ASDRP 2020 Research Expo & Symposium Presenter Schedule

Time	Room	Department	Project Title	Description	Advisor	Authors
1:30-1:45	8	Chemistry, Biochemistry & Physics	Chemical synthesis and mechanistic enzymology studies of para-substituted and sterically-hindered nitrophenyl esters using the Hammett linear free-energy relationship	Colorimetric enzyme substrates can be used to probe the relative stereoelectronic effects that define the mechanisms of enzymatic catalysis, increasing biocatalytic efficiency and streamlining syntheses of complex compounds. Through the synthesis of para-substituted nitrophenyl benzoate and sterically hindered esters, we conducted Hammett LFER studies on proton transfer events during biocatalysis.	Njoo	Selin Kocalar*, Catherine Zhou*, Jadon Tan, Alex Liu, Elliott Chen, Aylin Salahifar, Pranjal Verma, Saanvi Pemmaraju
1:45-2:00	8	Computer Science & Engineering	Solar panel output	Predict output of solar panel based on photographs	Subramaniam	KrishAnanth AaravUrgaonkar KevinPradjinata KashyapPatel
2:00-2:15	8	Computer Science & Engineering	Modeling the Host Galaxies of Fast Radio Bursts	We use convenient observables to model the dispersion measure contribution of the host galaxy of fast radio burst to the observed dispersion measure.	Leung	
2:15-2:30	8	Computer Science & Engineering	Analyses and Correlation Between Mouse Neural and Visual Data	Data analysis of the mouse, Krebs', neural and visual data to identify correlation between activity in brain regions and conjunctively study the corresponding physical activity in video format	Johnson	Meera Jagota, Garima Upadhyay, Akshat Parikh, Mahika Modi, Hritika Chaturvedi
2:45-3:00	8	Chemistry, Biochemistry & Physics	Investigation of the effect of mutations on GFP Folding	Reporter assays that use Green Fluorescent Protein (GFP) are essential to in vivo studies of cell health and functional product localization; site directed mutagenesis was employed to track the effects of various mutations on GFP function.	Brah	Yash Kamdar*, Arnav Rao*, Sirtaj Bansal, Vedasamhitha Padisetti
3:00-3:15	8	Biological, Human, and Life Sciences	Genetic Characterization and Comparison of Stress Responses between a crop species and an invasive species: Cassava and Castor Bean	The experiment is to stress crop plants and invasive, drought-tolerant plants to compare the stress responses via hydrogen peroxide measurements. This research is used to determine how invasive plants steel themselves against stress and how hydrogen peroxide levels contribute to this resistance to abiotic stressors.	Suresh	AarushiDeshpande ShainaAmbashta Tanvi Sri SaiPenugonda YashviPatel
3:15-3:30	8	Biological, Human, and Life Sciences	SARS-CoV-2 ddRNAi Delivery Methods	This group is continuing to do work on the SARS-Cov-2 virus as they created an interfering RNA strand that targets the ORF 1ab viral polyprotein that is responsible for transcription in the coronavirus cell. They have been and will continue to work on how to deliver this RNAi into the viral cell.	Suresh	AaravDubey IshyaMukkamala ReneshGudipati SaahilDas AvaniSethi