

2018 CRES UNDERGRADUATE AWARDS - Updated 2/27/2018

Research Theme	No. of Trainees	Trainee Name	Trainee Department	Application Title	Lead Mentor Name	Lead Mentor Department
Enriching Human Life and Society	1	Katherine Tian	Reproductive Medicine	Is glucocorticoid receptor signaling in arcuate kisspeptin neurons necessary for corticosterone-induced suppression of gonadotropin secretion?	Breen Church, Kellie	Reproductive Medicine
Enriching Human Life and Society	1	Adrian Garcia Badaracco	Engineering	Silica Nanoparticles as Imaging Contrast Agents for Retinal Disease	Chao, Daniel	Ophthalmology
Enriching Human Life and Society	1	Ashley Du	Biological Sciences	Cardiovascular effects of chronic e-cigarette vapor inhalation	Crotty Alexander, Laura	Medicine
Enriching Human Life and Society	1	Carolina Gonzalez Bravo	Biochemistry and Cell Biology	Uncovering the secret life of genes	Debelouchina, Galia	Chemistry And Biochemistry
Enriching Human Life and Society	1	TBD	TBD	Development of a High-throughput Screen to Identify New Leads for Acanthamoeba Keratitis	Debnath, Anjan	Pharmaceutical Sciences
Enriching Human Life and Society	1	TBD	TBD	Use of Naegleria-Cyanobacteria Grazing Assay to Identify New Drug Leads for Naegleria fowleri	Debnath, Anjan	Pharmaceutical Sciences
Enriching Human Life and Society	1	Dylan Mills	Chemistry and Biochemistry	Optimization of RNA-TAG system	Devaraj, Neal	Chemistry And Biochemistry
Enriching Human Life and Society	1	Kirsten Wong	Bioengineering	Non-Coding Genomic Regulation Identified By Disease-in-a-dish Modeling	Engler,Adam	Bioengineering
Enriching Human Life and Society	1	Andrew Wilson	Cellular and Molecular Medicine	Enhancing Wound Healing and Regeneration Through Heparan Sulfate Deficiency	Esko,Jeffrey	Cellular and Molecular Medicine
Enriching Human Life and Society	1	Fabian Lim	Molecular Biology	Elucidating the grammatical constraints governing neural enhancer activity	Farley, Emma	Medicine
Enriching Human Life and Society	5	Christpher Thomas Krysta Khatchadourian Yunshu Geng Ian Karin Alexandra Muise	Bioengineering	Expanding the range of detection for a novel infectious disease diagnostic approach	Fraley, Stephanie	Bioengineering
Enriching Human Life and Society	1	Konstancja Ziegert	ERC/Human Biology major	Preserving cognitive function in mouse models of shift-work	Gorman, Michael	Psychology
Enriching Human Life and Society	3	Andy Kao Della Syau Yousif Slaiwa	Biosciences	A Genetic and Structural Analysis of Protein Quality Control	Hampton, Randolph	Cell & Developmental Biology
Enriching Human Life and Society	1	Yingqi Chen	Medicine	Inflammatory Pathways and Human Longevity	Jain,Mohit	Medicine

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Enriching Human Life and Society	2	TBD	NanoEngineering	Healing Broken Hearts with Magnetic Stem Cells	Jokerst,Jesse	Nanoengineering
Enriching Human Life and Society	1	TBD	Computer Science and Engineering	Walking Intervention for a Digital Era (WIDE)	Kerr, Jacqueline	Family Medicine and Public Health
Enriching Human Life and Society	1	Jennifer Chan	Cognitive Science	Caregiver Collective: Technical Development	Khoshabeh, Ramsin	Electrical And Computer Engineering
Enriching Human Life and Society	1	Wanjun Gu	Chemical Engineering	Expanding the toolbox to study protein function	Kim,Judy	Chemistry And Biochemistry
Enriching Human Life and Society	4	TBD	TBD	Ethnography for Healthy Living and Healthy Aging Project	Kirsh,David	Cognitive Science
Enriching Human Life and Society	4	TBD	TBD	Ethnography for Healthy Living and Healthy Aging Project	Rossano, Federico	Cognitive Science
Enriching Human Life and Society	1	Michelle Phan	Global Policy and Strategy	Caregiver Collective: Community Assessment	Marquine, Maria	Psychiatry
Enriching Human Life and Society	4	TBD	TBD	UC San Diego-IBM Cognitive Horizons Network on AI for Healthy Living (AIHL): Human Microbiome	Miller-Montgomery, Sandrine	Bioengineering
Enriching Human Life and Society	1	Neil Talwar	Undergraduate research student in Urology	Evaluation of Markers of Fibrosis in Human Penile tissues to prevent Age-Related Male Sexual Dysfunction	Rajasekaran, Mahadevan	Urology
Enriching Human Life and Society	1	Jesse Tai	undergraduate student - in research training	Identification of fibrosis markers in human urethral scar tissue	Rajasekaran, Mahadevan	Urology
Enriching Human Life and Society	2	TBD	CSE, CogSci or ECE	Exploring interventions for encouraging healthy living	Rosing, Tajana	Computer Science & Engineering
Enriching Human Life and Society	1	Zhuojun Hou	Mathematics	Exploring interventions for encouraging healthy living	De Sa, Virginia	Cognitive Science
Enriching Human Life and Society	1	Elijah Lawrence	Medicine	The Genetic and Epigenetic Mechanisms of High-Altitude Adaptation in Tibetan and Andean Populations	Simonson, Tatum	Medicine
Enriching Human Life and Society	1	Dominik Stec	Bioengineering: Bioinformatics	Bioinformatic insights into the mechanism of glaucoma	Skowronska-Krawczyk,Dorota	Ophthalmology
Enriching Human Life and Society	1	To Be Named To Be Named	Undergraduate	Graphic Warning Labels Effect on Smoking Perceptions and Behavior: An Undergraduate Training Fellowship in Clinical Research	Strong,David	Family Medicine and Public Health

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Enriching Human Life and Society	1	Lillian Sau	Biology	Effect of fecal microbiome transplant on reproductive and metabolic phenotypes in a PCOS mouse model	Thackray, Varykina	Reproductive Medicine
Enriching Human Life and Society	1	Clifford Wright	Pediatrics	Engineering a Solution to Colorectal Cancer Induced by Inflammatory Nonhuman Sialic Acid: A Metagenomic Approach to the Microbiome of the Colon	Zengler, Karsten	Pediatrics
Enriching Human Life and Society	1	Katrina Hung	Pediatrics	The Role of the Microbiome in a Cancerous State Induced by Nonhuman Sialic Acid	Zengler, Karsten	Pediatrics
Enriching Human Life and Society	1	Kevin Kim	Electrical and Computer Engineering	Remote control of chemical reactions	Yuen Zhou,Joel	Chemistry And Biochemistry
Enriching Human Life and Society	1	Alexandria Stedman	Cognitive Science	Using EEG neurofeedback to target PTSD-related brain network abnormalities	Shu,I-Wei	Psychiatry
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Gursimran Bains	Electrical and Computer Engineering	Detecting and classifying auditory events for quantifying social gaze behavior	Cosman, Pamela	Electrical And Computer Engineering
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Jenny Hamer	Mathematics/Computer Science and Engineering	Applying Deep Neural Networks to Test Human Perceptual Biases in Spoken Language	Cottrell, Garrison	Computer Science & Engineering
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Nhi Lang	Neurosciences	Investigation of Mutations in a Protein Isomerase Gene and Its Role in Neurodevelopmental Disorder	Gleeson, Joseph	Neurosciences
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Qiwei Dong	Department of Cognitive Science	Brain Activity and Body Postural Analysis for Visual Height Intolerance	Jung,Tzyy-Ping	INC
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Mohamed Al-elew	Computer Science	Using Machine Learning to Map to Political Ideology from Twitter Data	Kousser,Thad	Political Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Arsham Aliaskari	Computer Science	Using Machine Learning to Map to Political Ideology from Twitter Data	Kousser,Thad	Political Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Henry Mao	Computer Science	Learning the semantics of polyphonic music composition	McAuley, Julian	Computer Science & Engineering
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Aurian Saleh	Pediatrics	Jumping Genes and Their Effect on Neurological Disorders	Muotri, Alysson	Pediatrics
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Lauren Stiene	Biology	Stepping up: The role of posterior parietal cortex in encoding of vertical-going actions into episodic memory	Nitz,Douglas	Cognitive Science

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Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Yifan Li	Biology	Stepping up: The role of posterior parietal cortex in encoding of vertical-going actions into episodic memory	Nitz,Douglas	Cognitive Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Ali Ozhan	Biology	Stepping up: The role of posterior parietal cortex in encoding of vertical-going actions into episodic memory	Nitz,Douglas	Cognitive Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Chelsea Dorich	Cognitive Science	Portable Neurofeedback for PTSD	Pineda,Jaime	Cognitive Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Ni (Jenny) Zhen	Cognitive Science	Temporal Interactions Between Alpha and Gamma Neurofeedback Training in Schizophrenia	Pineda,Jaime	Cognitive Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	2	TBD	Computer Science	Attentional Bias and Spontaneous Eye Blink as Physiological Markers of Substance Craving Induced through Virtual Reality	Schulze, Jurgen	Computer Science & Engineering
Exploring the Basis of Human Knowledge, Learning, and Creativity	4	Cristian Sharp	Physics	Building Novel Optical Tools for Simultaneous Recording of Activity in Multiple Neuronal Circuits In Vivo	Shtrahman, Matthew	Neurosciences
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Ruijia Chen	Cognitive Science	Implementing EEG-Neurofeedback and Assessing Gamma Band Responses in Schizophrenia Patients.	Singh,Fiza	Psychiatry
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Joshua Mandap	Microbiology	Neurogaming for the anxious brain	Snider, Joseph	INC
Exploring the Basis of Human Knowledge, Learning, and Creativity	2	Iulia Rusu Junneng Wen	Division of Biological Sciences	Neuronal-specific Transcriptional Regulation of Enhancer RNAs in Learning and Memory	Telese, Francesca	Medicine
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Andrew Washington	Cognitive Science	Bursting properties of neural oscillations: open-source software development and novel analysis	Voytek, Bradley	Cognitive Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Lauren Liao	Mathematics	Differentiating Neural Noise from Structured Dynamics in Electrophysiological Recordings	Voytek, Bradley	Cognitive Science
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Suhas Arehalli	Computer Science / Mathematics	Developing eye-tracking software for psycholinguistic research in diverse populations	Wittenberg, Eva	Linguistics
Exploring the Basis of Human Knowledge, Learning, and Creativity	1	Jingya Huang	Cognitive Science and Mathematics	Neural Coding of Facial Features Underlying Social Perception of Faces	Yu,Angela	Cognitive Science
Understanding and Protecting the Planet	1	Siyuan Fan	Double major in Economics and Mathematics	Measuring the Measurement Error in Weather Variables	Carson, Richard	Economics

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Understanding and Protecting the Planet	2	Jerome Esguerra	Chemistry	Understanding marine and human transporters for global pollutants	Chang, Geoffrey	Pharmaceutical Sciences
Understanding and Protecting the Planet	1	Chu-Hsien Tsai	Chemistry and Biochemistry	Creating Dense DNA Phases with Protein-Crosslinked Plasmids	Devaraj, Neal	Chemistry And Biochemistry
Understanding and Protecting the Planet	1	TBD	TBD	Conservation Solutions Docent Program	Henter, Heather	Ecology, Behavior & Evolution
Understanding and Protecting the Planet	4	TBD	Jacobs School of Engineering	Engineers for Exploration	Kastner, Ryan	Computer Science & Engineering
Understanding and Protecting the Planet	4	Brandon Flores	Chemistry and Biochemistry	Hybrid magnetocaloric/heat transfer materials for sustainable cooling	Rinehart, Jeffrey	Chemistry And Biochemistry
Understanding and Protecting the Planet	1	Stefen Mevik	Chemistry and Biochemistry	Assembly of metal chalcogenide clusters into tunable, solid state semiconductors	Schimpf, Alina	Chemistry And Biochemistry
Understanding and Protecting the Planet	1	Bruce Thompson	Chemistry and Biochemistry	Effects of confinement on material properties in cluster-based porous metal oxides	Schimpf, Alina	Chemistry And Biochemistry
Understanding and Protecting the Planet	1	Ruth Reinicke	Chemistry and Biochemistry	Effects of metal linker on material properties in cluster-based porous metal oxides	Schimpf, Alina	Chemistry And Biochemistry
Understanding and Protecting the Planet	1	Michel Chen	Chemistry and Biochemistry	Undergraduate 3: Modulation of materials properties using guest molecules in porous metal oxide materials	Schimpf, Alina	Chemistry And Biochemistry
Understanding and Protecting the Planet	1	Carl Demolder	Electrical Engineering	Continued Integration of Ultraviolet Radiation Sensing into Epidermal Electronics	Vanos, Jennifer	Scripps Institution of Oceanography
Understanding cultures and Addressing Disparities in Society	10	TBD	TBD	Blum Summer Field Internship 2018	Forman, Fonna	CGJ
Understanding cultures and Addressing Disparities in Society	2	To be selected	To be selected	Methodological Training for Mobile App Technology for Adolescent Mental Health	Jenkins, Janis	Anthropology
Understanding cultures and Addressing Disparities in Society	1	TDN	Anthropology	Biological consequences of stress among children of Hispanic immigrants before and after the 2016 election	Non, Amy	Anthropology
Understanding cultures and Addressing Disparities in Society	2	TBD	TBD	Handheld Scanners for Archaeology	Schurgers, Curt	Electrical And Computer Engineering