

## ASDRP 2020 Research Expo & Symposium Presenter Schedule

Time	Room	Department	Project Title	Description	Advisor	Authors
1:30 - 1:45	1	Chemistry, Biochemistry & Physics	Thymoquinone and Piperine-loaded nanostructured lipid particles: preparation and in vitro characterization	Thymoquinone, a potent anticancer drug, has poor bioavailability. Piperine, an alkaloid from Piper nigrum act as a bio enhancer of structurally and therapeutically diverse drugs. In this study nano-lipid formulation was prepared to improve thymoquinone's pharmacokinetic profile in combining with piperine.	Renganathan	Caitlynn Tran, Maya Jagota, Sruthi Rameshkumar, Tiffany Wang, Megna Sankaranarayanan
1:45-2:00	1	Chemistry, Biochemistry & Physics	Synthesis of Nickel Nanoparticles Derivatives for Enhancement of Oxygen Reduction Reactions	Synthesis and characterization of novel nickel nanomaterials are carried out using available literature. Compared to the industry grade platinum over carbon catalyst, Nickel Nanoparticles are a low-cost, high-stability, and high activity nanomaterial for catalyzation of the oxygen reduction reaction found in proton exchange membrane fuel cells.	Patel	Samyukta Athreya, Aniruddh Suresh, KrishPatel
2:00-2:15	1	Computer Science & Engineering	Are YouTube's Algorithms Politically Biased?		Mui	Sanjana Gadaginmath Atharva Gupta Shrooms Srivatsan Natraj Vairavan Michael Lutz
2:15-2:30	1	Biological, Human, and Life Sciences	Factors that Influence the Level of Stigma that Individuals With Mental Illness Experience	Employment of those with a mental illness has been shown to improve an individual's quality of life. This study examined whether stigma associated with the label of mental illness, type of mental illness, and treatment had an impact on the likelihood of gaining employment.	Hakinson	Samantha Chou, Kirthi Shankar, Anam Mughal, Anmol Bhide
2:45-3:00	1	Biological, Human, and Life Sciences	detection and control of spoilage fungi isolated from vegetables and fruits	Isolation of fungi from vegetables-fruits/ control their growth	Mikhail	Sadhana Chari, Isha Kale, Kimberly Khaw, Katherine Xie, Ria Nair
3:00-3:15	1	Chemistry, Biochemistry & Physics	Synthetic Studies Toward Greener Syntheses of Thymoquinone	Thymoquinone, a known phytochemical compound commonly extracted from Nigella sativa seed oil, has been reported to have antioxidant, anticancer, and anti-inflammatory properties along with other outstanding biological activities. Our group aims to synthesize this natural product by screening various salen ligands, transition metals, and oxidants to find optimal conditions for greener methodology.	Njoo	Ishani Ashok, Stacey Le, Neha Mendava, Aylin Salahifar, Anyana Vittaladevuni
3:15-3:30	1	Chemistry, Biochemistry & Physics	Screening of a natural product polyphenol library for inhibition of Amyloid beta 42 aggregation	Derivatives of the natural product polyphenol Epigallocatechin gallate were screened for inhibition of amyloid beta 42 aggregation, a structure associated with Alzheimer's Disease.	Clark/Brah	Ayush Bajaj*, Andrew Su*, Vikas Ummadisetty, Aditi Ravindra, Arnav Surpur, Preston Chu, Veena Ummadisetty, Stavan Patelia, Omkar Toro, Srikar Vemula
3:30-3:45	1	Biological, Human, and Life Sciences	Modeling alpha-synuclein aggregation in E.coli as a Parkinson's Disease cell model	$\alpha$ -synuclein is a major component in Lewy bodies that are present in affected neurons in Parkinson's Disease. We aimed to establish a cell model for PD using E. coli to study the aggregation of $\alpha$ -synuclein.	Truong	Amulya Harish*, Allen Ni*, Tiffany Ho, Anirudh Ramadurai, Bhumika Iroji, Sanya Chhabra