

AY 2020 - 21 PURA Recipients

Student	Year	Project	Mentor/s	Division
Simi Aluko	2021	Designing Modular Housing Structures using Foam Concrete	Rachel Sangree	WSE
Harsh Bhasin	2022	Assessing mitochondrial dysfunction in ABA rats and the efficacy of antioxidant supplement N-Acetyl Cysteine (NAC) as a therapeutic agent.	Tim Moran and Kellie Tamashiro	SoM
Carlos Buri-Nagua	2022	The Recruitment and Retention of a Minority Population in a Pragmatic Cluster Randomized Trial: The RICH LIFE Project	Mariana Lazo and Lisa Cooper	SoM
Chelsey Chen	2022	The role of NARF in breast cancer stem cell enrichment and tumor metastasis	Yongkang Yang and Gregg Semenza	SoM
Tongtong Chen	2022	Typifying the Iteration Problem: Constructing and Generalizing the Functional Square Root of $\sin(x)$ on $[0, \pi/2]$	Ed Schneinerman	WSE
Eun Tack Cho	2022	Modeling Goal-Directed Spatial Navigation in Mammals Using Deep Reinforcement Learning	Kanghoon Jung and Hyungbae Kwon	SoM
Sakshi Chopra	2022	Burden with Portable Oxygen Management in Oxygen Therapy	Jonathan Smith and Jessica Dakkak	WSE
Hayden Dux	2021	Health care disparities in neurosurgery: Socioeconomic barriers to health in the time of COVID-19	Raj Mukherjee	SoM
Bruce Enzmann	2022	Biodegradable Nanofiber Conical Conduits for Targeted Muscle Reinnervation	Hai-Quan Mao	WSE
Vivek Gopalakrishnan	2021	Brain Tumor Segmentation using Multimodal Manifold Oblique Random Forest	Jojo Vogelstein	WSE
Jin Ha	2021	Room 408	John Mann	KSAS
Daniel Habib	2022	Peer Influence on Vaping in High Schools	Andrew Cherlin	KSAS
John Han	2022	Laser speckle contrast imaging to improve the detection of precancerous lesions in routine colonoscopy	Nicholas Durr	WSE
Quinn Hauck	2023	Uncovering the Basis of Extreme Physical Capabilities: Quantifying and Applying the Transcriptome of the Ruby-Throated Hummingbird Using Synthetic RNA	Winston Timp	WSE
Autumn Hughes	2022	Developing an Interface to Investigate the Transferability of Inanimate Training on da Vinci Surgical Systems to Operating Room Performance	Jeremy Brown	WSE
Rumani Kafle	2023	Usability of Direct-to-Consumer Hearing Solutions among Older Adults with Dementia	Carrie Nieman	SoM
Sandeep Kambhampati	2021	Characterizing the Effect of Chromatin Organization on DNA Methylation Patterns Using Stochastic Modeling	Andy Feinberg and Abante Llenas	SoM and WSE
Ye Rin Kim	2022	Investigating a New Method of Detecting and Preserving Damaged Collagen in Artificially Aged Parchment Using Collagen Hybridizing Peptide	Patty McGuiggan	WSE
Michael Lan	2021	Design of a Face Mask Filter to Combat the SARS-CoV-2 Pandemic and Other Droplet and Airborne Diseases	Hai-Quan Mao	WSE
Simon Liu	2021	Implementing Electronic Beam Steering in an Implantable Ultrasound Device	Chad Gordon	SoM
Carol Lu	2022	Intuitive theories of "visual" search in congenitally blind individuals through the creation of visual search displays	Marina Bedny	KSAS
Elizabeth Mensah	2022	Free Energy of Defect Formation in Membranes by Antimicrobial Peptides	Ana Damjanovic	KSAS
Jody Mou	2021	Deep Learning Guided Design of Peptide Binders	Jamie Spangler and Tim Lu	WSE and MIT
Annabel Mungan	2021	Determining the Chemical Fingerprint of Wastewater During the COVID-19 Pandemic	Veronica Wallace and Carsten Prasse	WSE
Manasi Nawathe	2022	The Effect of Simvastatin on the Stiffness of Uterine Fibroids	Vicky Nguyen	WSE

Adhith Palla	2022	No Stone Unturned—Mapping the Subcortical Projections of the Claustrum	Solange Brown	SoM
Trisha Parayil	2021	Quantifying the impact of nusinersen treatment on the development and degeneration of motor neurons in patients with spinal muscular atrophy	Charlotte Sumner	SoM
Chloe Paris	2022	Developing Personalized Mechanistic Computational Models of Menstrual Cycle Hormones	Feilim Mac Gabhann	WSE
Jonathan Perez	2022	On the role of Fc receptors in the anterior pituitary gland: potential implications for patients treated with immune checkpoint inhibitors	Patrizio Caturegli	SoM
Aaditya Rau	2022	Atomistic Simulations of Dislocation Mechanisms in Nanotwinned Ni-Mo-W Alloys	Kevin Hemker	WSE
Shreya Wadhwa	2023	Little boxes on a hillside: Investigating the flexibility of high-level categorization to changes in natural visual statistics	Michael Bonner and Alon Hafri	KSAS
Roma Wang	2022	The Moderating Effect of Peer Gender Composition on How Personality Traits Affect Academic Performance	Yujung Hwang	KSAS
Richard Xu	2021	Integration of Genome and Epigenome to Elucidate Gene-Environment Interactions	Hongkai Ji	BSPH
Wingel Xue	2022	COVID-19 and Race: Emerging Diseases as a Tool of Social Control	Alexandre White	KSAS
Yoko Yamashita	2022	Investigating the Neuroprotective Potential of K0706 Treatment in Parkinson's Disease Using Mouse Models Injected with Alpha-Synuclein Preformed Fibrils	Senthil Karuppagounder	SoM
Rebecca Yu	2022	Neural Network for Bi-Atrial Segmentation of Clinical Cardiac Images of Patients with Atrial Fibrillation	Rheeda Ali and Natalia Trayanova	WSE
Amanda Yuen	2022	Understanding Refugee Resettlement from the Perspective of United States Resettlement Agencies and Non-Profit Organizations	Naveeda Khan	KSAS
Josephine Zhang	2022	Developing Bispecific Antibodies to Induce Cytotoxic T Cells Against Mycobacterium tuberculosis in Tuberculosis/HIV Co-infection	Robert Siliciano	SoM
Junjia Zhang	2022	Josephson Effect of Monopole Superconductors in a Doped Weyl Semimetal	Yi Li	KSAS
Lucy Zhang	2022	Continuous blood oxygen saturation and heart rate monitoring for post-operative single ventricle congenital heart disease infants.	Geraldine Seydoux	SoM