



Link for RSVP: <https://miami.zoom.us/meeting/register/tJwrdo-qrz4iHtN4J94naPE-gpn2MjjhmP0B>

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AGENDA

Time	Speaker Session Title Lakeside Village Auditorium	Poster Session Lakeside Village Pavillion
8:30 am		Coffee and Cookies Available
9:00 to 9:15 am	Welcome Alan Sirkin, Member, DAC Pratim Biswas, Dean, CoE Helena Solo-Gabriele, Assoc. Dean, CoE Renee Evans (poster judging)	
9:15 to 9:45 am	Speaker Session I: Engineering Cures for Cancer Session moderators: Ashutosh Agarwal and Stephen Nimer	Poster Session <u>set up</u> at 9:30 am
9:45 to 10:15 am	Break	
10:15 to 11:30 am	Speaker Session II: Advanced Materials for Manufacturing Session Moderators: Emrah Celik, James Coakley, Luis Ruiz Pestana	
11:30 to 1:00 pm	Break. Go to Poster Session	Poster Session I (11:30 to 1:30 pm) (with box lunches) RSVP required* for box lunch
1:00 to 2:15 pm	Speaker Session III: Advanced Materials in Healthcare Session Moderators: Sakhrat Khizroev, Fabrice Manns	Poster Take Down
2:15 to 2:45 pm	Student Poster Award Recipients, Closing, Adjourn Mohammad Ghiasian Renee Evans (Poster Awards) Helena Solo-Gabriele	

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Opening Session: (9:00 to 9:15 am). Lakeside Village Auditorium

Time	Speaker	Title
9:00 am	Alan Sirkin, Pratim Biswas, Helena Solo-Gabriele	Welcome
9:05 am	Renee Evans	Poster Judging

Speaker Session I: Engineering Cures for Cancer (9:15 to 9:45 am)

Moderators: Ashutosh Agarwal and Stephen Nimer

Time	Speaker	Title
9:15 am	Ashutosh Agarwal and Stephen Nimer	Session Welcome, Background for RFA. Announcement of Awards
9:25 am	Awardee 1	Title 1
9:35 am	Awardee 2	Title 2
9:45 am	Adjourn	

Speaker Session II: Advanced Materials for Manufacturing (10:15 to 11:30 am)

Session Moderators: Emrah Celik, James Coakley, Luis Ruiz Pestana, Giacomo Po

Time	Speaker	Title
10:15 am	Emrah Celik, James Coakley, Luis Ruiz Pestana, Giacomo Po	Session Welcome
	Bill Hixson	Additive manufacturing of titanium matrix composites
	Muhammad Awais	Precipitate size distribution and strengthening in superalloys
	James Coakley	Refractory superalloys
	William Jordan Wright	Artificial Intelligence Integrated Additive Manufacturing
	Raden Gustinvil	Additive Manufacturing of Thermoelectric Materials
	Inam Lalani	In-situ SEM micromechanics
	Giacomo Po	Micromechanical modeling of creep in metals
	Zhiwei Yan	Synergy between Graphene and Mediators in Batteries and Supercapacitors
	Mert Akin	Superionic electrolyte-the mechanism revealed
	Christos Mytafides	Multifunctional composites with photo-thermal energy-harvesting capability
	Ben Bessling	3D A-FEM for composite failure analysis
	Qingda Yang	Virtual design and testing of composite materials
	Mingyue Wu	Learning how glasses creep
	Geng Yuan	Rational design of high entropy alloy catalysts
	Luis Ruiz Pestana	The role of molecular modeling in the discovery of advanced materials
	Ying Wang	Activation of basaltic materials for use as supplementary cementitious materials
	Prannoy Suraneni	Reactivity of synthetic calcium aluminosilicate glasses
	Sadegh Tale	Machine learning for the rational design of chemicals for durable concrete
	Elvis Baffoe	Bio-inspired self-healing concrete materials
11:30 am	Session Moderators	Session Closing

BREAK FOR POSTER SESSION (11:30 am to 1:00 pm). Poster session hosted by the Graduate Engineering Student Council (GESC). Poster Session to be held at the Lakeside Village Pavillion. Poster list provided on last pages of this agenda.

Speaker Session III: Advance Materials in Healthcare (1:00 to 2:00 pm) Lakeside Village Auditorium

Session Moderators: Sakhrat Khizroev, Fabrice Manns

Time	Speaker	Title
1:00 pm	Sakhrat Khizroev, Fabrice Manns	Session Welcome
	Emma Drabbe	Retinoblastoma On a Chip
	Kevin Davis	Patient Operated Brain Computer Interface for Hand Grasp Restoration at Home
	Elric Zhang	Magnetolectric nanoparticles for wireless brain stimulation
	Diana Velluto	Drug-Integrating-Amphiphilic-Nanomaterial-Assemblies (DIANAs) for targeted and localized drug delivery
	Giancarlo Tejada	Sequestering inflammatory signals with a scavenger nanoparticle
	Mostafa Abdel-Mottaleb	Using magnetolectric nanoparticles for localized motor activity control in rats
	Aaron Stock	Optimization of Conformal Coating Encapsulation with Primary Islets and Stem Cell-Derived Islets for β Cell Replacement Without Immunosuppression for Treatment of Type 1 Diabetes
	Ashutosh Agarwal	Breast cancer metastasis on a chip
	Courtney Dumont	Biomaterial targeting nanoparticles for increased temporal control of drug release
	Abishek Prasad	Brain and spinal cord machine interfaces for restoring hand function in spinal cord injury
	Onur Tigli	Piezoelectric Materials: Applications in Biosensors for Cancer Diagnosis
	Sakhrat Khizroev	Magnetolectric nanoparticles for cancer treatment
2:15 pm	Session Moderators	Session Closing

Closing Session: (2:15 to 2:45 pm) Lakeside Village Auditorium

Time	Speaker	Title
2:15 pm	Mohammad Ghiasian and Renee Evans	Poster Awards
2:45 pm	Helena Solo-Gabriele	Adjourn

Poster Session

The posters have been separated into five categories as follows.

Energy, Environment & Manufacturing

Poster ID	Presenter's Name	Title of Poster
EEM1	Afeefa Abdool-Ghany	Supratidal Sediment and Seaweed a Significant Source of Enterococci to Nearshore waters: Evaluation before, during, and after COVID-19 shutdown
EEM2	Onochie Okonkwo	Particulate matter formation studies in pressurized coal combustion
EEM3	Ameen Alshikh	Overhaul planning and exchange scheduling for maintenance services with rotatable inventory
EEM4	Mert Akin	Safe and reliable all-solid-state battery operating in high-humidity ambient environments
EEM5	Mohammad Ghiasian	EVALUATING THE COASTAL PROTECTION OF CORAL REEFS THROUGH LABORATORY INVESTIGATION
EEM6	Larissa Montas	Assessing AOD and Ground-Based Measurements to Evaluate Coastal Air Quality Impacts of the DWH Oil Spill
EEM7	Lamis Amer	Resilience Assessment and Adaptation of On-Site Wastewater Treatment Systems to Rising Sea Levels – An Optimization Approach
EEM8	Darlington Imhanzuaria	Using PM sensors to measure air quality at RSMAS campus and dust particles on solar panels
EEM9	Shruti Choudhary	Evaluation of PM2.5 in an indoor and outdoor orchestra setting using low-cost PM sensor network
EEM10	Temitope Runsewe	Evaluation of Contamination in Waste Collection Programs – An Inbound and Outbound Analysis

General - Undergraduate

Poster ID	Presenter's Name	Title of Poster
G1	Valerie Truong	Quantification of ciliary muscle thickness changes during accommodation from dynamic transscleral OCT images
G2	Ryan Garay	Segmentation of Skeletal Structures for Bone Mineral Density Analysis: A Pilot Study
G3	JD Karanik	Nanoporous Copper
G4	Gohar Ali	Design of Smart Fries Dispenser
G5	Collette Thomas	SARS Cov-2 Wastewater Surveillance

General – Health/Biomedical

Poster ID	Presenter's Name	Title of Poster
HB1	Brandon Applewhite	Unidirectional Delivery of Beta-Aminopropionitrile using Electrospun Nanofibers Improves Arteriovenous Fistula Maturation
HB2	Leonor Teles	Recapitulating Lymph Node Stromal Cell Reticula in Type 1 Diabetes Using Gelatin Scaffolds
HB3	Flavia Zisi Tegou	Immunoengineered CCL21 and Beta Cell Antigen Hydrogel Platform to Induce Tolerance in Type 1 Diabetes
HB4	Teresa De Toni	Parallel Evaluation of Polyethylene Glycol Conformal Coating and Alginate Encapsulation as Immunoisolation Strategies for Pancreatic Islet Transplantation
HB5	Gabrielle Monterano Mesquita	Relation between lens, pupil and ciliary muscle dynamics during accommodation from OCT images
HB6	Yunkai Zhu	Prediction of subclinical depression from whole brain functional connectomes
HB7	Samantha Rincon Sabatino	Efficacy and Safety of Localized Mild Hypothermic Neuroprotection from Acute Noise Exposure in Rats
HB8	Carolina Fernandez	Laminar Specificity of the Auditory Awareness Negativity Under Multitone Masking: A Biophysical Modeling Study
HB9	Hao Zhou	The numerical simulation of the tear film aerosolization during non-contact eye procedure
HB10	Leana Rohman	Quantification of lens thickness microfluctuations in young and pre-presbyopic eyes using dynamic OCT biometry
HB11	Kayla Minesinger	Comparison of Actions of Ketamine and Telazol on Cochlear Function in Rats With Noise-Induced Hearing Loss
HB12	Dennis McDuffie	A Microphysiological System to Model the Endothelial-Epithelial Interface
HB13	Charles Alver	Pancreatic Slices on a Chip: A Model to Study Beta Cell Neogenesis
HB14	Emma Drabbe	Novel Tissue Bioreactor for Retinal Organoid Microenvironmental Control
HB15	Taylor Ariko	Impacts of Cerebral Small Vessel Disease on Global and Domain-Specific Cognition
HB16	Kevin Davis	Bimanual representations of hand grasping in ECoG signals form the sensorimotor cortex of a patient with tetraplegia
HB17	Ramanamurthy Mylavarapu	Modulation of motor cortical neurons in common marmoset (<i>Callithrix jacchus</i>) overlaps with macaques
HB18	Melissa Franklin	Activation of inflammasomes and their effects on neuroinflammation at the microelectrode-tissue interface in intracortical implants

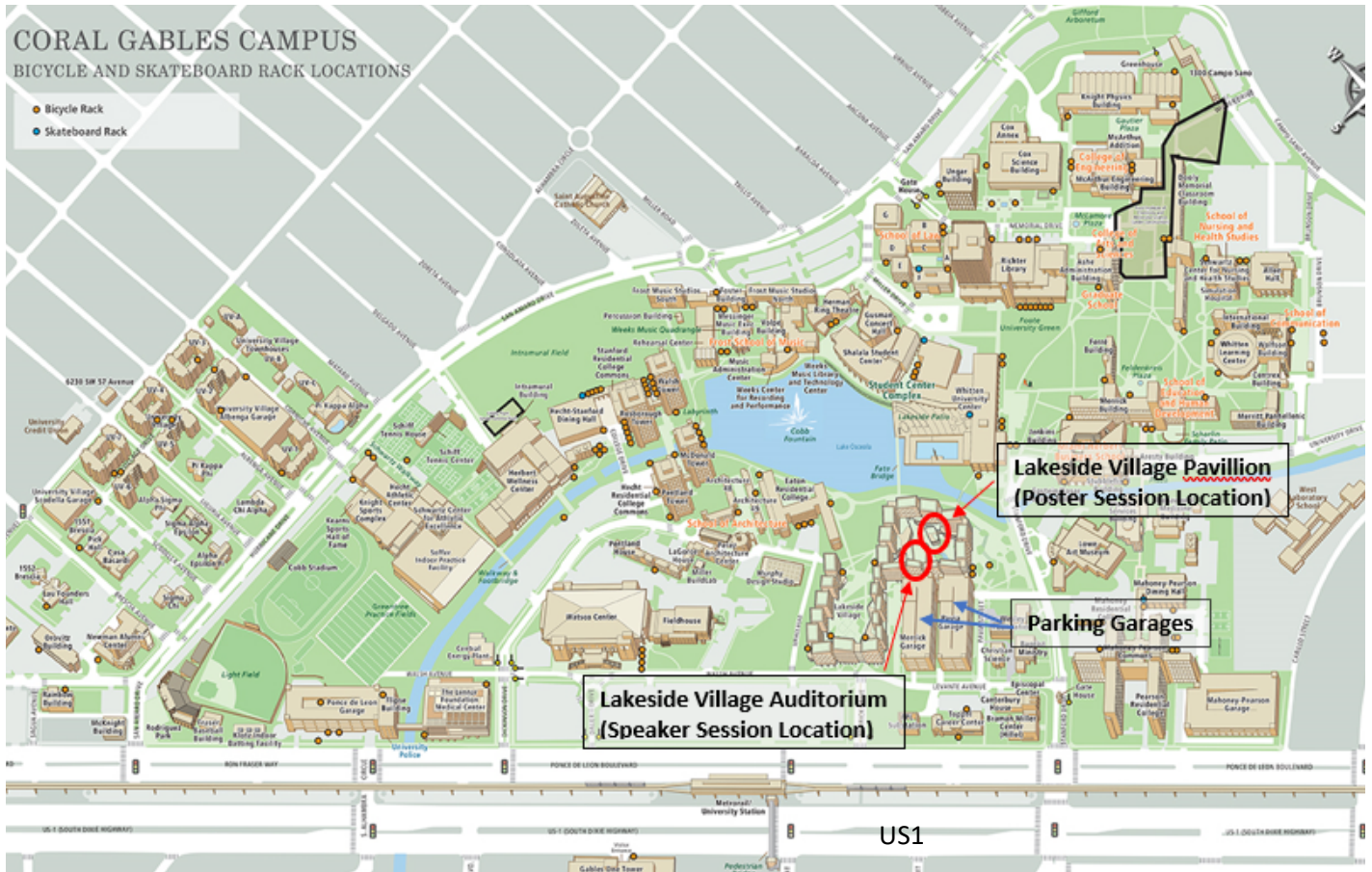
Materials

Poster ID	Presenter's Name	Title of Poster
M1	William Hixson	Titanium alloys for selective laser melting additive manufacturing
M2	Hossein Roghani	Shrinkage Cracking Control of Concrete Using Non-Metallic Rebars and Meshes
M3	Sujit Modi	Single-step Continuous Synthesis of Lignin based Carbon Nanomaterial from pyrolysis in Furnace Aerosol Reactor
M4	Zahid Hussain	Controlling parameters in the design of FRP-RC slabs based on recently approved ACI440-23 code
M5	Sadegh Tale	Machine Learning for The Rational Design of Bio-Inspired Air-Entraining Admixtures
M6	Elric Zhang	Magnetolectric Nanoparticles for Wireless Brain Stimulation
M7	Mostafa Abdel-Mottaleb	Using magnetolectric nanoparticles for localized motor activity control in rats
M8	Yiming Xi	Aerosol-based Synthesis of Crumpled Graphene Oxide

Machine Learning and Computer Science

Poster ID	Presenter's Name	Title of Poster
MLC1	Feiran Xu	A Scalable Bayesian Framework for Large-Scale Sensor-Driven Network Anomaly Detection
MLC2	Oluwasegun Gabriel Olanrewaju	Physician scheduling for emergency telemedicine
MLC3	Letian Zhang	Autodidactic Neurosurgeon: Collaborative Deep Inference for Mobile Edge Intelligence via Online Learning
MLC4	Julia Telischi	Image Based Analysis of the Utricular Macula in the Rat
MLC5	Rui Ma	Deep reinforcement learning for optimized visual field analysis
MLC6	Anchen Sun	Real-time Multimodal Data Integration and User Interaction in Ubiquitous Augmented Reality
MLC7	Bo Peng	MULTISCALE HETEROGENEOUS RECURRENCE ANALYSIS AND ITS APPLICATION IN SOLAR RADIATION PREDICTION
MLC8	Jieming Bian	FedSEAL: Semi-Supervised Federated Learning with Self-Ensemble Learning and Negative Learning
MLC9	Yujie Wang	Spatial Recurrence Quantification Analysis of Histopathological Images for Invasive Ductal Carcinoma Identification
MLC10	Monu Verma	Spatiotemporal Multimodal learning model for predicting the responses of breast cancer to neoadjuvant therapy.
MLC11	Joshua Darville	Microgrid Operational Planning using Deviation Clustering within a DDDAS Framework
MLC12	Mark Ciappesoni	Plasmon FET for ultra-wideband detection in OCT applications
MLC13	Abdurrahman Yavuz	A Sequential Sampling-based Particle Swarm Optimization to Control Droop Coefficients of Distributed Generation Units in Microgrid Clusters

Event Location



Address of Lakeside Village: 1280 Stanford Drive, Coral Gables, FL 33146

Parking is available in the Merrick and Pavia Garages located immediately adjacent to Lakeside Village. The cost is \$8 to park for the day. Additional parking is available through pay by phone.