

2019 ERN Conference in STEM  
 Washington, D.C. - February 21-23, 2019  
 Washington Wardman Park Hotel  
 Undergraduate Oral Presentation Schedule\*

Oral Presentation Session 1: Friday, Feb. 22 – 10:00am – 12:15pm  
 Oral Presentation Session 2: Friday, Feb. 22 – 4:00pm – 6:30pm  
 Oral Presentation Session 3: Saturday, Feb. 23 – 8:00am – 10:30am  
 Oral Presentation Session 4: Saturday, Feb. 23 – 11:00am – 12:30pm

Session #	Oral Abstract #	Room #	First Name	Last Name	Institution	Abstract Title
2	40	Park Tower 8219	Sophia	Abraham	University of South Florida	Authentication of RFID Communication with Wireless Identification and Sensing Platform (WISP5)
4	60	Park Tower 8206	Wesley	Agee	Harris-Stowe State University	The Effect of Monosodium Glutamate (MSG) on Transgenerational Inheritance of Phenotypic Traits in <i>Drosophila melanogaster</i>
1	1	Marriott Balcony A	Besmira	Alija	City University of New York-Hunter College	Stag2 Mutations and Their Influence on Activating Histone Marks
2	15	Marriott Balcony A	Azalia	Andrews	Harris-Stowe State University	Enhancing Photosynthetic Education for Grades 6-8
1	87	Park Tower 8212	Mayla	Ayers	Harris-Stowe State University	Student Engagement: Clickers and Confidence
1	81	Park Tower 8216	Christopher	Ball	Alabama State University	An Approach to Identifying Trace Metals In Types of Glass Using The Micro-LIBS Method
1	33	Park Tower 8217	Karis	Barnett	University of Maryland, Baltimore County	Characterizing the Voltammetric Response and Capacitance of Diamond Thin-Film Electrodes of Different Microstructure and Morphology
1	2	Marriott Balcony A	Natashia	Benjamin	University of the District of Columbia	Exquisite Specificity of a PMEPA1 Isoform in Regulation of the Androgen Receptor in Prostate Cancer
1	84	Park Tower 8212	Brian	Bibbins	Southern University at New Orleans	Multivariate Analysis of Education
2	13	Marriott Balcony A	Chelsea	Brown	Southern University at New Orleans	Comparative Analysis of Vegetation and Pollinator Diversity at the Long Island Solar Farm
1	90	Virginia C	Joy	Brown	Georgia Institute of Technology	Developing a Platform to Mimic Lymphatic Vessel Injury and Induce Cell Remodeling
3	23	Marriott Balcony A	Evan	Buckner	University of Arkansas	Manipulating Metabolic Pathways to Make Maize More Nutritious
1	82	Park Tower 8216	Lorna	Caesar	Delaware State University	Michelson Interferometer for Wavelength and Distance Metrology
1	28	Park Tower 8217	Lon Yin	Chan	Hunter College	Development of a Chemical Biology Approach to Detect Tumor Associated Protein Complex in Cancer
2	101	Virginia C	Maya	Clinton	North Carolina Central University	Hydrogen Production using Non-Concentrating Solar Cell and a Ruthenium-based Catalyst
1	96	Virginia C	Xavier	Collazo Fernandez	Universidad Del Turabo	Development of a Wireless Electrical Lawn Mower
3	68	Park Tower 8216	Bennett	Cromer	The Pennsylvania State University	Anion Exchange Reaction for Formation of GaN/GaSe Heterostructures
1	4	Marriott Balcony A	Laureen	Daniels	Bowie State University	The Effects of the Aging Process on Skeletal Muscle Disuse Atrophy
1	85	Park Tower 8212	DaLisa	Denham	Virginia State University	Optimal Control of Mixed Chemotherapy and Virotherapy Treatments of Tumors
1	57	Park Tower 8206	Rainee	DeRoin	Oklahoma State University	Hydrologic and Sediment Yield Modeling of Native Prairie and Encroached Eastern Redcedar Watersheds
2	18	Marriott Balcony A	Roshanara	Diaz Mejia	University of Puerto Rico in Cayey	Anxiolytic Effects of Organic Extracts from <i>Styopodium Zonale</i> in the Forced Swim Test in <i>Drosophila Melanogaster</i>
3	24	Marriott Balcony A	Roberto	Diaz-Gonzalez	University of Puerto Rico at Bayamon	The Role of Leaf Water Content on Oviposition Site Selection by <i>Pseudosphinx tetrio</i> on <i>Plumeria alba</i> Host Plants

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1	29	Park Tower 8217	Daisy	Díaz-Rohena	University of Puerto Rico - Rio Piedras Campus	Effect of the Counterion on the Radical Scavenging Activity of Ferrocenyl Chalcone Salt Derivatives
1	91	Virginia C	Brianna	Donaldson-Morton	University of Wisconsin - Whitewater	Comparing EEG, EMG, EOG, and ECoG Techniques to Create a Working Neurological Prosthetic
1	79	Park Tower 8216	Royce	Dong	Washington University in St. Louis	Optimizing Whispering-Gallery Microbubble Sensors with the Angle-Polished Fiber Coupler
2	97	Virginia C	Giancarlo	D'Orazio	University of the District of Columbia	A Multidisciplinary Undergraduate Project: Development of An Autonomous Rover For Mars Exploration
1	49	Park Tower 8219	Raymond	Elliot	Savannah State University	Role of Supply Chain Flexibility and Reliability on Online Shoppers Behavior and Trust
1	52	Park Tower 8206	Margaret	Flowers	Simpson College	Pan Trap Biases on Abundance and Body Size of Captured Bees
3	69	Park Tower 8216	Wilfred	Fonseca Ferrer	University of Puerto Rico in Ponce	Gold Nanoparticles Toxicity to the Coastal Marine Crustaceans
1	5	Marriott Balcony A	DelShawn	Fowler	Harris-Stowe State University	Strategies for Treatment or Prevention of Diabetes Using a Chemical that Mimics Exercise
2	12	Marriott Balcony A	Paulina	Frutos	University of Connecticut	Study of Wetland Restoration Structures on Microbial Functionality
1	6	Marriott Balcony A	Miriam	Garcia	Northeast Lakeview College	Ventral Striatal Dopamine Release and Freezing Behavior in Aversive Learning in Rats
1	86	Park Tower 8212	Kennedy	Garrett	Savannah State University	Analyzing Decision-making using Len's Model
1	53	Park Tower 8206	Lucas	Goodman	Iowa State University	Effects of Habitat Alteration on False Map Turtles in the Missouri River, South Dakota
1	50	Park Tower 8206	Justin	Griffin	Dillard University	A Comparative Analysis of the Genotoxicity along the Shorelines Post BP and Santa Barbara Oil Spills
4	62	Park Tower 8206	London	Gulyard	Dillard University	The Industrial Canal Lock Expansion Project- the Lower 9th Ward Environmental Concerns, the Justice – the Neighborhoods
1	83	Park Tower 8216	Khalil	Guy	Fisk University	Investigating the Evidence for a Fourth Neutrino
3	66	Park Tower 8216	Biya	Haile	Georgia Institute of Technology	Microsensors with Nanostructured Surfaces Fabricated by 3D Lithography
1	34	Park Tower 8217	Shelita	Hall	Norfolk State University	Dynamic Contact Angle Measurements of SnO <sub>2</sub> Nanostructures with Au Nanoparticles
1	48	Park Tower 8219	Samuel	Hernandez	Knox College	Modeling Epigenetic Heterogeneity and Age For Clinical and Forensic Testing
1	7	Marriott Balcony A	Jesse	Hill	University of Wisconsin - River Falls	Identifying Potential Drug Targets in the Malarial Parasite Plasmodium falciparum
1	63	Park Tower 8211	Matthew	Hill	Elizabeth City State University	A Multivariate Regression Analysis of Hospital Stays in a Nosocomial Infection Control Data
3	25	Marriott Balcony A	Tiffany	Hopkins	Harris-Stowe State University	Photosynthetic Pigments in Drought Stressed vs Non-stressed Oryza sativa

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3	74	Park Tower 8216	Edgar	Ibarra	University of California Berkeley	On-Surface Synthesis of Graphene Nanoribbons
4	59	Park Tower 8206	Erica Ednashi	Irizarry Pagan	Universidad del Este	Assessment and Quantification of <i>Vibrio</i> spp. in Tropical Beaches of Puerto Rico and Their Epidemiological and Public Health Importance
1	3	Marriott Balcony A	Katelyn	Irons	Jackson State University	The Therapeutic effects of <i>Veronia Amgdalinia</i> on the Inhibition of Growth of Cervical Cancer (HELA) Cells
1	92	Virginia C	Fatahillah	Iskandar	Virginia State University	Cyber Physics Modeling on Material Removal in Chemical Mechanical Planarization
1	54	Park Tower 8206	Josette	John	University of the Virgin Islands	Population Dynamics and Differences Between Deep (Mesophotic) and Shallow <i>Orbicella</i> spp Corals in the U.S. Virgin Islands
3	70	Park Tower 8216	Lauren	Kerstetter	The Pennsylvania State University	Use of Raman Spectroscopy to Study Reactions of Metals with MoS <sub>2</sub>
2	41	Park Tower 8219	Ali	Khan	Fort Valley State University	Applications of Raspberry Pi to Internet of Things: Smart Greenhouse Monitoring and Control
2	39	Park Tower 8219	Aditya	Krishnan	Santa Clara University	Sensor Data Attestation Based on Contractual Policies
2	102	Virginia C	Gabrielle	Lambert-Milak	University of Arizona	Photo-actuated Solid State Media for Realizing Spatio-temporal Modulations of Elastic Properties
2	42	Park Tower 8219	Samuel	Li	Princeton University	Personalized Colorectal Cancer Survivability Prediction with Machine Learning Methods
2	98	Virginia C	Kyle	Liang	UCLA	Honey Bee Parasite Detection Using a Smartphone
1	55	Park Tower 8206	Cameron	Lockett	Virginia State University	Suriname's Frogs Stay <i>Batrachochytrium dendrobatidis</i> Fre
3	77	Park Tower 8216	Josian	Luciano-Velazquez	University of Puerto Rico in Ponce	Nanotoxicity in Aquatic Systems
3	71	Park Tower 8216	Nadja M.	Maldonado Luna	University of Puerto Rico-Mayaguez	Synthesis and Characterization of Se-Based Nanoparticles for Potential Biomedical Applications
1	8	Marriott Balcony A	Alicia	May	University of Georgia	Identification of New Glial Markers in Planarians
2	14	Marriott Balcony A	Derek	McFarland	Harris-Stowe State University	The Prevalence of <i>Babesia</i> sp. Parasites in a Population of Carolina Wren
1	88	Park Tower 8212	Kenton	McNeal	Morehouse College	Self-Perceived intelligence and Mindset of Undergraduate HBCU students
3	73	Park Tower 8216	David	Medina Suarez	Univeristy of Puerto Rico in Ponce	Synthesis of Silver Nanoparticles and Applied Bactericidal Activity in Gram Positive and Gram Negative Bacteria
3	78	Park Tower 8216	Jousen	Merced	University of Puerto Rico in Ponce	Manufacturing of Silver Nanoparticles and Toxicity in Aquatic Ecosystems
4	61	Park Tower 8206	Arquel	Miller	Howard University	Influence of Ni and Ca/Mg Ratios on Root Foraging in Serpentine Plants
2	99	Virginia C	Jean-Paul	Mirindi	Prairie View A&M University	Research on Swarm Robotics
2	19	Marriott Balcony A	Morganie	Montgomery	Grambling State University	Learning, Decision-Making, and Actin Expression in <i>Dugesia dorotocephala</i>

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2	38	Park Tower 8219	Christopher	Murphy	University of the Virgin Islands	The Breakthrough Listen Search for Intelligent Life: Characterization and Mitigation of Satellite RFI
2	43	Park Tower 8219	Kyle	Norland	University of Arizona	Neural Graph Formulation for Personal Sensor Summarization
1	93	Virginia C	Jerian M.	Ocasio Espinosa	University of Puerto Rico at Mayaguez	Improving the Seismic Response of Reinforced Concrete Residential Structures Raised on Gravity Columns Using the Steel Cross Bracing Unit System
1	30	Park Tower 8217	Abisiola	Ola-Ajose	Harris Stowe State University	Vitamin C Quantity In Various Citrus Fruits
1	80	Park Tower 8216	Jose	Ortiz-Soto	University of Puerto Rico at Cayey	Rapid Thickness Identification of 2D Materials via Optical Microscopy
1	51	Park Tower 8206	Fabienne	Placide	University of New Orleans	Hurricane WRF Systems & HIAPER Aircraft: Deep South Views
1	64	Park Tower 8211	Zairelys Andrea	Reyes-Rivera	University of Puerto Rico at Mayaguez Campus	Prevalent Health Issues amongst Puerto Rican Agricultural Workers
1	65	Park Tower 8211	Jaida	Rice	Texas Southern University	Some Results for Periodic Maxilinear Difference Equations
1	94	Virginia C	Jaime	Rios	University of the District of Columbia	Design and Test of a Direct-Metal-Laser-Sintering (DMLS) Fabricated Microchannel Heat Exchangers for Advanced Cooling
3	72	Park Tower 8216	Julio A.	Rivera de Jesus	University of Puerto Rico- Mayaguez Campus	Effect of Mn and Cu-doping of Zn Based Quantum Dots on their capability to generate Reactive Oxygen Species
3	75	Park Tower 8216	Rosymar	Rivera-Colon	University of Puerto Rico at Ponce	The Impact of the Size on the Toxicity of Gold Nanoparticle
1	9	Marriott Balcony A	Sade	Roberts	Tuskegee University	In Vitro Activity of Epigallocatechin, Curcumin Alone and their Combination against Toxoplasma gondii
1	36	Park Tower 8217	Ulyssa	Robertson	Central Piedmont Community College	The Selection of DNA Aptamers Binding to Enterobacterial Common Antigen (ECA)
1	35	Park Tower 8217	Sarah	Rodriguez	California State University, San Bernardino	1, 5-Diaminonaphthalene, p-Chloranil: A Potential Electronic Ferroelectric
2	44	Park Tower 8219	JaVon	Sanchez	Virginia State University	Creating Human Interaction Networks for YouTube Users
3	27	Marriott Balcony A	Rosanyely	Santana	Florida International University	The Effects of Metal Contamination on Fish Locomotory and Sensory Abilities
1	56	Park Tower 8206	Zabrina	Santana	University of Puerto Rico, Rio Piedras Campus	Evaluation of the Use of Camera Traps to Study the Predation of the Puerto Rican racer ( <i>Borikenophis portoricensis</i> : Dipsadidae) in the Cambalache State Forest
2	103	Virginia C	Autezia	Sellers	Mississippi Valley State University	Ozone Monitor Signal Growth and Decay
2	10	Marriott Balcony A	Matthew	Shields	University of New Orleans	Colocalization of Nerve Injury Proteins
2	45	Park Tower 8219	Gregory	Siegfried	North Carolina Central University	Towards Unmanned Aerial Vehicle Object Detection
1	89	Park Tower 8212	Moné	Skratt Henry	City University of New York- College of Staten Island	Phrase Boundary Blinks in American Sign Language

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2	11	Marriott Balcony A	Jada	Smith	Central State University	Investigating Honey Bee and Mite Biting Behavior in the Midwest Colony
2	17	Marriott Balcony A	Kia	Smith	Dillard University	Beware: What's Growing on Your Produce? Pathogenic Contaminants?
1	37	Park Tower 8217	Kennedy	Smith	University of Arkansas at Pine Bluff	Synthesis of Metal Chalcogenide Aerogels
1	58	Park Tower 8206	Alvin	Soto Soto	University of Puerto Rico in Arecibo	A General Mass-Energy Habitability Model
2	46	Park Tower 8219	Jordan T.	Williams	Fort Valley State University	Face Recognition Using an Innovative Bag of Features and Support Vector Machines
1	95	Virginia C	Joshua	Talbott	Virginia State University	Autonomous Agriculture Spraying Robot
3	20	Marriott Balcony A	Raissa	Tchetcho Kemajou	Virginia State University	Differences of Metabolic Rates in <i>Sceloporus slevini</i> Between High and Low Elevation Populations
1	31	Park Tower 8217	Rickey	Terrell	University of Cincinnati	Optimization of Transport Properties for Li-ion Battery Electrolytes
1	32	Park Tower 8217	Melissa	Velazquez	Pontifical Catholic University of Puerto Rico	Viability of Chinese Hamster Ovary Cells after exposition to CdSTe nanoparticles
2	100	Virginia C	Geena	Wann-Kung	University of Hawai'i at Mānoa	Development of a Cost Effective Modular Wireless Hydroponics Controller
3	21	Marriott Balcony A	Harrison	Watson	Jackson State University	Effects of Tamoxifen on Reproductive Physiology in <i>Xenopus laevis</i>
2	16	Marriott Balcony A	Jira	White	Clafin University	Uncovering Genetic Interactions in Glia-Mediated Formation of The <i>C. Elegans</i> Brain Neuropil
3	26	Marriott Balcony A	Iran	Williams	Harris- Stowe State University	Floral Biology of <i>Thalia Dealbata</i> (Marantaceae)
3	22	Marriott Balcony A	Malcolm	Williams-Green	Morehouse College	Can Febuxostat Therapy Protect Kidney Function in Mice with Sickle Cell Disease?
1	47	Park Tower 8219	Adrienne	Wu	Mount Holyoke College	A Pan-Cancer Authorship Network Analysis
3	76	Park Tower 8216	Brenda	Yu	University of California, Merced	Biophysical Modeling of Nanoparticles for Localized Drug Delivery with Focused Ultrasound
3	67	Park Tower 8216	Vivian	Zhou	Case Western Reserve University	Investigation of Light Coupling in Hexagonal Boron Nitride for Photonic Device Design

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