

ASDRP 2020 Research Expo & Symposium Presenter Schedule

Time	Room	Department	Project Title	Description	Advisor	Authors
1:45-2:00	7	Biological, Human, and Life Sciences	Hypoglycemic Effect of Bioactive Compounds in Bitter Melon on <i>Caenorhabditis elegans</i>	Momodica Charantia (Bitter Melon) is known to have hypoglycemic properties which can potentially be used to control blood glucose levels in diabetic patients. Here we will isolate the hypoglycemic agent in bitter melon and test its efficacy on <i>C. elegans</i> and compared it to a common diabetic drug	Gandhi	FrancesJing LucasSun AyeshaAshraf AnushaSharangpani PrachiRoy SriyaMunaga AniketDas ShriyaRamdas YuvrajWalia SanaHusain DhritiAvala
1:45-2:00	7	Computer Science & Engineering	Laser Astronomy	The design, fabrication & construction of an observational instrument based on lasers of differing wavelengths to discover events that could indicate the deformation of the space-time continuum.	Downing	
2:00-2:15	7	Biological, Human, and Life Sciences	Emotional Impact of Covid-19	The study quantitatively measured changes in various lifestyle/habit changes of adolescents and compared that to self reported scores to gauge the overall impact of covid-19 on emotional/mental health.	Guo	AnnaTruong SanjanaParikh RevaSrivastava EmilyGoyal AnshKharbanda
2:15-2:30	7	Biological, Human, and Life Sciences	Genetic Characterization and Comparison of Stress Responses between a crop species and an invasive species: Kale and Black Mustard	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	ArchanaSatish AriannaLi ChahakGupta ErinYang SuhanaShrivastava
2:45-3:00	7	Chemistry, Biochemistry & Physics	Development & Synthesis of Novel 1,3-Diketone Pyrazole FTO Inhibitors	The fat mass and obesity-associated (FTO) protein has been clinically correlated with obesity; in this study, we design, synthesize, and test diketone pyrazole derivatives against FTO.	Clark/Brah	FTO: Bhavesh Ashok*, Prahan Reddy*, Anvi Surapaneni*, Atri Surapaneni*, Veda Nayak, Neha Ramesh, Harsha Rajkumar, Eeshi Uppalapati, Pradyun Singh, Taanvi Banerjee,
3:00-3:15	7	Biological, Human, and Life Sciences	Effect of Ab peptides on short and long term associative memory in <i>C. elegans</i>	Evaluated how Ab peptides aggregating in neurons and muscles of transgenic <i>C. elegans</i> can affect their ability to form short term and long term associative memory with odorants	Truong	Brian Fu*, Aryan Mangla*, Sophie Menon*, Darsh Singhanian*, Khushi Varshney*
3:15-3:30	7	Chemistry, Biochemistry & Physics	Development of novel inhibitors of TP53 Induced Glycolysis Regulatory Phosphatase (TIGAR) as a strategy of modulation of the p53 tumor suppressor pathway in anticancer therapy	TP53 Induced Glycolysis Regulatory Phosphatase's (TIGAR) expression is upshifted in some cancers, and may downshift apoptotic rates in cancer cells. To that end, we designed, synthesized, and screened compounds that could inhibit TIGAR.	Brah/Njoo/Tallapaka	Ayeeshi Poosarla, Sarah Su, Krithikaa Premnath, Andrew Wang, Asavari Gowda, Jeslyn Wu, Ananya Anand, Ishani Ashok, Shamita Bhattacharjee, Trisha Dharmapuri, Sophia Fung, Aman Gupta, Saira Hamid, Meher Jain, Tanya Jain, Ria Kolala, Emma Le, Stacey Le, Monica Manmadkar, Tejas Miryala, Thoya Raman, Aishi Rao, Simrun Sakhrani, Sanika Sharma, Ananya Vittaladevuni, Sarah Wang-Zhou, Grace Yang, Aishwarya Yuvaraj
3:30-3:45	7	Biological, Human, and Life Sciences	How Accurate is the Public's Perception of Schizophrenia?	Individuals with schizophrenia often face increased stigma because of commonly believed misconceptions about the disorder. We sought to understand the general public's perceptions and beliefs of schizophrenia. This research examined the common misconceptions that the public believes about schizophrenia and how accurate participants' perceptions of schizophrenia are.	Hakinson	Ananya Deepak, Aryan Makhija, Sohini Ozo, Aashwin Makhija, Onkaar Paul