the Sinoatrial Node Associated with Heart Failure Contributes to Chronotropic Incompetence                                   | Natalia Trayanova, Joseph Yu | WSE  |
| Tidie Song      | 2021 | KSAS | Characterizing the Role of Epigenetically Silenced Genes in Driving Lung Cancer Initiation   | Michelle Vaz                 | SoM  |
| Lakshay Sood    | 2023 | KSAS | Characterization of Type 2 Topoisomerase Inhibitors for Chemotherapeutic and Antifungal Regimens   | James Berger, Joyce Lee      | SoM  |
| Sarah Syed      | 2023 | KSAS | Identifying the Molecular Mechanisms underlying the Alignment of Neurotransmitter Release Sites and Receptors                                    | Shigeki Watanabe             | SoM  |
| Naba Wahid      | 2022 | KSAS | Ethnonationalism and Democratic Integrity: Lessons from India  | Steven David                 | KSAS |
| Sydnee Wong     | 2022 | KSAS | Increasing Silicon Nanomaterial Stability for Light-Activated Applications.  | Rebekka Klausen              | KSAS |
| Michael Xiang   | 2022 | KSAS | Investigation and Innovation of Functionally Directed, Site-Selective and Efficient Radical Fluorination Strategies for Bioorganic Molecules     | Thomas Lectka                | KSAS |
| Aditya Yedetore | 2022 | KSAS | Using Neural Networks To Investigate Language Acquisition  | Tal Linzen                   | KSAS |
| Joseph Yoniles  | 2022 | KSAS | PAR-induced Neurotoxic Aggregation of ALS-linked FUS Variants  | Sua Myong, Kevin Rhine       | KSAS |
| Chinat Yu       | 2023 | WSE  | A scientific guide to success at Hopkins   | Justin Halberda              | KSAS |

## Summer PURA Cohort 2019

| Recipient              | Year | Division | Proposal Title   | Mentor                    | Division  |
|------------------------|------|----------|--|---------------------------|-----------|
| Milind Agarwal         | 2020 | WSE      | Using computational biology to find genetic causes of severe inflammatory bowel disease in children  | Janet Markle              | BSPH      |
| Tihitina Aytenfisu     | 2021 | KSAS     | Compensating for Arrhythmogenic S1904L Mutation in Nav1.5  | Sandra Gabelli            | SoM       |
| Colin Bowen            | 2020 | WSE      | Statistical Characterization of Power Grids Using Electrical Parameters, Network Topology, Spatial Statistics, and Random Graphs                                       | Benjamin Hobbs            | WSE       |
| Devina Chatterjee      | 2021 | WSE      | CORE320 Validation of Quantification of Perivascular Inflammation using Computed Tomography Angiography Imaging  | Armin Zadeh               | SoM       |
| Hsuan-Wei "Isaac" Chen | 2020 | KSAS     | Learning Through Imitation: Different Routes to Performance in Autism and Peers  | Joshua Ewen               | SoM       |
| Janice Choi            | 2021 | KSAS     | Studying the co-transcriptional assembly of Cas9 Ribonucleoprotein Complex in real-time  | Ikenna Okafor, Taekjip Ha | KSAS, SoM |
| Jun Choi               | 2020 | KSAS     | The Early Long Duration of Midazolam Sedation Causes Behavioral Deficits and Synaptic Morphology Changes in the Mouse Model  | Cyrus Mintz               | SoM       |
| Tiffany Chu            | 2020 | WSE      | Development of a high-throughput cancer cell invasion assay for cancer drug discovery.   | Pei-Hsun We               | WSE       |
| Monica Daubon          | 2020 | KSAS     | Hippocampal Place Cell Activity in Echolocating Bats   | KirstenBohn               | KSAS      |
| Christopher Domalewski | 2020 | WSE      | Locally Treating Lung Cancer with Supramolecular Drug Amphiphiles via Aerosol  | Honggang Cui              | WSE       |
| Jianing "Jerry" Fang   | 2021 | KSAS     | Understanding the Mechanism of Wetland Degradation on the Eastern Tibetan Plateau and Its Implications for Black-necked Crane ( <i>Grus nigricollis</i> ) Conservation | Benjamin Zaitchik         | KSAS      |
| Emily Franco           | 2020 | KSAS     | Dwelling on the Negative with Friends: Psychometric Properties of a New Scale on Co-Rumination Beliefs   | Alison Papadakis          | KSAS      |
| Justin Greene          | 2021 | KSAS     | Characterizing Growth Heterogeneity in Isogenic <i>Yersinia pseudotuberculosis</i> microcolonies   | Kim Davis                 | BSPH      |
| Gabriel Grifno         | 2020 | WSE      | 3D in vitro model of the perivascular niche during glioblastoma treatment  | Peter Searson             | WSE       |
| Suyeon Ju              | 2021 | WSE      | Investigating the correlation in APD readings and fidelity between electrophysiology (EP) catheters and monophasic action potential (MAP) catheters                    | Natalia Trayanova         | WSE       |
| Joshua Krachman        | 2021 | WSE      | Determining Which Ion Channels Mediate Vascular Photorelaxation  | Lakshmi Santhanam         | SoM       |

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|-----------------------------|------|------|--|--------------------|------|
| Emma KurtzFreilich          | 2021 | KSAS | The Feasibility of a Common Currency for ECOWAS: an Econometric and Comparative Analysis   | Olivier Jeanne     | KSAS |
| Michael Lan                 | 2021 | WSE  | Design of a Peripheral Nerve Wrap from Electrospun Polycaprolactone Nanofibers and Decellularized Amnion   | Hai-Quan Mao       | WSE  |
| Sehyun "Vickie" Lee         | 2020 | WSE  | Investigation of neurological deterioration of Parkinson's disease in parallel with circadian rhythm disruption  | SungUng Kang       | SoM  |
| Silu Men                    | 2021 | WSE  | Using Functional Connectivity to Understand the Relationship between Value-Driven Attention Capture and Electroencephalography Data                    | Sridevi Sarma      | WSE  |
| Sehej-Leen Parmar           | 2020 | KSAS | Studying the Novel Role of Cdx2-mediated Differentiation in Oncogenic Senescence Induction   | Hariharan Easwaran | Som  |
| Marcos Perez                | 2020 | WSE  | Wind-Tunnel Testing and Analysis of Flow-induced Deformation and Flutter in Trees  | Rajat Mittal       | WSE  |
| Stone Streeter              | 2021 | KSAS | Prevention of Opiate Mediated Respiratory Suppression (ORS) in Obese Patients  | Seva Polotsky      | SoM  |
| Akanksha Suresh             | 2021 | KSAS | Investigating neuronal pentraxin 2 in age-related cognitive impairment   | Rebecca Haberman   | KSAS |
| Serena Tang                 | 2020 | KSAS | Multidimensional Analysis of Human Health and Performance in Long-Duration Spaceflight   | Mark Shelhamer     | SoM  |
| Michael Trautmann-Rodriguez | 2021 | WSE  | The Role of Extracellular Matrix-induced TFF1 in Breast Cancer.  | Daniele Gilkes     | SoM  |
| Matthew Wang                | 2021 | WSE  | No Motion Index: A Novel Metric as a Predictive Measure of Patient Outcome in Critically Ill Neurological Patients                                     | Pawel Kudela       | SoM  |
| Courtney Whilden            | 2020 | KSAS | Dissecting Circuits to Understand the Role of Cortical Layer 6 in Sensory Perception   | Solange Brown      | SoM  |
| Jixin "Audrey" Zheng        | 2022 | WSE  | Investigating the effects on decoding electrocorticographic signals from gravity-dependent torque during sequential reaching in a 3D virtual workspace | Daniel Cadrea      | SoM  |
| Angela Zhu                  | 2021 | WSE  | Engineering Bispecific Antibodies for Cancer Immunotherapy   | Jamie Spangler     | WSE  |



## Summer PURA Cohort 2018

| Recipient           | Year | Division | Proposal Title   | Mentor             | Division |
|---------------------|------|----------|--|--------------------|----------|
| Vinay Ayyappan      | 2020 | WSE      | Establishing Ubiquitous Mitochondrial Creatine Kinase (CKMT1) as a Proton MRS-Imageable Metabolic Vulnerability in Human Breast Cancer | Kristine Glunde    | SoM      |
| Yuxi Chen           | 2019 | KSAS     | Contribution of the Primary Somatosensory Cortex to Sensorimotor Adaptation in Mice  | Daniel O'Connor    | SoM      |
| Michelle Chiu       | 2019 | KSAS     | Larval Mosquito Salivary Gland Architecture and Secretion  | Michael Wells      | SoM      |
| Jianna Cressy       | 2018 | KSAS     | Role of medial prefrontal cortex in updating value representations   | Jeremiah Cohen     | SoM      |
| Samantha Dominguez  | 2019 | KSAS     | Auditory discrimination of echolocation and communication signals in bats  | Angeles Salles     | KSAS     |
| Madison Dutson      | 2018 | KSAS     | Addressing Environmental Health Challenges in Baltimore City Public Schools through Student Engagement                                 | Megan Latshaw      | BSPH     |
| Alanna Farrell      | 2020 | WSE      | Three-dimensional in Vitro Model of Blood-Brain Barrier Drug Delivery for Treatment of Brain Cancer                                    | Peter Searson      | WSE      |
| Angel Gabriel       | 2019 | KSAS     | The Effects of Racial Discrimination on Hypertension in an Integrated Community in Baltimore City                                      | Roland Thorpe      | BSPH     |
| Samantha Goldschmid | 2019 | KSAS     | Mixed Metal Catalysis for Small Molecule Activation  | Sara Thoi          | KSAS     |
| Michael Leff        | 2021 | KSAS     | Engineering single-chain cytokine-antibody fusions for cancer immunotherapy  | Jamie Spangler     | WSE      |
| Patrick Little      | 2018 | WSE      | The Time Course of Physical Intuitions   | Chaz Firestone     | KSAS     |
| MonYi Lwin          | 2019 | KSAS     | Urine ketones as a biomarker for seizure reduction in patients with epilepsy on the modified Atkins Diet                               | Mackenzie Cervenka | SoM      |
| Bruce Nguyen Tran   | 2019 | KSAS     | Active and passive listening channels for auditory scene analysis  | Cynthia Moss       | KSAS     |
| Melody Nguyen       | 2020 | KSAS     | Identifying in vivo protein modifiers of mutant VCP-induced muscle dysfunction via a directed genetic interaction screen.              | Anthony Cammarato  | SoM      |
| Richard Oh          | 2019 | WSE      | Prolonged Effects of Clinical Drug on Epileptic Neuronal Networks  | Pawel Kudela       | SoM      |
| Michael Ontiveros   | 2019 | KSAS     | Examining the potential of social network interventions to improve HIV care and treatment among women who use drugs in Tanzania        | Haneefa Saleem     | BSPH     |
| Karl Osterbauer     | 2019 | KSAS     | Testing a Model of Metal Poor Star Formation in Ultrafaint Dwarfs of the Local Group   | Kevin Schlaufman   | KSAS     |
| Bradley Parsons     | 2020 | KSAS     | Sleep Patterns in Student Athletes   | Alan Schwartz      | SoM      |
| Luyi Peng           | 2020 | KSAS     | Loss of p53 in pathogenesis of relapsed and refractory multiple myeloma  | Yu-Tai Chang       | SoM      |
| Isaree Pitaktong    | 2020 | WSE      | 3D Printing Vascularized Cardiac Tissue Constructs   | Narutoshi Hibino   | SoM      |
| Wenzer Qin          | 2019 | KSAS     | Astrometric Effects of Alternative Theories of Gravity   | Marc Kamionkowski  | KSAS     |

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| Madison Reed        | 2019 | KSAS | A Biochemical and Cellular Analysis of HIV recognition by CD4+ T lymphocytes                   | Scheherazade Sadegh-Nasseri | SoM  |
| Nazrawit Retta      | 2019 | KSAS | Quantitative Analysis of Sensory Cells and Neurons of the Ear in Deaf Bats                     | Amanda Lauer                | SoM  |
| Julia See           | 2020 | KSAS | Astrocyte IL-33 in Sex-dependent Modulation of Microglia Function and Anxiety Related Behavior | Shinichi Kano               | SoM  |
| Jayhyun "Jenny" Seo | 2019 | KSAS | Defining Epigenetic Regulation of B2-Adrenergic Receptor Tachyphylaxis in Asthma               | Steven An                   | BSPH |
| Christopher Shallal | 2021 | WSE  | Dielectric Elastomer Actuator Implementation into a Prosthetic Adaptive Socket                 | Nitish Thakor               | SoM  |
| Rosa Shi            | 2019 | KSAS | Preclinical neuroprotective efficacy evaluation of DA-9805 for Parkinson's disease             | Ted Dawson                  | SoM  |
| Tyler Spoletti      | 2020 | WSE  | Disrupting the Flight of Mosquito Swarms via Acoustic Waves                                    | Rajat Mittal                | WSE  |
| Albert Yang         | 2019 | WSE  | Creation of Split GFP-Based Cellular Boolean XOR Logic Gates                                   | Takanari Inoue              | SoM  |
| Mingyu Yang         | 2019 | WSE  | Developing Cortex-Like Tissue in Vitro   | Hai-Quan Mao                | WSE  |
| Kevin Zhan          | 2020 | WSE  | A genome-wide screen to identify negative regulators of centrosome biogenesis                  | Andrew Holland              | SoM  |

## Summer PURA Cohort 2017\*\*

| Recipient          | Year | Division | Major/s   | Mentor/s                              | Division  |
|--------------------|------|----------|---|---------------------------------------|-----------|
| Gabrielle Aversa   | 2019 | KSAS     | Chemistry   | Sara Thoi, Avery Baumann              | KSAS      |
| Anant Bhargava     | 2018 | KSAS     | Biophysics  | Erin Goley                            | SoM       |
| Monika Borkovic    | 2018 | KSAS     | Writing Seminars  | Jennifer Kingsley                     | KSAS      |
| Ines Botto         | 2018 | KSAS     | Sociology   | Tim Nelson                            | KSAS      |
| Alisa Brown        | 2018 | WSE      | Biomedical Engineering  | Jeff Siewerdsen, Amir Manbachi        | SoM       |
| Alyssa Chalmin     | 2019 | KSAS     | Molecular & Cellular Biology                                      | Kelly Metcalf-Pate, Alicia Braxton    | SoM       |
| Aran "Irene" Chang | 2020 | KSAS     | East Asian Studies  | Gerald Brandacher, Angelo Leto Barone | SoM       |
| Alexa Earls        | 2019 | KSAS     | Behavioral Biology  | Eric Hutchinson                       | SoM       |
| Nicolas Eng        | 2018 | WSE      | Biomedical Engineering  | Michael Beer                          | SoM       |
| Victoria Fang      | 2018 | WSE      | Biomedical Engineering; History of Science, Medicine & Technology | Arvind Pathak                         | SoM       |
| Marissa Ferreyros  | 2018 | KSAS     | Cognitive Science; Psychology                                     | James Knierim, Manu Madhav            | KSAS, WSE |
| Anna Garcia        | 2018 | WSE      | Chemical & Biomolecular Engineering                               | Patrick Brown, Cara Rabik             | SoM       |
| Amolika Gupta      | 2018 | KSAS     | Neuroscience  | Keri Martinowich, Kristen Maynard     | SoM       |
| Ananya Gupta       | 2019 | WSE      | Biomedical Engineering  | Sharon Gerecht, Justin Lowenthal      | WSE       |
| Max Jarcho         | 2020 | WSE      | Computer Science & Engineering                                    | Christopher Celenza                   | KSAS      |
| Ruchita Kothari    | 2019 | KSAS     | Biophysics  | Solomon Snyder, Chirag Vasavda        | SoM       |
| Abhijay Kumar      | 2018 | KSAS     | Molecular & Cellular Biology                                      | Andrew Holland, Michelle Levine       | SoM       |
| Joey Li            | 2017 | KSAS     | Molecular & Cellular Biology                                      | William Matsui, Ross McMillan         | SoM       |
| Xiang Li           | 2019 | WSE      | Electrical & Computer Engineering                                 | Jerry Prince, Muhan Shao              | WSE       |
| Nikki Lopez Suarez | 2019 | KSAS     | Materials Science & Engineering                                   | Maria Portuondo                       | KSAS      |
| Lakyn Mayo         | 2018 | WSE      | Materials Science & Engineering                                   | Peter Searson, Moriah Katt            | WSE       |
| Jeyani Narayan     | 2019 | WSE      | Chemical & Biomolecular Engineering                               | Yun Chen, Nirutoshi Hibino            | WSE, SoM  |
| Chidinma Nnadi     | 2019 | KSAS     | Biophysics  | Sarah Woodson, Subrata Panja          | KSAS      |
| Jilliann Pak       | 2018 | KSAS     | International Studies & Sociology                                 | Stefanie Deluca, Allison Young        | KSAS      |
| Aleksandra Popovic | 2019 | KSAS     | Molecular & Cellular Biology                                      | Elizabeth Jaffee, Nina Chu            | SoM       |
| Vignesh Sadras     | 2018 | WSE      | Biomedical Engineering  | Raimond Winslow                       | WSE       |
| Piunik Sarkisian   | 2018 | KSAS     | Psychology  | Evelyn Ender                          | KSAS      |
| Will Scerbo        | 2018 | WSE      | Applied Math & Statistics   | Daniel Naiman, Geoffrey Wright        | WSE, PI   |
| Mariah Schrum      | 2018 | WSE      | Biomedical Engineering  | Russell Taylor                        | WSE       |

|                     |      |      |  |                                       |           |
|---------------------|------|------|--|---------------------------------------|-----------|
| Fion Shiau          | 2018 | KSAS | Neuroscience; Molecular & Cellular Biology                     | Seth Blackshaw, Brian Clark           | SoM       |
| Paige Stanley       | 2018 | WSE  | Chemical & Biomolecular Engineering; Applied Math & Statistics | Jeffrey Gray, Jeliasko Jeliaskov      | WSE, KSAS |
| Wen Wen Teh         | 2018 | KSAS | Neuroscience; Economics  | Abdulgafoor Bachani                   | BSPH      |
| Linh Tran           | 2019 | WSE  | Biomedical Engineering   | Gregg Semenza, Haiquan Lu             | SoM       |
| Delaney Ubellacker  | 2019 | KSAS | Cognitive Science  | Brenda Rapp, Robert Wiley             | KSAS      |
| Fernando Vicente    | 2018 | WSE  | Biomedical Engineering   | Andrew Feinberg                       | SoM       |
| Dillan Villavisanis | 2018 | KSAS | Anthropology   | Amanda Lauer                          | SoM       |
| Max White           | 2018 | KSAS | Biophysics   | Jie Xiao, Chris Bohrer                | SoM       |
| Kimberly Wong       | 2019 | KSAS | Cognitive Science  | Michael McCloskey, Gali Elenblum      | KSAS      |
| Wendy Xie           | 2019 | KSAS | Neuroscience   | Cynthia Moss, Michaela Warnecke       | KSAS, SoM |
| Cindy Yuan          | 2019 | KSAS | Neuroscience; Cognitive Science                                | Marshall Hussain Shuler, Tanya Marton | SoM       |

**\*\* students were not asked to submit proposal during inaugural year of HOUR**

## Summer PURA Cohort 2016\*

| Recipient               | Year  | Division | Proposal Title   | Mentor                       | Division |
|-------------------------|-------|----------|--|------------------------------|----------|
| Peter Angeli            | 2017  | KSAS     | Verifying the Octodon Degus as a Natural Model for Alzheimer's Disease                           | Michela Gallagher            | KSAS     |
| Anne Armstrong          | 2017  | KSAS     | The effect of psychosocial stress on reward-seeking behavior in Long Evans rats                  | Patricia Janak               | KSAS     |
| Abhijith Bathini        | 2018  | KSAS     | Determining the Mechanism Underlying Lhx8-Dependent Control of Circadian Phase Preference        | Seth Blackshaw               | SoM      |
| Alfred Chin             | 2019  | KSAS     | Role of GSH cycle and homocysteine in cardiovascular disease                                     | Solomon Snyder               | SoM      |
| Yu-Chen "Herriet" Hsieh | 2018  | KSAS     | Evaluating cortical astrocyte mGluR5 signaling following demyelination                           | Dwight Bergles               | SoM      |
| Venkatasai Jasty        | 2017  | WSE      | Engineering essential amino acid expression system into HEK cells                                | Michael Betenbaugh           | WSE      |
| Felicia Juarez          | 2017  | KSAS     | Investigating the role of Lhx2 in the development of the ciliary body                            | Seth Blackshaw               | SoM      |
| James Keiler            | 2017  | KSAS     | Alpha-Synuclein Transmission Pathology Mediated by LRRK2   | Ted Dawson                   | SoM      |
| Sanjay Kottapalli       | 2019  | KSAS     | Thymulin Gene Therapy for Allergic Asthma Using Biodegradable Nanoparticles                      | Jung Soo Suk                 | SoM      |
| Jae Young "Jake" Lee    | 2018  | KSAS     | Free Radical Copolymerizations of BN-Styrene and Styrene   | Rebekka Klausen              | KSAS     |
| Jennifer Lee            | 2016  | KSAS     | Evolving Conceptions of Minjok: National Identity in a Globalizing South Korea                   | Beverly Silver               | KSAS     |
| Joey Li                 | 2017  | KSAS     | IQGAP1 scaffold protein regulation of cancer stem cells in pancreatic ductal adenocarcinoma      | William Matsui               | SoM      |
| Wilhelm Liano           | 2017  | WSE      | Dephosphorylation via Rare Earth Oxide Nanocatalysts   | Chao Wang                    | WSE      |
| Kristen Manto           | 20147 | WSE      | Hydrogel Capsule Technology as New Tool for Studying Cell Migration                              | Konstantinos Konstantopoulos | WSE      |
| Denis McInerney         | 2018  | KSAS     | Sensor Curvature Study for the Higgs Boson   | Andrei Gritsan               | KSAS     |
| Ndeye "Marieme" Ndiaye  | 2018  | KSAS     | Autism Social Behavior   | Gul Dolen                    | KSAS     |
| Daphne Schlesinger      | 2018  | WSE      | Polymer microneedles for more effective transdermal drug delivery                                | Jordan Green                 | SoM      |
| Erica Schwarz           | 2017  | WSE      | Using Graph Theory and the Minimum Cut Algorithm to Predict Ablation Targets                     | Natalia Trayanova            | WSE      |
| James Shamul            | 2017  | WSE      | Doxorubicin-Loaded Poly( $\beta$ -amino ester)-Poly(ethylene glycol) Micelles for Cancer Therapy | Jordan Green                 | SoM      |
| Thaara Shankar          | 2019  | KSAS     | Decoding Klimt through Neuroaesthetics   | Christopher Lakey            | KSAS     |
| Jonathan Snedeker       | 2018  | KSAS     | Nuclear Organization and Control of DNA replication in Germline Stem Cells                       | Xin Chen                     | KSAS     |
| Daniel Stambler         | 2019  | KSAS     | Improving Interest in History in High Schools across the USA                                     | Annalisa Czeuczulin          | KSAS     |
| Hayley Strasburger      | 2017  | KSAS     | Oligodendrocyte Progenitor Cell Transdifferentiation in Multiple Sclerosis                       | Peter Calabresi              | SoM      |
| Man Hon "Ambrose" Tang  | 2019  | PI       | The Pulse of Hong Kong   | Susan Weiss                  | PI       |

|                    |      |      |  |                 |      |
|--------------------|------|------|--|-----------------|------|
| Justin Thomas      | 2018 | KSAS | Differentiation of Hematovascular Lineages from Human Pluripotent Stem Cells                             | Elias Zambidis  | SoM  |
| Harsh Wadhwa       | 2018 | KSAS | Effect of ATXN-2 polyglutamine expansion on Nucleocytoplasmic Transport Defects in C9ORF72 -mediated ALS | Thomas Lloyd    | KSAS |
| Jiaqi "Judy" Wang  | 2016 | WSE  | Role of NDRG1 in Vesicular Recycling and Tumor Cellular Autophagy  | Suchant Kachhap | SoM  |
| I Chae "Rachel" Ye | 2016 | WSE  | Tuning the effects of DDIT4 to promote cancer cell death under hypoxia                                   | Daniele Gilkes  | SoM  |
| Danait Yemane      | 2017 | KSAS | Sawa Military Training and Women's Health in Eritrea   | Peter Winch     | BSPH |
| Alessandra Zito    | 2018 | KSAS | The Implantation of MoS3 into Carbon Aerogels: An Investigation of Three Procedures                      | Sara Thoi       | KSAS |

*\*redesignated as Summer PURA. Previously identified as Spring PURA back to the establishment of the program.*

## Summer PURA Cohort 2015\*

| Recipient              | Year | Division | Proposal Title   | Mentor           | Division |
|------------------------|------|----------|--|------------------|----------|
| Ellen Bruner           | 2015 | KSAS     | Tracing Elite Industry in the Ancient Mediterranean: Cyprus, Ceramics, and Copper  | Emily Anderson   | KSAS     |
| Ivan Chen              | 2015 | KSAS     | Role of HIF-1 dependent Glutathione Biosynthesis in Triple Negative  | Gregg Semenza    | SoM      |
| Michael Chickering     | 2016 | WSE      | Bisphenol A Toxicity Screening in Cerebral Organoids   | Hongjun Song     | SoM      |
| Vikas Daggubati        | 2017 | KSAS     | Uncovering execution points of Polo-like Kinase 4 in centriole duplication   | Andrew Holland   | SoM      |
| Yunfan Fan             | 2016 | WSE      | Methylation Sequencing on the MinION   | Winston Timp     | WSE      |
| Preston Ge             | 2017 | KSAS     | Evaluating c-Abl phosphorylation of Parkin in Parkinson's Disease  | Dwight Bergles   | SoM      |
| Tyler Jorgenson        | 2015 | WSE      | Development of Hierarchical DNA Structures   | Rebecca Schulman | WSE      |
| Sang Hyuk Lee          | 2019 | WSE      | Effect of cell senescence on the nuclear morphology and transcriptional activity of cancer cells                             | Denis Wirtz      | WSE      |
| Sathvik Namburar       | 2017 | KSAS     | The Economic and Environmental Effects Associated with Medical Waste   | Alan Robin       | SoM      |
| Amelie Nkodo           | 2017 | KSAS     | Translating child rights into institutional forms at the Centre de Guidance Familiale et Infantile (CEGID) in Dakar, Senegal | Veena Das        | KSAS     |
| Qiuyin Ren             | 2016 | WSE      | Creating non-spherical biodegradable nanoparticles for gene delivery.  | Jordan Green     | SoM      |
| Sounak Roy             | 2018 | KSAS     | Investigating the Role of CXC Chemokine Receptors in Prostate Cancer Bone Metastasis   | Ken Pienta       | SoM      |
| Christine Server       | 2015 | KSAS     | Unraveling the Circuitry of Serotonergic Neurons in the Raphe Nuclei   | Jeremiah Cohen   | SoM      |
| Daniel Shinn           | 2016 | WSE      | Enhancing peripheral motor axonal regeneration via nanoparticle-mediated gene delivery to the nerve autograft                | Hai Quan Mao     | WSE      |
| Emily Su               | 2016 | WSE      | Elucidating the Mechanosensitive Role of Primary Cilia in Calcium Signaling  | Takanari Inoue   | SoM      |
| Daniel Takash          | 2016 | WSE      | Optimal Taxation and Enforcement Strategies in Newly Legalized Drug Markets  | Sauleh Siddiqui  | WSE      |
| Pranay Tyle            | 2016 | WSE      | Influence of Oxygen Deprivation On Cancer Metastasis in Three Dimensional Microenvironments                                  | Denis Wirtz      | WSE      |
| Camila Villasante      | 2017 | KSAS     | The Dynamics of <i>Escherichia coli</i> Adenylate Kinase   | Vincent Hilser   | KSAS     |
| William Wisner-Carlson | 2017 | KSAS     | Refining Serial Murder Classification in Modern America  | Kathy Edin       | KSAS     |
| Brenda Young           | 2015 | KSAS     | Deconstructing the cellular basis of thalamic nuclei specification by in vivo clonal analysis                                | Guo Li Ming      | SoM      |
| Cyrus Zhou             | 2015 | KSAS     | Using natural variation to understand stochastic gene expression   | Robert Johnston  | KSAS     |

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## Summer PURA Cohort 2014\*

| Recipient            | Year | Division | Proposal Title   | Mentor                       | Division |
|----------------------|------|----------|--|------------------------------|----------|
| Jordan Baker         | 2015 | WSE      | Carotenoid and Lipid Production in Photoautotrophic Microalgae   | Michael Betenbaugh           | WSE      |
| Brett Brodsky        | 2016 | KSAS     | A human stem cell model for studying genetic mutations in an inherited neurodevelopmental disease  | Linzhao Cheng                | KSAS     |
| Weitong "Jeron" Chen | 2015 | WSE      | Viscoelastic Characterization of Cancer Cells during Mitosis   | Denis Wirtz                  | WSE      |
| Daniel Contaldo      | 2016 | KSAS     | Documenting the Libera Program in Italy  | Bernadette Wegenstein        | KSAS     |
| MacIntosh Cornwell   | 2015 | WSE      | Quantitative Analysis of Epigenetic Organization within Nuclei using FISH  | Winston Timp                 | WSE      |
| Abby Dowling         | 2014 | SoN      | Caribbean Men's Study  | Jacquelyn Campbell           | SoN      |
| Stacy Gil            | 2015 | WSE      | Developing a web-based educational applet on the cerebral vasculature  | Arvind Pathak                | WSE      |
| Saksham Gupta        | 2014 | KSAS     | An Analysis of E3 Ubiquitin Ligases in C9ORF72-related ALS   | Thomas Lloyd                 | KSAS     |
| Seal-Bin Han         | 2017 | WSE      | Development of miniaturized cochlear implant device for use in mice  | Amanda Lauer                 | WSE      |
| Sarah Hewes          | 2015 | WSE      | 3D printing of functional hydrogel-encapsulated microvessels   | Peter Searson                | WSE      |
| Yijia "Candace" Hu   | 2014 | KSAS     | Haploperoxide C and its regulation of SAICAR and cancer cell growth  | Young-Sam Lee                | KSAS     |
| Peter Kalugin        | 2015 | KSAS     | Elucidating the role of intraflagellar transport in primary cilia  | Takanari Inoue               | KSAS     |
| David Nam-Woo Kim    | 2016 | KSAS     | Molecular mechanisms of Huntington's Disease   | Solomon Snyder               | KSAS     |
| Andrew Landau        | 2015 | PI       | Notes, sequences and melodies: The Relationship Between Tempo and Auditory Object Encoding   | Charles Limb                 | PI       |
| Isaiah Levy          | 2015 | WSE      | Targeting Tumor Suppressor MicroRNAs in Pediatric Leukemia   | Linda Resar                  | WSE      |
| Carrie Mok           | 2016 | WSE      | Developing RNA Aptamers that Target HMGA1  | Linda Resar                  | WSE      |
| Pavlos Pachidis      | 2015 | WSE      | Breast cancer cell migration in confinement: The contact-guided dilemma between channels of different widths                                 | Konstantinos Konstantopoulos | WSE      |
| Edward "Ned" Samson  | 2015 | WSE      | How do humans synchronize movements with an external rhythm?   | Noah Cowan                   | WSE      |
| Siqi Tan             | 2018 | WSE      | Characterization of LOXL2 Protein for Applications in Vascular Stiffness   | Lakshmi Santhanam            | WSE      |
| Jai Thakor           | 2017 | KSAS     | MiniBrain-Modeling Double Cortex Syndrome with iPSCs and Cerebral Organoids  | Kimberly Christian           | KSAS     |
| Carolyn Xue          | 2017 | KSAS     | Effect of Anti-ulcer Agent, Geranylgeranylacetone, on Cardiac Toxicity of Doxorubicin when treating and imaging Acute Myeloid Leukemia Cells | Kathleen Gabrielson          | KSAS     |

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## Summer PURA Cohort 2013\*

| Recipient                 | Year | Division | Proposal Title  | Mentor               | Division |
|---------------------------|------|----------|---|----------------------|----------|
| Maani Archang             | 2014 | WSE      | Hepatic Stellate Cell-Targeted miRNA Nanoparticles to Treat Cirrhosis Using Retrograde Intrahepatic Infusion                            | Hai-Quan Mao         | WSE      |
| Alessandra Bautze         | 2014 | KSAS     | WHAT SOPHIE SAW Film Production   | Meredith Ward        | KSAS     |
| Deirdre Caffrey           | 2014 | KSAS     | Using the Six-minute Walk Test as a Screening Tool for Chronic Obstructive Pulmonary Disease (COPD) in a Community Setting (Lima, Peru) | William Checkley     | SoM      |
| Caryn Carson              | 2015 | KSAS     | Analyzing the Role of SUMO in Protein Misfolding Stress   | Michael Matunis      | BSPH     |
| Henry Chen                | 2014 | KSAS     | The Impact of the United States Farm Bill on International Trade  | Renee Marlin Bennett | KSAS     |
| Alexander Crits-Christoph | 2016 | KSAS     | Adaptations of Endolithic Microbial Communities to UV Exposure  | Jocelyne DiRuggiero  | KSAS     |
| Diego Espinoza            | 2015 | KSAS     | miRNA-Target Networks in SIV-infected and INF-Treated Macaque Astrocytes  | Kenneth Witwer       | SoM      |
| Albert Feeny              | 2014 | WSE      | Measuring Intrinsic Repolarization Liability  | Larisa Tereshchenko  | SoM      |
| Bethany Flaherty          | 2014 | KSAS     | The Effects of Spatiotemporal Continuity on Change Blindness  | Justin Halberda      | KSAS     |
| Sarah Furlong             | 2014 | KSAS     | Do Children Have Massive Memory for Visual Images?  | Barbara Landau       | KSAS     |
| Anna Gilmour              | 2014 | KSAS     | A Novel Paradigm for Studying the Neural and Hormonal Mechanisms of Female Appetitive Behavior  | Gregory Ball         | KSAS     |
| David Glover              | 2016 | WSE      | Recovery of Somatosensory Cortex Function through Optogenetics Stimulation of Cortical Neuronal Activity                                | Galit Pelled         | SoM      |
| Andrew Griswold           | 2015 | KSAS     | Iron (II) Catalyzed Difluorination of Acid Chlorides  | Thomas Lectka        | KSAS     |
| Jordan Hoffman            | 2014 | KSAS     | Temporally Modeling Changing Stochastic Processes Using Monte Carlo Markov Models   | Colin Norman         | KSAS     |
| Julia Huerta              | 2015 | SoN      | The Effect of Cumulative Abuse on Mental Health Outcomes Among African American and African Caribbean Women                             | Jackie Campbell      | SoN      |
| Joshua Kays               | 2014 | KSAS     | Characterizing Tissue Micro-architecture for Applications in Drug Delivery and Tissue Engineering                                       | Justin Hanes         | SoM      |
| Jin Wan "Julian" Kim      | 2015 | KSAS     | The Effects of Nitrosylation on Thorase Neuron Protection   | Valina Dawson        | SoM      |
| Malinda McPherson         | 2014 | KSAS     | Neural Substrates of Emotion Processing During Musical Improvisation  | Charles Limb         | SoM      |
| Praneeth Satta            | 2014 | WSE      | A Surgical Navigation System with a Head Mounted Tracking System and Augmented Reality Display  | Peter Kazanzides     | WSE      |
| Eva Schulteis             | 2014 | KSAS     | Sub-Plate Neurons in Mouse Models of Schizophrenia  | Solange Brown        | SoM      |
| Chanon Tuntivate          | 2015 | WSE      | Studying the Effect of Temperature on Blunt End Stacking of DNA Origami Tiles   | Rebecca Schulman     | WSE      |

|                         |      |      |   |          |     |
|-------------------------|------|------|---|----------|-----|
| Zixiao "Andrew"<br>Wang | 2015 | KSAS | Role of CtBP2 in Embryonic Retinal<br>Development | Don Zack | SoM |
|-------------------------|------|------|---|----------|-----|

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## Summer PURA Cohort 2012\*

| Recipient          | Year | Division | Proposal Title   | Mentor/s            | Division |
|--------------------|------|----------|--|---------------------|----------|
| John Belanger      | 2013 | KSAS     | SEE: Inside Out Project New Haven  | Matthew Porterfield | KSAS     |
| Daniel Borota      | 2014 | KSAS     | Caffeine and Long-term Memory Storage: An Investigation of Post-Training Caffeine Administration and its Neuromodulatory Effects on Hippocampal Pattern Separation | Michael Yassa       | SoM      |
| Manuel Brockman    | 2013 | KSAS     | Spatial Navigation Capacities in Requisite Dual Solution Trials in Humans  | Amy Shelton         | KSAS     |
| Dillon Brout       | 2013 | KSAS     | Investigating Type Ia Supernovae Classification & Redshift Determination Methods, An Effort to Constrain the Equation of State of Dark Energy                      | Adam Riess          | KSAS     |
| Sarah Brown        | 2013 | WSE      | Automated Image Analysis Programming   | Doug Robinson       | SoM      |
| Lawrence Chow      | 2014 | KSAS     | Ethanol Exposure and Histone Modification in Intronic Regulatory Regions of FKBP5  | Richard Lee         | SoM      |
| James Chuang       | 2013 | WSE      | Constructing a Neochromosome for the Modular Assembly of Exogenous Pathways in <i>S. Cerevisiae</i>  | Jef Boeke           | SoM      |
| Jena Daya          | 2014 | WSE      | Understanding Premature Aging in Hutchinson Gilford Progeria Syndrome  | Denis Wirtz         | WSE      |
| Naika Gabriel      | 2013 | SoN      | An Analysis of Key Features of Violence Against Women in Haiti Before and After the 2010 Earthquake and Perceptions of Violence Against Women in Haiti             | Jackie Campbell     | SoN      |
| Lucy Gao           | 2014 | WSE      | Role of Cofilin in Regulated Brush Border Trafficking of NHE3  | Mark Donowitz       | SoM      |
| Jeffrey Granat     | 2013 | KSAS     | A Systematic Approach to Understanding Nucleosome Stability  | Greg Bowman         | KSAS     |
| Catherine Guenther | 2013 | KSAS     | Privatizing The Prison System: A Continuation of Racial Discrimination?  | Nathan Connolly     | KSAS     |
| Jonathan Guo       | 2013 | PI       | A Swingin' Affair: A Study of the Music of Dexter Gordon   | Gary Thomas         | PI       |
| Roger Henry        | 2013 | KSAS     | The Sweet Side of Cell Survival: A Model for O-GlcNAc-Mediated Apoptosis Inhibition  | Natasha Zachara     | SoM      |
| Matthew Hill       | 2014 | KSAS     | Molecular Hydrogen Emissions in Luminous Infrared Galaxies   | Nadia Zakamska      | KSAS     |
| Alice Hung         | 2013 | KSAS     | Tissue-specific Activation of Estrogen Signaling in Development  | Marnie Halpern      | SoM      |
| Joshua Kassner     | 2014 | KSAS     | The Effects of Quorum Sensing Inhibitors on the Phagocytosis of Neutrophils  | Jocelyne DiRuggiero | KSAS     |
| Hyunju Kim         | 2013 | KSAS     | Exploring the Lives of Korean American Storeowners in Baltimore  | Joel Gittelsohn     | BSPH     |
| Kathryn Ledwell    | 2013 | PI       | Musical Development for Children with Cochlear Implants  | Charles Limb        | SoM      |
| Daniel Lewis       | 2014 | WSE      | Sickle Cell Vaso-Occlusion in a Microfluidic Device Containing Three-Dimensional Constructs  | Sharon Gerecht      | WSE      |
| Diana Liao         | 2013 | KSAS     | Characterizing the Effects of Hand Movements on Working Memory   | Cherie Marvel       | SoM      |

|                           |      |      |   |                     |      |
|---------------------------|------|------|---|---------------------|------|
| Mary Elizabeth Maldarelli | 2013 | KSAS | A Guide to Early Strings and Thai Folk Instruments at the Library of Congress   | Susan Weiss         | PI   |
| Alexander Mullen          | 2014 | WSE  | Engineering Cell-Based Nerve Regeneration: The Effect of Nanofiber Alignment on Nanoparticle-Mediated Transfection in Schwann Cells | Hai Quan Mao        | WSE  |
| Akshay Sanghi             | 2014 | WSE  | Can Acetic Acid be Used to Improve Therapy for Yeast Infections?  | Richard Cone        | KSAS |
| Rose Schneider            | 2013 | KSAS | Attentional Allocation in Multiple Object Tracking: The Case of Hoppy   | Jonathan Flombaum   | KSAS |
| Niccolo Seligman          | 2015 | PI   | Exploring the Vielle: Lost Repertoire for a Mysterious Instrument   | Mark Cudek          | PI   |
| Pooja Shah                | 2013 | WSE  | Food Insecurity and HIV: Examining the Clinical and Behavioral Implications of Inadequate Food Access in Baltimore                  | Shruti Mehta        | BSPH |
| Andi Shahu                | 2013 | KSAS | Dissecting the Role of c-Abl in Parkinson's Disease   | Ted Dawson          | SoM  |
| Jay Shi                   | 2013 | KSAS | Neurotrophin-Mediated Regulation of Lin28a: Mechanism of Translational Regulation Underlying Synaptic Plasticity                    | Mollie Meffert      | SoM  |
| Sanjoli Sur               | 2013 | WSE  | J-point Elevation Prior to Ventricular Arrhythmia Risk Evaluation   | Larisa Tereshchenko | SoM  |
| Jules Szanton             | 2013 | KSAS | The Kill List: A Constitutional Analysis of the Targeted Killing of American Citizens during the Global War on Terror               | Joel Grossman       | KSAS |
| Joshua Temple             | 2015 | WSE  | Immunosuppressive Properties of Enhanced Bone Marrow Aspirate   | Warren Grayson      | SoM  |
| Nicholaus "Nick" Trenton  | 2013 | WSE  | The Role of Chemotaxis in Three-Dimensional Cancer Cell Migration   | Denis Wirtz         | WSE  |
| Julia Zhang               | 2013 | KSAS | Uncovering the Molecular Basis of Sleep: Interactions of WIDE AWAKE and RDL in <i>Drosophila melanogaster</i>                       | Mark Wu             | SoM  |

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## Summer PURA Cohort 2011\*

| Recipient               | Year | Division | Proposal Title   | Mentor/s            | Division |
|-------------------------|------|----------|--|---------------------|----------|
| Jorge Marchand Benmaman | 2013 | WSE      | The Temporal and Spatial Role of Secretory Molecules that Govern Cancer Cell Motility  | Denis Wirtz         | WSE      |
| Natalie Bray            | 2013 | KSAS     | Effects of Increasing CO2 on Leaf Litter Palatability and Chemistry for Soil Animals   | Katalin Szlavecz    | KSAS     |
| Sarah Bristol           | 2012 | SoN      | Mothers' Documentation of the Persistent Impact of War on their Children and Family in the Democratic Republic of Congo: A Photovoice Project  | Nancy Glass         | SoN      |
| Melinda Chen            | 2014 | WSE      | Dynamic Interplay between Cell Morphology and Biochemical Signaling Pathways   | Takanari Inoue      | SoM      |
| Woo Jin Choi            | 2012 | WSE      | Preparation and Characterization of Mucus-penetrating Drug Nanocrystals  | Justin Hanes        | SoM      |
| Nolan DiFrancesco       | 2012 | KSAS     | "New Media" in the Arab World: A Look into Beirut  | Fadel Abdallah      | KSAS     |
| Jean Fan                | 2013 | WSE      | Improving Computational Models of the Biological Consequences of Mutation through Limiting the Phylogenetic Distances of Srthologous Sequences | Rachel Karchin      | WSE      |
| Jonah Furman            | 2012 | KSAS     | The Anti-postmodernist Ethics of David Foster Wallace's "The Pale King"  | Yi-Ping Ong         | KSAS     |
| Hasini Jayatilaka       | 2013 | WSE      | The Role of Actin Bundling and Crosslinking Proteins in Cancer Cell Motility in 3D Matrices  | Denis Wirtz         | WSE      |
| Xiang Li                | 2012 | WSE      | Engineering Brain Tumor Cells With Built-in Oxygen Sensors   | Arvind Pathak       | SoM      |
| Rubi Luna               | 2012 | KSAS     | Stress and Coping: Baccalaureate Nursing Students in Clinical Simulations  | Darcy Thompson      | SoM      |
| Katherine Magruder      | 2012 | PI       | The Life and Times of Ferdinand Palmo: Food and Music in Nineteenth Century New York City  | Susan Weiss         | PI       |
| Simon Pan               | 2013 | KSAS     | Unraveling the Apoptotic Signaling Pathways Regulated by Pax6 During Retinal Development   | Valeria Canto-Soler | SoM      |
| Anita Ram               | 2012 | KSAS     | Evaluating the Nutrition Transition in South India   | Larry Cheskin       | SoM      |
| Andrew Rosenberg        | 2012 | KSAS     | A Constitutional and Political Examination of the Same-sex Marriage Debate   | Joel Grossman       | KSAS     |
| Malena Silva            | 2013 | KSAS     | Spatial Language and the Spatial Deficit in People with Williams Syndrome  | Barbara Landau      | KSAS     |
| Eva Smith               | 2014 | KSAS     | Leticia Najarro Romero and Her Role in the Labor, Struggle, and Change: The Story of the Labor Movement of Guatemala                           | Peter Beilenson     | KSAS     |
| Andrew Snavelly         | 2012 | KSAS     | Odorant Receptor Trafficking in Olfactory Sensory Neurons  | Haiqing Zhao        | SoM      |
| Alex Treiger            | 2012 | KSAS     | Health Care, Civil Rights, and Congress's Contested Power: The Evolution of the Commerce Clause  | Joel Grossman       | KSAS     |

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## Summer PURA Cohort 2010\*

| Recipient             | Year | Division | Proposal Title   | Mentor/s          | Division |
|-----------------------|------|----------|--|-------------------|----------|
| Patrick Armstrong     | 2012 | WSE      | Hydrogels and Stem Cells: Therapies for Fixing a Broken Heart  | Roselle Abraham   | SoM      |
| David Bjergaard       | 2012 | KSAS     | Searches for New Particles Decaying to Two Energetic Top Quarks at the Compact Muon Solenoid Detector at the LHC                             | Petar Maksimovic  | KSAS     |
| Ashley Chappell       | 2012 | SoN      | Abuse During Pregnancy Among African-American & Afro-Caribbean Women   | Jackie Campbell   | SoN      |
| Thomas Danner         | 2013 | KSAS     | Resynchronizing the Failing Heart: The Role of Cardiac Resynchronization Therapy in Modulating the $\beta$ -adrenergic Response              | David Kass        | SoM      |
| Alperin Degirmenci    | 2013 | WSE      | Tactile and Graphical Displays for Robot-Assisted Minimally Invasive Surgery   | Allison Okamura   | SoM      |
| John Downey           | 2012 | WSE      | Channelrhodopsin-2 Manipulation of Neuroplasticity   | Galit Pelled      | SoM      |
| Stephen Dunlap        | 2012 | KSAS     | Neural Substrates of Musical Scale Perception  | Charles Limb      | SoM      |
| Karen Hong            | 2012 | KSAS     | Lectin Conjugated Nanoparticles for Targeted Multi-Modal Imaging of Tumor Endothelial Cells  | Arvind Pathak     | SoM      |
| Peter Houlihan        | 2013 | KSAS     | Phenotypic Plasticity among Populations of Nymphalid Butterflies in Biogeographically Diverse Tropical Forest Habitats                       | Greg Ball         | KSAS     |
| Ally Huang            | 2013 | WSE      | Pancreatic Cancer Stem Cells and the Microenvironment  | William Matsui    | SoM      |
| Nicole Jiam           | 2013 | KSAS     | Changes in Prefrontal Cortical Neuron Number and CRF-Immunoreactive Interneurons in Relationship to Age-Related Cognitive Decline            | Michela Gallagher | KSAS     |
| Moon Young "Liza" Lee | 2013 | WSE      | Computational fd Phage Coat Protein Structure Prediction and Design for the Assembly of Hydroxyapatite Nanorods and Bone Tissue Regeneration | Jeff Gray         | WSE      |
| Matthew Levine        | 2013 | KSAS     | The Capacity and Quality of Spatial Working Memory   | Jonathan Flombaum | KSAS     |
| Yagmur Muftuoglu      | 2012 | KSAS     | Refined Virtual Docking and Chemical Analyses for the Development of Novel Nonsteroidal Inhibitors of Human Aromatase (CYP19)                | Lise Dahuron      | WSE      |
| Eul "Elisa" No        | 2013 | WSE      | Development of a Cell Based High-Throughput Co-Culture Assay to Identify Compounds that Interfere with Endothelial Cell-Pericyte Association | Hans Hammers      | SoM      |
| Deng Pan              | 2013 | WSE      | Shape Dependence in Nanoparticle-Mediated Gene Delivery  | Hai Quan Mao      | WSE      |
| Sevdalina Sabeva      | 2013 | WSE      | Experimental Study of Topology Optimization in Civil Engineering Design  | James Guest       | WSE      |
| Lindsay Scattergood   | 2012 | PI       | Cochlear Implant Mediated Music Perception in Children   | Charles Limb      | SoM      |
| Srona Sengupta        | 2013 | KSAS     | The Sweet Nature of DNA Damage Repair  | Natasha Zachara   | SoM      |

|                         |      |      |  |                     |      |
|-------------------------|------|------|--|---------------------|------|
| Dominique Seow          | 2013 | KSAS | Characterizing the Diversity of the Soil Microbial Community of the Atacama Desert                           | Jocelyne DiRuggiero | KSAS |
| Justin Silverman        | 2012 | KSAS | Developing Ultrashort Carbon Nanotubes   | Nina Markovic       | KSAS |
| Shan Steinert-Threlkeld | 2012 | KSAS | A New Approach to Biomedical Ontologies  | Tilak Ratnanather   | WSE  |
| Audrey Swanenberg       | 2015 | KSAS | Linking Indigenous and Environmental Movements: The Case of Peru   | Rina Agarwala       | KSAS |
| Annie Tsay              | 2013 | KSAS | Role of Antibody in Control and Clearance of Measles Virus Infection in Primary Respiratory Epithelial Cells | Diane Griffin       | BSPH |
| Andrew Warren           | 2012 | WSE  | Development of a Photobiomodulation Treatment System Using a 3D Hydrogel Culture Model                       | Jennifer Elisseeff  | SoM  |
| Annie Wu                | 2012 | KSAS | Innovative DNA Vaccine for Human Papilloma Virus-Associated Head and Neck Cancer                             | Chien-Fu Hung       | SoM  |
| David Yoo               | 2012 | KSAS | Investigating an Interaction between Salmonella-Induced Tubules and MHC Class II Trafficking                 | Trina Schroer       | KSAS |

*\*redesignated as Summer PURA. Previously identified as Spring PURA back to the establishment of the program.*

## Summer PURA Cohort 2009\*

| Recipient   | Year                   | Division             | Proposal Title   | Mentor/s                    | Division |
|---|------------------------|----------------------|--|-----------------------------|----------|
| Nadir Bhuiyan, Henry Ma, Justin Porter, Tiffany Wei | 2012, 2013, 2013, 2013 | KSAS, WSE, KSAS, WSE | iGEM 2009: Designing a Heavy Metal Biosensor ( <i>Group Project</i> )  | Marc Ostermeier             | WSE      |
| Eric Dang   | 2011                   | KSAS                 | Role of Hypoxia-Inducible Factor 1 in Mediating Regulatory T Cell Functions and Development  | Drew Pardoll                | SoM      |
| Avik De   | 2011                   | WSE                  | Neuromechanical Control of Cyclic Tasks  | Noah Cowan                  | WSE      |
| Sarah Doyle   | 2011                   | KSAS                 | Liberian Education: The Government's Capacity to Continue Development Processes Occurring During Doped States of Electronically Conducting Polymers      | Ben Vinson                  | KSAS     |
| Giselle Elbaz                                       | 2011                   | KSAS                 | Iron Age Idolatry: A New Interpretation of an Iron Age Portrayal of Yahweh and Asherah ( <i>Group Project</i> )  | JD Tovar                    | KSAS     |
| Madhavi Gavini, Nicholas Generous                   | 2012                   | KSAS                 | The True Price of Gold: Examining Gender Disparities to Mercury Exposure in Female Mongolian Miners  | Theodore Lewis              | KSAS     |
| Halshka Graczyk                                     | 2011                   | KSAS                 | Real Time Somatosensory Evoked Potential Analysis  | Ellen Sibergeld             | BSPH     |
| Shrivats Iyer                                       | 2012                   | WSE                  | Overdevelopment of the Underdeveloped: Microfinance Effects in Peru  | Angelo All                  | SoM      |
| Hilary Kinka  | 2011                   | KSAS                 | Fundamental Study on Swelling of Clays   | Mark Blyth                  | KSAS     |
| Christophe Locussol                                 | 2011                   | WSE                  | Mobile in Mobile, AL: Moving Up the Ladder of Social and Geographic Opportunity  | Annalingam Anandarajah      | WSE      |
| Tanya Lukasik                                       | 2011                   | KSAS                 | One of the Network Level Implications of Changes in Reliability Accompanying Synaptic Maturation: A Computational Investigation                          | Stefanie DeLuca             | KSAS     |
| Daniel Millman                                      | 2011                   | KSAS                 | A Novel Technique in Tuberculosis Therapeutics: Inhibiting Chorismate Mutase Sensitizes <i>Mycobacterium tuberculosis</i> to $\beta$ -lactam Antibiotics | Ernst Niebur                | SoM      |
| David Miranda                                       | 2011                   | KSAS                 | Fashion with a Purpose: How Consumerism, the Material Economy, and Social Entrepreneurs Can Bring Positive Changes to African Communities                | William Bishai              | SoM      |
| Mohammad Modarres                                   | 2012                   | KSAS                 | Role of Geometry and Ventricular Conduction Sensitivity to Sodium Current in Reentry Inducibility  | Jim Goodyear, Joan Freedman | KSAS     |
| Carolyn Park  | 2011                   | WSE                  | Technological Innovation and the Status of Modern Civil Legal Aid in the UK  | Natalia Trayanova           | WSE      |
| Kevin Park  | 2011                   | KSAS                 | Investigating the Role of Ken in JAK-STAT Stem Cell Regulation   | Joel Grossman               | KSAS     |
| Judy Qui  | 2011                   | WSE                  | Simplices and Sphere Packing; Derivation of Lattices via Rotation  | Erika Matunis               | SoM      |
| William Raetz                                       | 2013                   | WSE                  | A Historical Study of Mental Hygiene Research at JHU and its Implications for Community Relations in East Baltimore                                      | Andrew Salch                | KSAS     |
| Michael Rogers                                      | 2012                   | KSAS                 |  | Veena Das                   | KSAS     |



|                 |      |      |  |                             |      |
|-----------------|------|------|--|-----------------------------|------|
| Stephanie Shiao | 2011 | KSAS | Development of a Music Training Program for the Deaf Individuals with Cochlear Implants  | Charles Limb                | SoM  |
| Donghoon Shin   | 2011 | WSE  | Investigating the Dynamic Properties of Switchable Surfaces  | Joelle Frechette            | WSE  |
| Calum Spicer    | 2013 | KSAS | Bulgarian Solitaire Games  | Fred Torcaso                | KSAS |
| Allson Suarez   | 2011 | WSE  | Using Directed Evolution as a Method for Improving the Expression of the <i>Flavobacterium johnsoniae</i> homologue of the Mammalian Na <sup>+</sup> /I <sup>-</sup> Symporter (NIS) | Sandra Gabelli, Mario Amzel | SoM  |
| Kaitlin Warnock | 2011 | KSAS | Controlling the JAR Behavior of Eigenmannia Using a Double Inverted Pendulum   | Eric Fortune                | KSAS |
| Annie Wu        | 2012 | KSAS | Innovative Immunotherapy for the Control of Melanoma   | Chien-Fu Hung               | SoM  |
| David Yoo       | 2012 | KSAS | Live-cell Imaging of Salmonella-induced Tubules  | Trina Schroer               | KSAS |

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## Summer PURA Cohort 2008\*

| Recipient                                  | Year | Division | Proposal Title   | Mentor/s                      | Division |
|--|------|----------|--|-------------------------------|----------|
| Ersin Akinci                               | 2009 | KSAS     | The Torrid Zone in Fifteenth and Sixteenth-Century Western and Islamic Science   | Richard Kagan                 | KSAS     |
| Anum Azam                                  | 2010 | WSE      | The Role of surface Tension Forces in 3D Self-Assembly of Nanoparticles  | David Gracias                 | WSE      |
| Yoonah Chi, Jill Lasak                     | 2009 | KSAS     | The Relationship between the Korean Board Game "Baduk" and Processing speed, Executive Function and Short-Term Memory in Older Adults ( <i>group project</i> ) | Justin Halberda, George Rebok | KSAS     |
| Deanna Chieco                              | 2009 | KSAS     | The Role of the Frizzled-3 Receptor in Sympathetic Nervous System Development  | Rejji Kuruvilla               | SoM      |
| Daniel Colacurcio                          | 2009 | KSAS     | Boronate Compounds Modulate MAG-Mediated Inhibition of Axon Regeneration   | Ronald Schnaar                | SoM      |
| Avik De                                    | 2010 | WSE      | Simultaneous Localization and Mapping (SLAM) with Sparse Sensing: A Topological Approach   | Noah Cowan                    | WSE      |
| James DiCarlo, Jaime Liu, Ingrid Spielman, | 2010 | WSE      | Mating Type and Ploidy Detector for <i>S. cerevisiae</i> ( <i>group project</i> )  | Jef Boeke                     | SoM      |
| Kristin Donato                             | 2010 | WSE      | Genetically Engineering Fluorescent Brain Tumor Cells  | Arvind Pathak                 | SoM      |
| Precious Fortes                            | 2009 | KSAS     | Migrating Bodies: How Migration Has Altered Health Care and Education in Poor Rural Provinces of Northern Philippines  | Clara Han                     | KSAS     |
| Jonathan Gilbert                           | 2009 | WSE      | Reversible Removal of Cells from a Surface Using a Switchable Low Density SAM  | Joelle Frechette              | WSE      |
| William Hays                               | 2010 | PI       | The State of Modern Opera: A Technical Examination and Cultural Investigation  | Hollis Robbins                | PI       |
| Joseph Heng                                | 2011 | WSE      | Cochlear Implant-Mediated Perception of Musical Timbre   | Charles Limb                  | SoM      |
| Alexander Hoogland                         | 2011 | WSE      | Exploring the Environmental Chemistry and Fate of a Highly Used Herbicide Safener in Natural and Engineered Systems  | Lynn Roberts                  | WSE      |
| Vasilisa Kizub                             | 2010 | KSAS     | Advancement of Research on Gene Expression: Defining the Molecular Significance of Chromosomal Remodelers  | Greg Bowman                   | KSAS     |
| Su Liu                                     | 2009 | KSAS     | The Effect of Maternal Antibodies of Mothers of Children with Autism in Mouse Models   | Harvey Singer                 | SoM      |
| Rebecca Orchard                            | 2009 | PI       | Integrated Music Analysis in fin de siecle Vienna  | David Smooke                  | PI       |
| Oi-ying "Irene" Pang                       | 2009 | KSAS     | The Effects of Microfinance on Informal Finance among Urban Market Women in Ghana: A Case Study  | Joel Andreas                  | KSAS     |
| Molly Plovanich                            | 2009 | KSAS     | Enhancing the Stability of the Notch Ankyrini Domain through Consensus-Based Mutagenesis   | Doug Barrick                  | KSAS     |
| Aarthi Rao                                 | 2009 | KSAS     | An Examination of Identity in Young Adult Indian: American Short Fiction   | Jean McGarry                  | KSAS     |

|                       |      |      |   |                  |      |
|-----------------------|------|------|---|------------------|------|
| Sarah Robinson        | 2009 | SoN  | Prevalence and Health Effects of Post-Traumatic Stress Disorder in African-American and Afro-Caribbean Women    | Jackie Campbell  | SoN  |
| Lisa Rosinsky         | 2010 | KSAS | Poetry in Performance: From Auditory Imagination to Spoken Word   | Douglas Basford  | PI   |
| Shelby Strong         | 2009 | KSAS | The Cleveland Orchestra's Musical Response to World War II Culture: 1940-1942                                   | Richard Giarusso | PI   |
| Wesley Sudduth        | 2010 | KSAS | Kelo, Hathcock, and eminent Domain in America: The Struggle Between Personal Freedom and the Collective Benefit | Joel Grossman    | KSAS |
| Shaw-wei "David" Tsen | 2009 | KSAS | Inactivation of Viral Pathogens Using Femtosecond Lasers  | T-C Wu           | SoM  |
| Callie Vincent        | 2009 | SoN  | Psychological Workplace Violence and Depression Rates in Nurses   | Jackie Campbell  | SoN  |
| Jonathan Yen          | 2010 | WSE  | Generation of Patient-Specific Human Pluripotent Stem Cells without Integrating Viral Vectors                   | Linzhao Cheng    | SoM  |

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## Summer PURA Cohort 2007\*

| Recipient               | Year | Division | Proposal Title   | Mentor/s           | Division |
|-------------------------|------|----------|--|--------------------|----------|
| Shahed Alam             | 2009 | WSE      | 3D Visualization of Murine Vascular Architecture   | Arvind Pathak      | SoM      |
| John Bagert             | 2008 | WSE      | The Design of a Low-Density ssDNA Surface with Switchable Conformation   | Joelle Frechette   | WSE      |
| Bryan Benson            | 2010 | WSE      | Fabrication of New Types of Nancubes, Research of Innovative Techniques for this Fabrication   | David Gracias      | WSE      |
| Ryan Bloom              | 2010 | WSE      | Mapping the Mechanical Forces generated by Tumor Cells During Proteolytic and Non-Proteolytic Migration in a 3D Matrix                               | Denis Wirtz        | WSE      |
| Steffi Cerato           | 2008 | KSAS     | A Look at Slavery Freedom Suits in the United States South, the Similarities and Departures in the Battle for Freedom Across the Southeastern Courts | Michael Johnson    | KSAS     |
| Iris Chan               | 2008 | KSAS     | The Urban Geography of Poverty: Resource Allocation and Libraries in Baltimore   | Erica Schoenberger | KSAS     |
| Daniel Colacurcio       | 2009 | KSAS     | The Mechanisms by which Sialidase Inhibits Ganglioside Binding of Myelin-Associated Glycoprotein   | Ronald Schnaar     | SoM      |
| Gillian Condell         | 2008 | SoN      | Surgery and Sleep in Rats  | Gayle Page         | SoN      |
| Sarah Elashvili         | 2008 | KSAS     | Distinct Functional Mechanisms of NDE1 and NDEL1 through Interaction with DISC1  | Akira Sawa         | SoM      |
| Shiv Ghandi             | 2008 | KSAS     | APOBEC3G Mediated Control of Viral Replication in Elite Suppressors Objective  | Robert Siliciano   | SoM      |
| Anne Gatchell           | 2008 | WSE      | Modeling Switching Behaviors and Monolayer-Modified Surfaces in the Presence of Salts  | Joelle Frechette   | WSE      |
| Yasmin Husain           | 2009 | WSE      | Biotinylation of Acute Hippocampal Slices  | Stewart Hendry     | SoM      |
| Karin Hwang             | 2009 | WSE      | Identification of Specific Protein Involvement in Bacterial Contractility  | Denis Wirtz        | WSE      |
| Jordan Ireton           | 2009 | KSAS     | Uncovering Mechanism of Light Detection by Melanopsin Through Mutational Analysis  | Samer Hattar       | KSAS     |
| Eric Kim                | 2009 | WSE      | Designing Face-Specific Inorganic Surface Binding Peptides   | Jeff Gray          | WSE      |
| Darya Kizub             | 2008 | KSAS     | Assessment of Barriers to Successful Implementation of Anti-Retroviral Therapy in Russia   | Chris Beyrer       | BSPH     |
| Gergory Koenig          | 2008 | PI       | A Pedagogical Study of the Chinese Classical Guitar School with Professor Chen Zhi   | Julian Gray        | PI       |
| Yuen-Ting "Diana" Kwong | 2009 | KSAS     | Developing Methods to Optimally Estimate Glomerular Filtration Rate from Serum Creatinine and Cystatin C   | Josef Coresh       | SoM      |
| Se Ryeon Lee            | 2009 | KSAS     | Oxidation Reaction of Alkenes Catalyzed by Metalloporphyrin Nanoparticles  | David Goldberg     | SoM      |
| Worawan Limpitikul      | 2009 | WSE      | Differentiation of Mouse Embryonic Stem Cell-Derived Cardiomyocytes Using Electrical Stimulation   | Leslie Tung        | SoM      |

|                 |      |      |  |                             |      |
|-----------------|------|------|--|-----------------------------|------|
| Cindy Liu       | 2008 | KSAS | Activity Dependent Integration of Newborn Neurons into the Adult Hippocampus   | Hongjun Song                | SoM  |
| Kristin Lucas   | 2008 | KSAS | Creating Single Nanowires Through Nanopores  | Nina Markovic               | KSAS |
| James Medford   | 2008 | KSAS | The Controlled <i>in situ</i> Deformation of Carbon Nanotubes to Create Room Temperature Quantum Dots                          | Nina Markovic               | KSAS |
| Ada Otter       | 2008 | SoN  | Trajectory of Abuse During Pregnancy: Impact on Breastfeeding and Pregnancy Outcomes Among High Risk Women in Portland, Oregon | Jackie Campbell             | SoN  |
| Diana Pak       | 2008 | KSAS | Spatial Learning, Sensory Modality, and Autistic Traits  | Amy Shelton                 | KSAS |
| Laxmi Pellakuru | 2008 | WSE  | Detection of S-Nitrosylation in Prostate Cancer <i>in situ</i>   | Srinivasan Yegnasubramanian | SoM  |
| Jason Shaev     | 2009 | KSAS | A Study of the Effectiveness and Possible Improvement of Each B-Jet Tagging in the CMS Pixel tracker                           | Petar Maksimovic            | KSAS |
| Arin Tuerk      | 2008 | KSAS | Updating Working Memory Representations in Human Adult and Infants   | Lisa Feigenson              | KSAS |

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## Summer PURA Cohort 2006\*

| Recipient        | Year | Division | Proposal Title  | Mentor/s                  | Division |
|------------------|------|----------|---|---------------------------|----------|
| Andrew Arceci    | 2008 | PI       | The Viola da Gamba: A New Setting   | John Moran                | PI       |
| Jason Boock      | 2007 | WSE      | Exploring the Structure and Catalytic Mechanism of a Protein Switch Using Quantum Dots  | Marc Ostermeier           | WSE      |
| Tashalee Brown   |      | KSAS     | A Novel Technique of Detecting S-nitrosylation of Proteins in multiple Systems  | Dan Berkowitz             | SoM      |
| Rebecca Busch    | 2007 | KSAS     | Notch3 Signaling in the Development of Ovarian Cancer   | Tian-Li Wang              | SoM      |
| Clive Chen       | 2007 | WSE      | Overcoming Extracellular and Intracellular Barriers in Gene Delivery for Cystic Fibrosis via PEGylated Polycationic Nanocomplexes of Various Shapes | Justin Hanes              | SoM      |
| Jeremy Elser     | 2008 | WSE      | Blood Vessel Responsiveness Consequences Due to Microgravity Conditioning   | Artin Shoukas             | SoM      |
| Patrick Gedeon   | 2007 | KSAS     | The Role of GDF-11 and Regulating Neuronal Development and Differentiation in the mammalian Olfactory System  | Randall Reed              | SoM      |
| Emily Gleason    | 2007 | KSAS     | Identification and Purification of SUMO Binding Proteins  | Mike Matunis              | BSPH     |
| James Han        | 2007 | KSAS     | Human Neural Stem Migration in an Organotypic Culture Model   | Alfredo Quinones-Hinojosa | SoM      |
| Alexander Hui    | 2007 | WSE      | Effects of Autologous Mesenchymal Stem Cells on Interposition Bone Block Arthrodesis of the First Metatarsophalangeal Joint                         | Jennifer Elisseeff        | SoM      |
| Patrick Kennedy  | 2008 | KSAS     | Between the Essence and the Descent: A Study in First-Person Long Fiction on the Contemporary American Experience and European Cultural Tradition   | Jean McGarry              | KSAS     |
| Lan Le           | 2007 | WSE      | Structural Determinants Underlying Targeting of L-type Ca <sup>2+</sup> Channels to Dyadic Junctions in the Heart                                   | Henry Colecraft           | SoM      |
| Benjamin Lin     | 2007 | WSE      | Investigation of the Synergistic Effects of Mechanical and Chemical Cues on the Directed Migration of Fibroblasts Using a Micronanofluidic Device   | Andre Levchenko           | WSE      |
| Chih-Ping Mao    | 2007 | KSAS     | A novel RNA interference-based DNA vaccine for the treatment of cervical cancer   | T-C Wu                    | SoM      |
| Rishi Mediratta  | 2008 | KSAS     | Clinical Presentations of Diarrheal Disease in Children in Bangladesh and Ethiopia  | Bradley Sack              | BSPH     |
| Win Pin Ng       | 2007 | WSE      | Computational Model of Cell Cycle Regulation by RanGTP Gradient   | Pablo Iglesias            | WSE      |
| Altair Peterson  |      | KSAS     | Women at Work in Charm City   | Melanie Shell-Weiss       | KSAS     |
| Robert Rasmussen | 2008 | WSE      | Competition as a Motivation Factor in Learning  | Nitish Thakor             | SoM      |
| Stephen So       |      | WSE      | Three-Dimensional Co-Culture Model  | Jennifer Elisseeff        | SoM      |

|                |      |      |  |                    |     |
|----------------|------|------|--|--------------------|-----|
| Vani Takiar    |      | KSAS | Tancytes: A Quiescent Neural Stem Cell Population in the Adult Hypothalamus?   | Seth Blackshaw     | SoM |
| Jennie Wang    |      |      | Bovine-Cornea-Derived matrix for Corneal Tissue Engineering  | Jennifer Elisseeff | SoM |
| Ying-Ying Wang | 2007 | WSE  | Transport of Functionalized nanoparticle Carriers in Cervical Vaginal Mucus for Topical treatment of Cervical Cancer | Justin Hanes       | SoM |
| Gary Wong      |      |      | Effect of Broad Spectrum Cox Inhibitors on cAMP Dependent F508-CFTR Activation                                       | Pamela Zeitlin     | SoM |
| Sarah Yee      |      |      | HIF-2OL 34\WP Greek Courier" 12 Expression and Its Effects on Renal Cell Carcinoma                                   | Gregg Semenza      | SoM |

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## Summer PURA Cohort 2005\*

| Recipient  | Year | Division | Proposal Title   | Mentor/s                 | Division |
|--|------|----------|--|--------------------------|----------|
| Donna Ackerman   | 2007 | KSAS     | Thy Daughter's Nakedness: A Study Of The History Of The Law Of Incest And Its Prevalence In Today's Society                              | Joel Grossman            | KSAS     |
| Andrew Arceci  | 2007 | PI       | The Viola da Gamba, Violone, and the Modern Double Bass  | Susan Weiss              | PI       |
| Anshuman Bansal  | 2006 | KSAS     | The 60-Year Johns Hopkins Surgical Experience with the Blalock-Taussig Shunt Operation   | William Baumgartner      | SoM      |
| Warner Brown   | 2006 | KSAS     | Nostalgia for Old Shanghai and the Renewed Popularity of Early Twentieth Century Commercial Art  | Tobie Meyer-Fong         | KSAS     |
| Tony Chang   | 2006 | WSE      | A Novel, in vitro Model of Tocolytic Desensitization   | Martin Slodzinski        | SoM      |
| Anthony Chyou  | 2006 | KSAS     | Role of the Endosomal Na <sup>+</sup> (K <sup>+</sup> )/H <sup>+</sup> Exchanger, Nhx1, in K28 Viral Toxin Induced Cell Death            | Rajini Rao               | SoM      |
| Joshua Cogan   | 2008 | KSAS     | The Watermark Soil Moisture Sensor: Is it Suitable for Long Term Soil Monitoring?  | Katalin Szlavecz         | KSAS     |
| Sarah David  | 2007 | KSAS     | Balancing Security and Civil Liberties: The British Experience with the IRA  | Joel Grossman            | KSAS     |
| Claire Edington  | 2006 | KSAS     | Microbicides and HIV Transmission: Using Social Science Methods for a Public Health Project in Mtubatuba, South Africa                   | James Goodyear           | KSAS     |
| Jared Evans  | 2006 | KSAS     | Fabrication of 3D Ordered NanoPorous Gold for Chemical Sensors   | Gabor Domokos            | KSAS     |
| Ondrej Juhasz,<br>Ravi Pathak,<br>Anthony Ngo,<br>William Bishop | 2008 | WSE      | Effect of Microgravity on Semicircular Canal and Vestibular Function ( <i>Group Project</i> )  | Mark Shelhamer           | SoM      |
| Niaz Khan  | 2007 | WSE      | Study of Apoptosis in Neuronal Networks Locally Transfected by Viral Plasmids  | Nitish Thakor            | SoM      |
| Angelo Ko  | 2006 | KSAS     | The Effect of the 2008 Olympic Games on China's Political Reform and National Identity   | Sonia Ryang              | KSAS     |
| Galen Lande  | 2007 | KSAS     | Large-Scale Protein-Protein Docking of the Yeast Proteome  | Jeff Gray                | WSE      |
| Leigh Lieberman  | 2006 | KSAS     | The Actor of Antiquity and His Devine Spectators: Discovering the Influence of Ancient Hellenic Cults On Modern Artistic Perception      | Dimitrios Yatromanolakis | KSAS     |
| Sopo Lin   | 2007 | WSE      | Magneto-electroporation: A Novel Procedure for Obtaining Magnetically Labeled Stem Cells for MRI Cell Tracking                           | Jeff Bulte               | SoM      |
| Christopher Massa  | 2006 | WSE      | Computer Simulation of Ventilation Distribution in a Morphometric Model of the Respiratory System with Applications to Acute Lung Injury | David Kaczka             | SoM      |
| Venkatesan Natarajan   | 2006 | KSAS     | The Marrying Age: A Collection of Short Stories  | Jean McGarry             | KSAS     |



|                 |      |      |   |                 |      |
|-----------------|------|------|---|-----------------|------|
| Hari Prabhaker  | 2007 | KSAS | Examination and Development of a Genetic Health System to Combat Sickle-Cell Anemia in Tribal India: Investigating Community Sensitization, the Efficacy of Genetic Documentation, Neonatal Screening, and Limited Chemoprophylaxis | James Goodyear  | KSAS |
| Fareed Riyaz    | 2006 | KSAS | A Limited Structural Genomics Approach to Understanding the Sequence Specificity of F Plasmid Tral36  | Joel Schildbach | KSAS |
| Laura Rupprecht | 2007 | WSE  | Dynamics of Bacterial Intermediate Filament Crescentin In Vitro and In Vivo   | Denis Wirtz     | WSE  |
| Rachael Stewart | 2006 | KSAS | LOOKS FOR HOME: The Native American Diaspora  | John Mann       | KSAS |
| Hyder Syed      | 2006 | KSAS | The United Nations: Global Power or Paper Tiger? An Analysis of the India-Pakistan Question   | Steven David    | KSAS |

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## Summer PURA Cohort 2004\*

| Recipient               | Year | Division | Proposal Title   | Mentor/s               | Division |
|-------------------------|------|----------|--|------------------------|----------|
| Alistair Aaronson       | 2005 | KSAS     | Genetically Engineered Smooth Muscle Differentiation of Human Stem Cells   | Yegappan<br>Lakshmanan | SoM      |
| Irun Bhan               | 2005 | KSAS     | Cell Cycle Regulation of Dynactin-Nuclear Binding  | Trina Schroer          | KSAS     |
| Justin Caplan           | 2005 | KSAS     | Novel Approaches to Inhibiting the DNA Repair Enzyme O <sup>6</sup> -Alkylguanine-DNA-Alkyltransferase for the Treatment of Malignant Brain Tumors | Henry Brem             | SoM      |
| Chen "Mary" Chen        | 2005 | KSAS     | The Role of Zyxin in Hematopoietic Stem Cells  | Curt Civin             | SoM      |
| Nelson Chuang           | 2005 | WSE      | Analysis of Structure – Function Correlation of the Brain of Cerebral Palsy Patients   | Susumu Mori            | SoM      |
| Chris Gregg             | 2005 | WSE      | B <sup>3</sup> Adrenergic Receptor: Crystallizing Function & Fundamental Second Messenger Pathways   | Dan Berkowitz          | SoM      |
| Gaurav Gupta            | 2006 | WSE      | The Role of Klotho in the Cardiovascular Biology of Aging  | Dan Berkowitz          | SoM      |
| Kristin Jeung           | 2005 | WSE      | Robotic Scissors for Measurement of Haptic Signals During Surgical Cutting   | Allison Okamura        | SoM      |
| Kenneth Kay             | 2005 | KSAS     | Biochemical Characterization of Melanopsin: Implications in Non-Image Forming Vision   | King-Wai Yau           | SoM      |
| Satoko "Janet" Kuramoto | 2006 | KSAS     | The Association Between Stress Level and Risky Injection Drug Use Behavior Among Adults Living in an Urban Disadvantaged Area                      | Carl Latkin            | BSPH     |
| Marcos Kuroki           | 2005 | WSE      | Fluorescent Resonance Energy Transfer Based Nano Biosensors Utilizing Colloidal Semiconductor Quantum Dots and Molecular Beacons                   | Jeff Wang              | SoM      |
| Won Lee                 | 2007 | KSAS     | The impact of famine on the North Korean Refugee Children in Northeast China: with the focus on their family relations                             | Sonia Ryang            | KSAS     |
| Peter Lillehoj          | 2006 | WSE      | Development of Strain Measurement Techniques in Microsample Testing  | Kevin Hemker           | WSE      |
| Mark Lin                | 2006 | KSAS     | The protein content of intranuclear inclusions in frontal cortex of HDL-2 patients   | Russell Margolis       | SoM      |
| Andrew Liu              | 2007 | WSE      | Feature Detection, Registration, and Parcellation of the Human Cerebellum  | Jerry Prince           | SoM      |
| Owen Loh                | 2005 | WSE      | A Biologically Inspired Artificial Antenna for Robot Locomotion  | Noah Cowan             | WSE      |
| Yu Miyagawa             | 2006 | KSAS     | Lost Writers and their Lost Works  | Stephen Dixon          | KSAS     |
| Marco Morelli           | 2005 | KSAS     | Investigating Protein Interactions by the HIV-1 Cofactor Tat-SF1   | Clara Kielkopf         | SoM      |
| Haley Morrison          | 2005 | KSAS     | Contemporary Responses to the Holocaust: Problems of Memory and Understanding  | Ruth Leys              | KSAS     |
| Chinyere Ogbonna        | 2005 | KSAS     | The perception of Visual Illusions in Williams Syndrome  | Barbara Landau         | KSAS     |

|                 |      |      |   |                  |      |
|-----------------|------|------|---|------------------|------|
| Daniel Ong      | 2005 | KSAS | Gonad Formation in Drosophila melanogaster  | Mark Van Doren   | KSAS |
| Matthew Pagano  | 2005 | KSAS | Reconstruction of decay mode $\rho^0 \rightarrow \pi^+ \pi^-$ in pp Collisions at $\sqrt{s} = 2$ TeV        | Peter Maksimovic | KSAS |
| Hari Prabbhakar | 2007 | KSAS | A Cross-Sectional Evaluation of the Tribal Health Initiative: A Clinical Model for India's Future           | Veena Das        | KSAS |
| Joshua Rowe     | 2005 | KSAS | William S. Burrough's Nova Trilogy in the Historical Context of Post-Modern Media Theory                    | Ronald Walters   | KSAS |
| Stephen So      | 2007 | WSE  | Role of Cadherin, Actin, Arp2/3 and WASp in Wound Healing   | Denis Wirtz      | WSE  |
| Robert Whelan   | 2006 | KSAS | Han' Me Doon Da Fiddle: Making Links Between The Ethnomusicology and Cultural History of the Shetland Isles | Susan Weiss      | PI   |
| Eric Wolkoff    | 2005 | KSAS | Judicial Selection in the States: Selection Methods and Their Effects on Justice                            | Joel Grossman    | KSAS |

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## Summer PURA Cohort 2003\*

| Recipient           | Year | Division | Proposal Title  | Mentor/s                         | Division |
|---------------------|------|----------|---|----------------------------------|----------|
| Trevor Adler        | 2004 | KSAS     | Historical Research of the Methods and Motivations for Raising Ships  | John Russell-Wood                | KSAS     |
| Oluwakemi Ajide     | 2006 | KSAS     | Dynamics of the Fusion Pore During Cell-Cell Fusion   | Eric Grote                       | BSPH     |
| Tala Altalib        | 2005 | KSAS     | Modulation of TNF-Alpha Expression in Human Chondrocytes and Synoviocytes by NSAIDs and Ginger Extract                      | Carmelita Frondoza               | SoM      |
| Heather Blair       | 2004 | KSAS     | Mapping the Prevalence of HIV Against That of Tuberculosis in Johannesburg, South Africa                                    | James Goodyear                   | KSAS     |
| Ashley Horton       | 2004 | KSAS     | Marie-Anne Lavoisier: A Woman of Scientific and Cultural Importance   | Lawrence Principe                | KSAS     |
| Brett Kutscher      | 2004 | WSE      | Fluorescence Recovery After Photobleaching Instrumentation  | Doug Murphy, Pablo Iglesias      | SoM, WSE |
| George Lambrinos    | 2005 | KSAS     | The Role of Wallerian Degeneration in the Pathogenesis of Neuropathic Pain Following Peripheral Injury                      | James Campbell                   | SoM      |
| Adrea Lee           | 2004 | KSAS     | The Role of Fractalkine in the Pathogenesis of HIV Dementia   | Carlos Pardo-Villamizar          | SoM      |
| Johnson Lee         | 2004 | KSAS     | Smooth Muscle Differentiation of Human Embryonic Stem Cells (hESCs)   | Yegappan Lakshmanan              | SoM      |
| Amanda Leese        | 2004 | KSAS     | Human Rights Violators and the International Court of Justice: Contrasting the Barbarity of Crimes with the Dignity of Laws | Siba Grovogui                    | KSAS     |
| Daniel Loeser       | 2004 | WSE      | A Miniaturized Contact Fluorescence Imaging System Incorporating True Contact and Solid-State Illumination                  | Leslie Tung                      | SoM      |
| Holly Martin        | 2004 | KSAS     | We Are What We Eat: U.S. Consumption Trends vs. Sustainable Protein Sources   | Felicity Northcott, Sidney Mintz | KSAS     |
| Katherine McDonough | 2006 | KSAS     | French Musicians and the Political World of the 1789 Revolution   | Susan Weiss                      | PI       |
| Paul Nerenberg      | 2004 | KSAS     | STILLMix — Surface Tension Impelled Low-Gravity Liquid Mixing Experiment  | Cila Herman                      | WSE      |
| Megan O'Brien Gold  | 2004 | SoN      | Universal Urine Screening for Neisseria Gonorrhoeae and Chlamydia Trachomatis Among Battered Women                          | Phyllis Sharps                   | SoN      |
| Allan Olson         | 2006 | WSE      | Network Modeling of Polycrystals  | Sanjay Arwade                    | WSE      |
| Jin Packard         | 2004 | KSAS     | Mechanism of Vesicular Formation in Yeast Endocytosis   | Beverly Wendland                 | KSAS     |
| Scott Pitz          | 2004 | KSAS     | How Do Earthworm Communities Affect the Hydrology of Agro-Ecosystems?   | Katalin Szlavecz                 | KSAS     |
| Eric Simone         | 2004 | WSE      | Fabrication of Micro DNA Biosensor Chip with Embedded Concentration Electrodes  | Jeff Wang                        | WSE      |
| Bhuvan Srinivasan   | 2004 | WSE      | Comparison of Deterministic and Stochastic Models of the PKA Pathway  | Andre Lebchenko                  | WSE      |
| Ankit Tejani        | 2004 | WSE      | Use of Erythropoietin as a Novel Treatment in a Murine Model of Myocardial Infarctions                                      | Joshua Hare                      | WSE      |
| Denise Terry        | 2005 | KSAS     | LIFE: A Photo Essay   | Deborah McGee Mifflin            | KSAS     |

|                 |      |      |  |                  |      |
|-----------------|------|------|--|------------------|------|
| Rebecca Tesfai  | 2004 | KSAS | The Achievement of Immigrant Populations in Urban High Schools                     | Stephen Plank    | KSAS |
| Anand Veeravagu | 2005 | WSE  | A Model for the Quantification and Analysis of Long-Range Spinal Cord Regeneration | Lawrence Schramm | SoM  |
| Simon Zaleski   | 2006 | PI   | Infusing New Beauty into Modern Music Using Ideas From the Past                    | Wedd Wiggins     | PI   |

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## Summer PURA Cohort 2002\*

| Recipient             | Year | Division | Proposal Title  | Mentor/s                   | Division  |
|-----------------------|------|----------|---|----------------------------|-----------|
| Angela Au             | 2003 | WSE      | Evaluation of Thermally Reversible Polymer Gels as Cell Scaffolds for Tissue Engineering                            | Carmelita Frondoza         | SoM       |
| Allison Barker        | 2003 | KSAS     | Statistical Pattern Recognition of Alzheimer's Disease  | Carey Priebe               | KSAS      |
| Brian Daniels         | 2003 | WSE      | Biodegradable Synthetic Polymer Scaffolds for Application in Tissue Engineering                                     | Denis Wirtz                | WSE       |
| Terry Dean            | 2003 | KSAS     | The Effects of Acute Sleep Deprivation on PFC Function and Mood in College Students                                 | Brenda Rapp, Richard Allen | KSAS, SoM |
| Rajiv Devanagondi     | 2004 | KSAS     | Functional Localization of Paroxysmal Dyskinesias in the Lethargic Mutant Mouse                                     | H.A. Jinnah                | SoM       |
| Daniel Dokko          | 2003 | WSE      | Haptic Sensors in Robot-Assisted Surgery  | Allison Okamura            | SoM       |
| Adam Dziorny          | 2003 | WSE      | fMRI Protocol Development and Testing for the Study of Executive Attention  | Pat Barta                  | SoM       |
| Thomas Foutz          | 2003 | KSAS     | Dissecting the Transforming Pathways of FLT3/ITD Mutations in Leukemia  | Donald Small               | SoM       |
| Hanh Ho               | 2003 | KSAS     | Atomic Force Microscopy Studies of Heterologous Lipid Bilayer Interactions  | Jan Hoh                    | SoM       |
| Andrew Kim            | 2005 | KSAS     | Glutamate Transporter Regulation of Metabotropic Glutamate Receptors in Hippocampal Astrocytes                      | Dwight Bergles             | SoM       |
| Matthew Groot         | 2003 | KSAS     | Investigation of the Late Bronze Age Occupation at Tell Umm el-Marra, Syria   | Glenn Schwartz             | KSAS      |
| Erik Lontok           | 2003 | KSAS     | Biogenesis and Function of the Infectious Bronchitis Virus S Protein  | Carolyn Machamer           | SoM       |
| Monica Lopez-Gonzalez | 2005 | KSAS     | CD Recording of Ernesto Lecuona's Andalucia Suite   | Corey McVicar              | PI        |
| Hyunmi Oh             | 2004 | WSE      | Phenotypic Characterization of FGFR2 Ser252Trp and Pro253Arg Mutant Mice  | Ethylin Wang Jabs          | SoM       |
| Robert Oldt III       | 2004 | KSAS     | Molecular Genetic Analysis of Intermediate Trophoblastic Tumors   | Ie-Ming Shih               | SoM       |
| Mark O'Leary          | 2003 | WSE      | The Art of Motion   | Gregory Chirikjian         | WSE       |
| Ashish Patel          | 2005 | WSE      | Lord Tebbit's 'Cricket Test'--A Story of South Asian Marginalization in Britain                                     | Veena Das                  | KSAS      |
| Sam Phillips          | 2003 | WSE      | Using Evolutionary Algorithms to Optimize Structural Member Design  | Ben Schafer                | WSE       |
| Jennifer Poti         | 2003 | KSAS     | Alanine Scanning Mutagenesis of the G Subunit of the Chloroplast ATP Synthase                                       | Richard McCarty            | KSAS      |
| Shiroman Prakash      | 2005 | KSAS     | Sequences of Voronoi Diagrams and Even Distributions of Points on the Sphere  | Mark Haskins               | KSAS      |
| Ali Rabbani           | 2003 | KSAS     | Beyond America: A Visual and Auditory Exploration of the Artificial Nature of American Culture and What Lies Beyond | Linda DeLibero             | KSAS      |
| Jeanelle Roerkohl     | 2003 | SoN      | Attributional Styles of Children at Risk for Post-Traumatic Stress Disorder and Their Caretakers                    | Linda Lewandowski          | SoN       |
| Arun Sharma           | 2003 | KSAS     | The Role of Atypical Protein Kinase C (aPKC) Zeta in Hepatocyte Polarity  | Ann Hubbard                | SoM       |

|                  |      |      |  |                 |      |
|------------------|------|------|--|-----------------|------|
| Aidan Smith      | 2003 | KSAS | Public Education and the Cold War:<br>Constructing National Identity         | Ronald Walters  | KSAS |
| Suman Sureshbabu | 2003 | KSAS | Microfinance in Africa: A Question of<br>Sustainability                      | Kellee Tsai     | KSAS |
| Khoi Than        | 2003 | KSAS | Mutagenicity of Chloroacetamide Herbicides<br>and Their Degradation Products | A. Lynn Roberts | WSE  |
| Thomas Wang      | 2003 | WSE  | Mechanism of Apoptotic Cell Death Induced<br>by Shiga Toxin 1 B-Subunit      | Olga Koubasnjuk | SoM  |

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## Summer PURA Cohort 2000\*

| Recipient            | Year | Division | Proposal Title   | Mentor/s                            | Division |
|----------------------|------|----------|--|-------------------------------------|----------|
| Jideofor Aniuoku     | 2002 | KSAS     | Isolation and Characterization of Xenopus Laevis BAF   | Katherine Wilson                    | SoM      |
| Jennifer Baltz       |      |          | Isolation and Characterization of Dnmlp-Associated Proteins Involved in Mitochondrial Fission                  | Michael McCaffrey, Beverly Wendland | KSAS     |
| Alan Braly           | 2002 | WSE      | The Mechanical and Structural Response of Human Tooth Enamel to Acid Reflux                                    | Timothy Weihs                       | WSE      |
| Chalres Chaney       |      |          | Studies of Transduction of Genes into Human Hematopoetic Stem Cells Using Polymeric Microencapsulation         | Kam Leong                           | SoM      |
| Ming-Chieh Ding      |      |          | The Effect of Global Ischemia on Reticular Thalamis Nuclei   | Nitish Thakor                       | SoM      |
| Hannah Eucker        |      |          | Optimal Conditions for Protein Sampling  | Christopher Chen                    | SoM      |
| Jonathan Golob       |      |          | Regulated Gene Expression in Stem Cell Directed Gene Therapy   | Linzhao Cheng                       | SoM      |
| Victor Howard        |      |          | Stereological Studies of Synapse Loss in Mouse Models of Aging and Alzheimer's Disease                         | Peter Mouton                        | SoM      |
| KiBem "Antonio" Kim  | 2002 | KSAS     | Mechanisms of Transcriptional Repression in the Germ Line  | Victor Corces                       | KSAS     |
| Barbara Kiviat       | 2001 | KSAS     | Suburb Without a City: Salisbury, Maryland as a Case Study of Changing Rural America                           | Tristan Davies                      | KSAS     |
| Kendra Klang         |      |          | A Search for KIT and FMS Receptor-Activating Mutations in AML  | Donald Small                        | SoM      |
| Eric Krauland        |      | WSE      | Catimic Microparticles for Pulmonary DNA Delivery  | Justin Hanes                        | WSE      |
| Yi-Yang "Yvonne" Lau |      |          | Tissue Engineering - Development of a Human Tracheal Bioprosthesis   | Kam Leong                           | SoM      |
| Nahyoung Lee         |      |          | Glutamine Transporter and Glutamate Neurotransmission  | Jeff Rothstein                      | SoM      |
| Morris Ling          | 2001 | KSAS     | RNA Replicons as Vaccines for HPV - Associated Cancer  | T-C Wu                              | SoM      |
| Martha Milton        |      |          | Carl Ludwig and the Laboratory Revolution of Medicine, Science, Technology and Experimentation                 | Daniel Todes                        | SoM      |
| Zaman Mirzadeh       |      |          | Melatonin-GABA Interactions and the Seasonal Regulation of Neuroplasticity in Songbirds                        | Greg Ball                           | KSAS     |
| Michael Overstreet   |      |          | Effect of Growth and Differentiation Factors on Human Chondrocytes Propagated in Three-Dimensional Scaffolds   | Carmelita Frondoza                  | SoM      |
| Matthew Pormecka     |      |          | The Rational Design of Novel Benzoyl and Cinnamoyl Based Photochemical Precursors to Nitric Oxide              | John Toscano                        | KSAS     |
| Amit Rahman          |      |          | In Vov Strain Hardening of Actin Cytoskeleton - A Novel Mechanical Signal                                      | Denis Wirtz                         | WSE      |
| Alok Sathaye         | 2002 | WSE      | Using Finite Element Modeling to Investigate Spatial Electrophysiological Phenomena in Cell Culture Monolayers | Leslie Tung                         | SoM      |



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|---------------|------|------|---|--------------------|------|
| Caroline Shaw | 2001 | KSAS | Bringing Local Concerns to the National Agenda: Manchester and Parliamentary Reform             | Judith Walkowitz   | KSAS |
| Pasha Siraj   |      |      | Clausal Structure and Null elements in Singaporean English                                      | Geraldine Legendre | KSAS |
| Samia Sulemon |      |      | Comparison of Dexamethason and a Novel COX II Inhibitor on Survival in Rats Bearing a 9L Glioma | Stuart Grossman    | SoM  |
| Brian Udoff   | 2002 | KSAS | Work in Progress - A Short Film   | Stephen Dixon      | KSAS |
| Sean Waldron  |      |      | Advancement in the Intermolecular Imino Ene Reaction  | Thomas Lectka      | KSAS |
| Eugene Wang   |      |      | Detection of Brain Tumor DNA in Serum and Cerebrospinal Fluid (CSF)                             | Ben Carson         | SoM  |
| Lisa Wood     | 2001 | SoN  | The Impact of Lead Exposure on the Livers of Young (age 1-6 years) East Baltimore Children      | Marion D'Lugoff    | SoN  |

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## Summer PURA Cohort 1999\*

| Recipient                        | Year       | Division | Proposal Title  | Mentor/s            | Division |
|----------------------------------|------------|----------|---|---------------------|----------|
| Charles Chaney                   | 2000       | WSE      | Studies on the Effect of Fluoride-Treated Bovine Bone-Derived Materials on Human Osteoblasts  | Carmelita Frondoza  | SoM      |
| Audrey Chen                      | 2000       | PI       | Explorations of the Abdomen and Thorax  | Phyllis Bryn-Julson | PI       |
| Shooshan Danagoulian             | 2000       | KSAS     | Economic Policy Convergence Among Contemporary French Political Parties   | Wilda Anderson      | KSAS     |
| Rozalin Davoodnia                | 2000       | KSAS     | Disease Maintenance Across Cultures   | Katrina McDonald    | KSAS     |
| Michael Dorsi                    | 2000       | KSAS     | The Effects of Chronic Dorsal Rhizotomy on the L5 Ligature-and-Cut Model of Mechanical Allodynia in the Rat   | Allan Belzberg      | SoM      |
| Jeffrey Hanson                   | 2000       | WSE      | Chondrocyte Seeded Chitosan Scaffolds for Cartilage Repair  | Carmelita Frondoza  | SoM      |
| Joseph Jamal                     | 2000       | KSAS     | Identification of Oculodentodigital Dysplasia Gene: A Lesson in the Positional cloning Approach   | Ethilyn Wang Jabs   | SoM      |
| Kanupriya Kumar                  | 2000       | KSAS     | A Comparison of Western-Trained (Allopathic) and Ayurvedic Doctors With Regards to Depression in Urban India  | Sara Berry          | KSAS     |
| Wah "Steve" Leung                | 2000       | KSAS     | Organic Solutes Cure Cystic Fibrosis Defect   | Sandra Guggino      | SoM      |
| Amit Malhostra, Michelle Schmidt | 2001, 2000 | WSE      | Significance of Cyclis Response Element Binding Protein and the Subsequent Gene Expression on the Ischemic Apoptotic Pathway ( <i>group project</i> )                     | Nitish Thakor       | SoM      |
| Arash Mostaghimi                 | 2001       | WSE      | CCG Repeat Expansions in Psychiatric Diseases   | Russell Margolis    | SoM      |
| Thomas Mullaney                  | 2000       | KSAS     | Tiananmen Square and the Three Days of Freedom  | William Rowe        | KSAS     |
| Joshua Obstfeld                  | 2000       | KSAS     | Democratic Peace in Russia? What Anti-Semitism Can Tell Us  | Steven David        | KSAS     |
| Terry Prendiville                | 2000       | KSAS     | Cognitive Functioning and Cerebral Laterlization in Gender Dysphoric Men Undergoing Hormone Therapy   | Adrian Dobs         | SoM      |
| Pia Shah                         | 2000       | KSAS     | Grassroots Healthcare and Feminism, Kutch, India  | Siba Grovogui       | KSAS     |
| Adam Siegel                      | 2000       | KSAS     | Stranded Cost in Electricity Deregulation: An Assessment and Comparison of Public Utility Commission Decisions in Selected States and the Impact on Post-Regulation Rates | Joseph Harrington   | KSAS     |
| Katharine Steece                 | 2000       | KSAS     | Biochemical and InVivo Characterization of Carboxy-Terminal Clathrin Binding Domain   | Beverly Wendland    | KSAS     |
| Sarmela Thevarajah               | 2000       | KSAS     | The Role of Contemporary Bharatha Natyam on the Formation and Expression of Identity in Sri Lanka   | Gyanendra Pandey    | KSAS     |
| Thach-Giao Truong                | 2000       | KSAS     | Pho Bo as Symbol: Beef Noodle Soup and the People of Vietnam  | Sonia Ryang         | KSAS     |

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## Summer PURA Cohort 1998\*

| Recipient          | Year | Division | Proposal Title   | Mentor/s           | Division |
|--------------------|------|----------|--|--------------------|----------|
| Omar Aquaddoomi    | 1999 | WSE      | Acoustic and Optical Sensory Systems for Autonomous Underwater Vehicle Navigation  | Louis Whitcomb     | WSE      |
| Joshua Apgar       | 1999 | KSAS     | The Role of Type II Topoisomerase during Cell Division   | Denis Wirtz        | WSE      |
| Linda Chang        | 2000 | KSAS     | Chinese History in the 20th Century  | Stephen Dixon      | KSAS     |
| Teddy Chao         | 1999 | WSE      | YARDSALE: A Homegrown Documentary  | Jerome Christensen | KSAS     |
| Edward Cho         | 2000 | KSAS     | In Vitro Assembly of Alpha-Synuclein   | Michael Lee        | SoM      |
| Andrew Dickenson   | 2000 | PI       | A Documentation of the Career of Gibert Biberian   | Julian Gray        | PI       |
| James Ha           | 2000 | KSAS     | Distribution of Locally Delivered Antisense Constructs in Mouse Brain  | Ben Carson         | SoM      |
| George Ho          | 1999 | KSAS     | Characterization of FMRP-like Expression in Fragile X Subjects with Full Mutation  | Walter Kaufmann    | SoM      |
| Kay Hsieh          | 1999 | KSAS     | The Impact of a Frontier Environment on Literature   | Stephen Dixon      | KSAS     |
| Danny Lee          | 1999 | KSAS     | Patterning of the Vertebrate Neural Tube   | Marnie Halpern     | KSAS     |
| Tony Lee           | 1999 | KSAS     | The Regulation of Gene Expression in Lysosomal Disease   | Jonathan Pevsner   | SoM      |
| Rachel Lei         | 2000 | KSAS     | Cellular Response to Human Papillomavirus E6 Oncoprotein Expression  | Kathleen Cho       | SoM      |
| Elizabeth Lipke    | 2000 | WSE      | Real-Time Measurement of Reactive Oxygen Species in Cultured Vascular Endothelial Cells  | B. Rita Alevriadou | SoM      |
| Adam Morris        | 1999 | WSE      | International Autonomous Underwater Vehicle Competition  | Louis Whitcomb     | WSE      |
| Danny Ng           | 2000 | WSE      | Development of an in vitro Model System for Assessing the Effect of the Adrenoleukodystrophy Protein on Very Long-Chain acyl-CoA Synthetase Activity | Paul Watkins       | SoM      |
| Mary Pohl          | 2000 | KSAS     | The Effect of Cytokines on Leukocyte Function  | Brian Rosenfeld    | SoM      |
| Zygmunt Porada III | 1999 | WSE      | Interleaved vs. Simultaneous Retinal Stimulation Strategies  | Mark Humayun       | SoM      |
| Mercedes Quinones  | 1999 | KSAS     | Olfactory Neurons as a Model for Rett Syndrome   | Gabriele Ronnett   | SoM      |
| Nadine Rosenbloom  | 1999 | SoN      | The Benefits of Infant Massage in Lesotho  | Nancy Glass        | SoN      |
| Monica Schwartz    | 2000 | PI       | Twentieth-Century Bassoon Techniques: A Complete Resource for Composers and Performers   | Linda Harwell      | PI       |
| Kristi Stanton     | 1999 | KSAS     | Synthetic Implantable Biodegradable Polymers in Brain Tumors for Boron Neutron Capture Therapy   | Jeffrey Williams   | Som      |
| Rabiyia Suleman    | 1999 | KSAS     | The Localization of Glutamate Receptor Subtypes in the Primate Retina  | David Calkins      | KSAS     |
| Alexandra Surcel   | 1999 | KSAS     | Characterization of Plasmodium Histidine-rich Proteins and Their Role in Hemozoin Formation  | David Sullivan     | BSPH     |

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|--------------------|------|------|---|------------------|------|
| Christopher Valeri | 1999 | KSAS | CT Visualization and Validation of Ts6Dn Mice   | Joan Richtsmeier | SoM  |
| Lyld Wells         | 1999 | KSAS | The Megiddo Expedition  | Jerrold Cooper   | KSAS |
| Linda Yi           | 1999 | KSAS | Secondary Education An Option? An Analysis of the Bearing Faced by Costa Rican Adolescents Attending Public Schools | Barbara Smith    | KSAS |
| Sarvenaz Zand      | 1999 | WSE  | Pharmacological Upregulation of Nerve Growth Factor by Hybrid Analogs of 1,25-Dihydroxyvitamin D3                   | Henry Brem       | SoM  |

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Summer PURA Cohort 1994\*

| Recipient      | Year | Division | Proposal Title | Mentor/s | Division |
|----------------|------|----------|----------------|----------|----------|
| Saminez Akhter | 1997 | KSAS     |                |          |          |

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