

Session #	Room	Abstract #	First Name	Last Name	Institution	Abstract Title
2	Hoover	44	Dayana	Abdullah - Smoot	Texas Southern University	Seasonal Cytotoxic Effects of Urban Watersheds
2	Hoover	45	Folasade	Adedoyin	Texas Southern University	Determination of Bacterial Loads from Houston Watershed Soil Samples
2	Virginia B	7	Fadeke	Adeola	University of New Orleans	Bite Force Influences Intersexual Conflict and Sexual Selection in House Cricket (Acheta domesticus)
1	Marriott Balcony B	79	Oluwaponmile	Afuwape	Iowa State University	Swelling as a Metric for Improving Biocompatibility of Hydrogel-coated Neural Electrodes
1	Coolidge	21	Stephanie	Aguilar	University of California Los Angeles	Perfluorophenylazide Photochemistry for Modification of Materials
4	Virginia B	34	Patricia	Akello	University of Texas, San Antonio	Survey of Security Issues in Cloud, Fog and Edge Computing: Systematic Review and Theory-based Perspective on the State of the Art
2	Hoover	52	Jazmine	Alexander	Florida A&M University	Using Cultural Humility to Balance the Institutional and Intersectional Barriers to the Advancement of Black Women STEM Graduate Students at a Large HBCU
2	Hoover	41	Ayat	Ali	Texas Southern University	Characterization of House Dust Impact on Human Lung Cells
1	Virginia B	4	Nida Ali	Alsaffar	Howard University	Thymoquinone Inhibition of Glutathione S-transferases (GSTs) Enzyme Function Correlates with Decreased Cell Proliferation and Altered Development in Dictyostelium Discoideum
4	Virginia B	35	Safwa	Ameer	University of Texas at San Antonio	The EGRBAC Model for Smart Home IoT Access Control
1	Marriott Balcony B	107	Paula	Angarita Rivera	Indiana University-Purdue University of Indianapolis	Are Breath Samples Collected During Exercise Distinguishable from Breath Samples Collected during Hypoglycemic Events?
2	Virginia B	11	Janne	Ault-Brown	Tuskegee University	Mushrooms as Novel sources for Anti-Toxoplasma Gondii Drug Discovery
4	Coolidge	31	Douglas	Austin	Delaware State University	Adsorption of Heavy Metals from Water Created from Hemp Waste and Invasive Phragmite Grass
2	Marriott Balcony B	85	Farhad	Barati	University of the District of Columbia	Safety Assessment of Earthen Levees in the Face of Multiple Hazards
2	Virginia B	12	Delmaliz	Barreto-Vazquez	University of Puerto Rico-Rio Piedras	Evaluation of Proteus vulgaris Growth in Human Synthetic Urine for an Ureolysis System with an Integrated Ammonia Fuel Cell
1	Coolidge	22	Brooke	Baumgarten	University of Central Florida	A Longevity Study on the Analysis of Sexual Lubricants When Stored in Different Environmental Conditions
2	Tyler	70	Jasmine	Beckford	Norfolk State University	Electrical, Optical, and Thermal Properties of Different Metal doped Zinc Oxide Thin Film for Flexible Transparent Heater (TFTH)
1	Coolidge	23	Janese	Bibbs	George Mason University	Development of Tetraarylphosphonium/Tetrakis(pentafluorophenyl)borate (TAPR/TFAB) Salts as Non-aqueous Electrolytes for Organic Redox Flow Batteries
2	Marriott Balcony B	86	Norman	Burgos-León	University of Puerto Rico at Mayaguez	Analysis of the Damage Sustained by the NWS Doppler Radar During Hurricane Maria in Puerto Rico
1	Virginia B	10	Kristina	Burns	Alabama Agriculture and Mechanical University	Microbial Diversity Associated with the Oral and Fecal Samples of White-Nose Syndrome (WNS) Infected Tricolored Bats
1	McKinley	60	Adrián	Camacho-Berríos	Universidad de Puerto Rico	Oxygen-deficient ZnO Thin Films for the Detection of Environmentally Important Gases
2	Marriott Balcony B	90	Gian	Carrara	Florida International University	A Packable and Reconfigurable Origami Antenna for Extended Mobile Range

2	Virginia B	18	Reuel	Danquah	University of Maryland Eastern Shore	Phylogenetic Classification of Planktothrix isoethrix cf. via Analysis of Toxin-producing Genes
3	Park Tower 8216	95	Samuel	Danquah	Norfolk State University	Composite Solid State Electrolyte for Safe Electrochemical Energy Storage Application
3	Park Tower 8216	96	Manny	de Jesus Lopez	University of Puerto Rico at Mayaguez	Study of Al11Ce3 Distribution in Aluminum Matrix Produced via Centrifugal Casting
1	McKinley	58	Deborah	Ehie	Missouri State University	TEPB-CS and TEAB-CS: Gene Therapy Alternatives
1	Marriott Balcony B	80	Tanya	Enderli	Florida Institute of Technology	An in vitro Viscoelastic Model of the Rat Aorta Using Wire Myography of a Fixed Sample
4	Virginia B	36	Michaelangelo	Fields	Winston-Salem State University	Using Machine Learning Methods for Vehicle Predictive Maintenance
4	Park Tower 8228	75	Beatriz	Galarza Tohen	University of Texas at San Antonio	Problem-Based Learning Elicits the Understanding of Computational Thinking for Latinx Students
2	Hoover	46	Shari	Galvin	Texas Southern University	Analysis of Bacteria in Houston Watersheds in the Aftermath of Hurricane Harvey
4	Park Tower 8219	53	Xavier	Garrido	University of Hawaii West Oahu	Forecasting Dissolved Oxygen in Loko 'ia (Hawaiian Fishponds) Using ARIMA
2	Tyler	71	Nicholas	Geiser	University of California, Los Angeles	Integral of Three-loop Modular Graph Functions and Transcendentality in Superstring Amplitudes
2	Hoover	47	Lenneisha	Gilbert	University of Maryland Eastern Shore	Developing and Implementing of Integrated Insect Pest Management and Food Safety Practices for Cucurbit Production in the Central Maryland and the Delmarva Peninsula
3	Park Tower 8228	64	Kinley	Gómez-Rosa	University of Puerto Rico	DFT analysis of Faujasite Zeolite Substituted with Cu, Ni and Zn for the Adsorption of Emerging Contaminants
1	Virginia B	16	Aaron	Griffith	Delaware State University	Characterization of Distal Lower Extremity Balance Measuring Neuromuscular Effort and Amplitude Probability Distribution Function in Healthy and Unhealthy Neuromuscular Systems
4	Park Tower 8219	54	Tony	Haines	Old Dominion University	Uniform Stabilization to a Non-trivial Equilibrium of a Fluid-viscoelastic Structure Interaction Model
2	Marriott Balcony B	91	Micah	Hall	Prairie View Agriculture and Mechanical University	Secure IOT in Smart Grids with Blockchain
3	Park Tower 8216	97	Bobby	Haney	Florida Agriculture and Mechanical University	Solvent Absorbent Amphiphilic Janus Gels for Pickering Emulsions
2	Virginia B	13	Muyideen	Haruna	Morgan State University	Bacteriophages for Staphylococcus aureus Isolated from the University Athletic Grounds
4	Virginia B	37	John	Heaps	University of Texas at San Antonio	A Deep Learning Language Model for Software Bug Detection
1	Coolidge	24	David	Hernandez Funes	University of Central Florida	Evaluation of Inter- and Intra-person Variability of Hair Features for Forensic Analysis of Hair
1	Virginia B	2	Tanisha	Hinton	Jackson State University	Vernonia Amygdalina as a Novel Chemotherapeutic Agent for the Treatment of Acute Promyelocytic Leukemia Cells
4	Park Tower 8219	55	Jiehao	Huang	City College of New York	Tropical Cyclone Hazards in Relation to Propagation Speed
2	Hoover	48	LaToya	Irvin	Delaware State University	Effects of Salinity on Gene Expression of Durum Wheat (Triticum turgidum ssp. Durum)
2	Marriott Balcony B	87	Sean	Jackson	Florida Agricultural and Mechanical University	Optimization of 3D-Printable Electrolytes for Dye-Sensitized Solar Cells

1	Marriott Balcony B	81	Jorge	Jimenez	University of Pittsburgh	A Sustained Release Cysteamine Drug Delivery System for Corneal Cystine Crystals in Cystinosis
3	Park Tower 8216	98	Shardai	Johnson	Tuskege University	Study of Low Temperature Plasma on Morphology of Turbostratic Carbon for Improved Properties of Composite Filaments
1	Coolidge	25	Kaitlin	Jones	University of Central Florida	Determination of Discriminatory Abilities of DART-HRMS versus Py-GC/MS in Automotive Paint Analysis
2	Hoover	42	Djene	Keita	Texas Southern University	Exposure to Triclosan Activated MAPK Signal Transduction Pathway in Human Lung and Colon Cells
2	Hoover	43	Brianna	Kenney	Delaware State University	Electrochemical Studies of Perfluoroacids (PFAs) and Perfluorooctane Sulfonate (PFOS)
1	Coolidge	26	Jessica	Kindell	University of Central Florida	Analyzing Latent Print Residues using 2D Gas Chromatography
3	Park Tower 8228	65	Jovian	Lazare	Clark Atlanta University	Computational Study on Binding Affinities of Two Distinct Backbone Configurations/Conformations of Aliphatic $\alpha$ -amino Acids on Graphene
1	Coolidge	27	Emily	Lennert	University of Central Florida	Analysis of Smokeless Powders, Smokeless Powder Residues, and Pyrolysis Products by GC-MS
1	McKinley	61	Ido	Levy	City College of New York	Band Engineering to Achieve a Wide Band Gap Topological Insulator
1	McKinley	57	Rhodesherdeline	Limage	Binghamton University	Nanoparticle and Microbiota Exposure Alter Mucus Composition in an In Vitro Gastrointestinal (GI) Tract Model
1	Virginia B	1	Naoko	Little-Jackson	Howard University College of Medicine	Bioinformatic Assessment of the Dictyostelium discoideum Glutathione S-transferase A3 (DdGSTA3) Enzyme: Putative Non-Enzymatic Roles in Cellular Signaling
3	Park Tower 8216	99	Charissa	Lucien	Florida Agricultural & Mechanical University	Investigation of Material Properties using Nanoindentation and Artificial Neural Networks
1	Mckinley	62	Douglas	MacPherson	City University of New York	Enzyme-Responsive Peptide Nanoparticles for Non-Invasive Imaging of Metastatic Cancer
1	Mckinley	63	Mamadou	Mbaye	Norfolk State University	Nanocomposite Thermoelectric Devices based on Bi <sub>0.4</sub> Sb <sub>1.6</sub> Te <sub>3</sub> and Bi <sub>2</sub> Te <sub>2.88</sub> Se <sub>0.17</sub> Chalcogenide materials
1	Virginia B	17	Sharee	McGriff	Delaware State University	Translating Time between Humans and Chimpanzees Reveals Conservation in Human Cortical Evolution and Deviations in Childhood Development
1	Marriott Balcony B	82	Melissa	Mendoza	Binghamton University	Glycosaminoglycan-Induced Calcification within a Three-Dimensional Microfluidic Model of the Aortic Valve Fibrosa
3	Park Tower 8228	66	Johnathan	Mitchell	Tuskegee University	Next Generation Hydroponics: 3-D Printable, Biobased Nano Nutrient Delivery and Growth System
2	Tyler	72	Richard	Monge	City University of New York	T1-based Temperature Sensing and Nanoscale Magnetometry via Scanning Nitrogen-Vacancy Centers Probe Microscopy
1	Coolidge	28	Jamonica	Moore	Auburn University	Development of Metal Complexes with Quinol-Containing Ligands for Superoxide Dismutase Mimicry
2	Hoover	49	Bryshal	Moore	Fort Valley State University	Deposition of Suberin in the Exodermis of the Tomato Root in Response to Abiotic Stress Conditions
1	Virginia B	5	Carolina	Muniz	Howard University	Bioinformatic Assessment of Dictyostelium Discoideum Glutathione S-transferase Suggests Non-Enzymatic Influence(s) on the YakA Signaling Pathway through S-Glutathionylation
2	Marriott Balcony B	88	Alejandro	Najera-Acosta	New Mexico State University	Spare Parts Provision through a Reliability Framework
1	Coolidge	29	Kandyss	Najjar	University of Central Florida	Potential Transfer of Cosmetic Particles after Close Intimate Contact

2	Virginia B	14	Caroline	Ndirangu	Morgan State University	Host Range Analysis of Morphologically Variant <i>Pseudomonas aeruginosa</i> Bacteriophages
2	Tyler	73	Funmilola	Noiki	North Carolina Central University	Measurements of Photonuclear Reaction Pathways Towards Promising Medical Radioisotopes
4	Park Tower 8219	56	Fatemeh	Norouzi	Morgan State University	Linear Univariate Garch(P,Q) and Pink Noise
1	Virginia B	3	Ebony	Nottingham	Florida Agriculture and Mechanical University	Combination Therapy in 3D NCSLC Tumor Model Overcomes Induced Drug Resistance
3	Park Tower 8216	100	Obinna	Nwokonkwo	Southern University and Agriculture and Mechanical College	Evaluation of an Indirect Heating Method for Self-healing and Shape Memory in Polymer Materials Using High Intensity Focused Ultrasound
2	Virginia B	8	Adedamola	Olatoregun	Texas Southern University	Evaluation of Tardigrades as Environmental Bio-indicators Following Exposure to Cadmium
3	Park Tower 8228	67	Abdiel	Oquendo	University of Puerto Rico, Mayaguez Campus	Synthesis, Characterization and Antibacterial Properties of Pure and Li Doped ZnO Nanoparticles for Alternative Water Disinfection Methods
1	Marriott Balcony B	108	Jessica	Patel	Delaware State University	Calcium Lead Titanate Thin Films for Pyroelectric Detector Application
4	Coolidge	19	Joshua	Patterson	Delaware State University	Effect of Phosphorylated N-Acetyl-D-Glucosamine on Epithelial Cell Recovery
2	Marriott Balcony B	92	Gianfranco	Perez-Greco	Florida International University	Modeling and Analysis of Helical Kresling Origami Antennas
1	Marriott Balcony B	83	Nicole	Perez-Salas	University of Puerto Rico-Mayaguez	Synthesis and Dynamics of Biocompatible Au-SiO <sub>2</sub> Janus Nanomotors for Medical Applications
1	Virginia B	6	Sheriff-Seedy	Phaal	Fort Valley State University	Cloning and Characterization of UDP-dependent Glycosyltransferases (UGTs) in Pomegranate
2	Marriott Balcony B	89	Marquese	Pollard	Florida Agricultural and Mechanical University	Porosity Evaluation of Additive Manufactured Tooling for Intelligent Composite Fabrication
4	Coolidge	20	Shejla	Pollozi	City University of New York, The Graduate Center & Lehman College	Self-Assembly of Tri-Peptides to Design a Novel Proton Transfer Membrane for Fuel Cell Applications
3	Park Tower 8216	101	Sean	Psulkowski	Florida State University	Thermomechanical Effects on Initial Adhesion in FDM Additive Manufacturing
1	McKinley	59	Tania	Ramos-Santiago	University of Puerto Rico - Mayaguez	Understanding Transport of Iron Oxide Nanoparticles in 3D Cell Spheroids Co-culture
4	Virginia B	38	Bhaskar	Roberts	Princeton University	Efficient Algorithms for Quantum Signal Processing Decomposition
4	Coolidge	32	Brianna	Ross	Jackson State University	Influence of Local Meteorology Conditions on Ground-level Ozone Concentrations in Jackson, MS
4	Coolidge	33	Xaimara	Santiago Maldonado	University of Puerto Rico Rio Piedras	Development of an Aptamer-based Biosensor for the Detection of Cyanotoxin L-BMAA in Water
4	Park Tower 8228	76	Stephanie	Santos-Diaz	Purdue University	Investigating Facilitators' Experiences in Chemistry Outreach
2	Marriott Balcony B	93	Salomon	Satche	Howard University	Evaluation of Physical-Layer Security for Mobile Cyber Physical Systems Under a Mobile Jammer Attacker
1	Marriott Balcony B	84	Samantha	Schultz	Florida Institute of Technology	Maximum Failure Load for a Variety of Orthopedic Screws
3	Park Tower 8228	68	Erin-Nicole	Scott	Tuskegee University	Characterization of PLA Nanocomposites with Bacterial Cellulose from Banana Peel
3	Park Tower 8216	102	Amrit	Sharma	Norfolk State University	Lead-free Ferroelectric Thin Films for Pyroelectric Energy Harvesting
2	Virginia B	9	Sabena	Siddiqui	University of Hawaii at Hilo	Humpback Whale Non-song Calls as a Function of Pod Composition and Subsurface Behavior in Hawaii

2020 ERN Conference in STEM  
 Washington, D.C. - February 6-8, 2020  
 Washington Wardman Park Hotel  
 Graduate Oral Presentation Schedule\*

Oral Presentation Session 1: Friday, Feb. 7 – 10:00am – 12:15pm  
 Oral Presentation Session 2: Friday, Feb. 7 – 4:00pm – 6:30pm  
 Oral Presentation Session 3: Saturday, Feb. 8 – 8:00am – 10:30am  
 Oral Presentation Session 4: Saturday, Feb. 8 – 11:00am – 12:30pm

2	Hoover	50	Brianna	Smith	Tuskegee University	Variable Models Evaluating Environmental Toxicity of Carcinogenic Compounds
4	Coolidge	30	Jessica	Sprague	University of Central Florida	Variability in DART-HRMS Instrument Parameter Optimization due to Molecular Identity
2	Virginia B	15	Jaylah	Stanley	Alabama State University	Surface engineering of RNA coliphage Q $\beta$ with UB-MSP Fusion for Malaria Point of Care
4	Park Tower 8228	77	Kathryn	Starkey	University of Colorado, Colorado Springs	AGEP Engineering Alliance: A Model to Advance Historically Underrepresented Minority Postdoctoral Scholars and Early Career Faculty in Engineering
3	Park Tower 8216	103	Jacob	Strimaitis	Norfolk State University	Comparison Study on Electrochemical Properties of Lithium-ion Capacitors Assembled with Common Lithium Metal Oxide Anodes
4	Virginia B	39	Adam	Swanier	Jackson State University	Educational Gaming: Using Twitter as a Medium to Teach Water Security
2	Marriott Balcony B	94	Siera	Sylvester	Florida A&M University	The Development of an Incipient Wood Decay Model for Building Materials in the U.S.
2	Hoover	51	Marielys	Torres Díaz	University of Puerto Rico- Rio Piedras Campus	Impact of Nanomaterials in Marine Ecosystems: A study of the Metabolic Response of <i>Vibrio fischeri</i>
4	Virginia B	40	Cyanea Van	Trieu Do	University of Texas at San Antonio	A Machine Learning Model with Features from Granger Causality Analysis for Predicting Cyberattack Patterns in IPv4 Address Space
3	Park Tower 8216	104	Prathima	Tumkur	Norfolk State University	Characterization of Cellulose Nanoparticles Synthesized from Waste Cotton
3	Park Tower 8216	105	Jonathan	Valenzuela	Norfolk State University	Single Crystal Growth of CaFe <sub>2</sub> O <sub>4</sub> Using the Optical Floating Zone Technique
4	Park Tower 8228	78	Diana	Velez	University of Puerto Rico- Mayagüez Campus	Puerto Rico and the Cell Therapies Manufacturing Global Value Chain: Insurance Logistics and Treatment Coverage Alternatives
2	Tyler	74	Christina	Walker	Delaware State University	Using Machine Learning to Analyse Amino Acids & Minerals by Fourier Transform Infrared Spectroscopy
1	Marriott Balcony B	106	Awnalisa	Walker	Binghamton University	A Risk-Averse Two-Stage Stochastic Program for the Inventory Rebalancing of Bike-Sharing Systems
3	Park Tower 8228	69	Kelsea	Yarbrough	Norfolk State University	Fabrication and Characterization of Aluminum Doped Zinc Oxide Thin Film Transistors Grown by Radio Frequency Sputtering Technique

\*Presentation schedule is listed by primary author's last name