



Robert Wood Johnson
Medical School

2022 RWJMS Medical Students Summer Research Symposium

Wednesday, August 10, 2022

Keynote Speaker

Reynold A. Panettieri, Jr, MD

**Vice Chancellor for Translational Medicine and Science
Director, Rutgers Institute for Translational Medicine and Science
Professor of Medicine, Robert Wood Johnson Medical School**

Organized by: RWJMS Office of Research

2022 RWJMS Medical Students Summer Research Symposium

| <u>Poster</u> | <u>Student</u> | <u>Mentor</u> | <u>Title of Research</u> |
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| 1 | Affan Aamir | Sara Heinert, PhD | Youth Feedback on a Youth-Led Digital Education Intervention to Improve Blood Pressure for Adults Who Present to the Emergency Department with Hypertension |
| 2 | Lucy Aaron | Biren Saraiya, MD | Development of Physician-Patient Communications Elective for Pre Clinical Medical Students |
| 3 | Kathryn Abbott | Tammy Chung, PhD | Racial/Ethnic Differences in Maternal Smoking Before Pregnancy and Childhood Prodromal Psychosis from the ABCD Study |
| 4 | Shareif Abdelwahab | Mariam Eskander, MD | Assessing geographic disparities in accessing clinical trials for pancreatic cancer treatments in the United States |
| 5 | Audrey Abend | Kelvin Kwong, MD | Evaluation of sleep stages using electroencephalogram (EEG) and electromyogram (EMG) findings during drug-induced sleep endoscopy (DISE) in pediatric population |
| 6 | Lily Adler | William Beckerman, MD | Evaluating Neutrophil-to-Lymphocyte Ratio as a Presurgical Risk Calculator in Comparison to Modified Frailty Index and the ACS NSQIP Presurgical Risk Calculator in Patients Undergoing Open Lower Extremity Revascularization Procedures |
| 7 | David Agyapong | Hai Sun, MD, PhD | Correlation of hippocampal sclerosis and parvalbumin expression with distinct seizure ending patterns in mice subjected to the intrahippocampal kainic acid model of status epilepticus |
| 8 | Andres Alba | Huizhou Fan, PhD | Development of 3rd-generation selective antichlamydials (SAC) with improved potency |
| 9 | Josephine Alegun | Lara Hathout, MD | Assessing the Impact of MMR Status on the Prognosis of Patients with Endometrioid Endometrial Cancer |
| 10 | Leila Alidoost | Peter Cole, MD | Self-Identified Race and Ethnicity in Pediatric Oncology/Hematology |
| 11 | Ava-Dawn Anigbogu | Gail Burack , PhD | The Clinical Outcomes of People Living with HIV/AIDS during the COVID-19 Pandemic |
| 12 | Nathan Arnold | Nell Maloney Patel, MD | Effect of Spaced Repetition Surgical Simulation Training on Skill Retention |
| 13 | Nicholas Baker | Ernest Leva, MD | Assessment of Pediatric Trauma Pain Management Strategies at Robert Wood Johnson University Hospital |
| 14 | Kacie Barry | Benjamin Crabtree, PhD | Perceptions of Oncologists on Survivorship Care: Survivorship Models and Care Delivery |
| 15 | John Carlson | Joseph Hanna, MD | Nitric Oxide use in Covid-19 ICU patients |
| 16 | Rachel Cary | Rachel Choron, MD | The Impact of Prehospital EMS Education on Improving the Under Triage Rate for Trauma Patients at a Level 1 Trauma Center |

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| 17 | Qianwei Chen | Michele T. Pato, MD | Childhood-onset and Lifetime Traumatic Events in the Evolution of Bipolar Disorder |
| 18 | Sruti Cheruvu | Mi-Hyeon Jang, PhD | Time-Course of Neurogenesis in Hippocampus after Acute Spinal Cord Injury |
| 19 | Ojas Chinchwadkar | Hai Sun, MD, PhD | Loss of Inhibitory Interneuron Activity is Possibly Linked to Distinct Seizure Ending-Patterns in Epileptic Mice in the Kainic Acid Model |
| 20 | Emily Costello | Wayne Fisher, PhD | How to Best Define Different Levels of Severe Challenging Behavior in Individuals with Autism Spectrum Disorder and Intellectual Disability |
| 21 | Michael Daidone | William Beckerman, MD | Comparison of Longitudinal Outcomes for CLI Patients Receiving Antegrade and Retrograde Interventions |
| 22 | Nicholas Dante | Christoph Buettner, MD | What is the Role of the Sympathetic Nervous System in Overnutrition-Induced Insulin Resistance and Metabolic Disease? |
| 23 | Sarah Decedue | Katie Devine, PhD | Relationship between mental health and sleep quality in adult and young adult survivors of childhood cancer |
| 24 | Jennifer Delgado | X.F. Steven Zheng, PhD | Superoxide Dismutase 1 and Its Role in Cancer as A Nuclear Transcription factor: SOD1 Effect on Genes Involved in Nucleotide Biosynthesis |
| 25 | Sanjana Eranki | Steven Brant, MD | Understanding the Epigenetic Differences in Various Ethnic Groups relevant to the Pathogenesis of Inflammatory Bowel Disease |
| 26 | William Fahy | Bruce Haffty, MD | Clinical toxicity in hypofractionated and conventionally fractionated radiation in breast cancer patients with germline mutations in various DNA repair genes |
| 27 | Charlene Fermin | Jennifer Amico, MD, MPH | Exploring Bias among NJ Family Medicine Providers when Recommending Contraception |
| 28 | Daniel Fernandes | Adam C. Berger, MD | Sentinel Lymph Node Biopsy in Patients with Non-Melanoma Skin Cancers: A Single Center Experience |
| 29 | Derek Ge | Sabiha Hussain, MD | Screening for Social Risk Factors in the Intensive Care Unit During the Pandemic |
| 30 | Taylor Glassman | Lawrence Kleinman, MD | Examining the relationship between perceived emotional support and changes in anxiety or depression among parents of children with COVID-19: Project CONNECT to Predict Sick Children |
| 31 | Michelle Gnidash | Babar Rao, MD | The use of line-field confocal optical coherence tomography (LC-OCT) to visualize acne lesions in-vivo |
| 32 | Kevin Guerrero | Manuel Jimenez, MD | Examining the user experience of a family wellness program for Latino families: A qualitative study |
| 33 | Juline Hanna | Brad Kamitaki, MD | Addressing Barriers to Comprehensive Epilepsy Care: A Mixed-Methods Study |
| 34 | Jason Hua | Jag Sunderram, MD | Does Chronic Intermittent Hypoxia exacerbate World Trade Center dust induced lung injury? |
| 35 | Osaumwense Idemudia | Jeffrey Carson, MD | Quality of Life Measurement in Red Blood Cell Transfusions based on Restrictive versus Liberal Red Blood Cells Transfusion Strategy |
| 36 | Umin A Jaloh | William Beckerman, MD | Comparing outcomes in patients on preoperative antiplatelet therapy undergoing open lower extremity revascularization |
| 37 | Connie Jiang | Michael Steinberg, MD, MPH | National Web-based Survey Evaluating Cigarette Relighting Behavior: Prevalence, Beliefs, and Practices |
| 38 | Srivarsha Kaloth | Denalee O'Malley, PhD | Colorectal Cancer Survivorship and Comorbidity Burden through a Racial/Ethnic Lens: Implications for Risk-based Models |

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| 39 | Sophie Kauderer | Huong Truong, MD | Peripheral Vascular Disease by Sex: Is There a Difference in Anatomic Site of Lesions? |
| 40 | Natalia Kellam | Deepak Jain, MD | Impact of SARS-CoV-2 infection during pregnancy on neonatal and early childhood outcomes |
| 41 | Nadia Kenfack Kembou | Richard Marlink, MD | Applying the RE-AIM and PRECIS-2 Evaluation Frameworks of Dissemination and Implementation Science to Analyze the Implementation Strategy of a Screening Intervention for Breast Cancer in Regional Botswana |
| 42 | Labeeqa Khizir | Sammy E. Elsamra, MD | Assessing the accuracy of intraoperative ureteroscopy in determining ureteral stricture length at time of robotic ureteral reconstruction. |
| 43 | Susan Kim | Michele T. Pato, MD | Schizophrenia with Comorbid OCD in African-Ancestry and European-Caucasian Ancestry Subjects in the Genomic Psychiatry Cohort |
| 44 | Sharwani Kota | Craig Bollig, MD | Interposition Vein Grafts in Head and Neck Microvascular Reconstruction: A Systematic Review |
| 45 | Neha Kuderu | Advaitha Madireddy, PhD | Assessment of the Effects of Red Dye 40 on DNA Integrity in FANCD2 Deficient Fanconi Anemia Cells. |
| 46 | Rahul Kukreja | Naveena Yanamala, PhD | The longitudinal effect of social isolation on sleep and cognition in dementia patients |
| 47 | Isha Kumbam | John Calvin Chatlos, MD | Inducing and Measuring Spiritual Experiences in Clinical Setting |
| 48 | Ye Na Kwak | Jag Sunderram, MD | A literature search of the ROX index as an effective predictive tool for high-flow nasal cannula treatment in COVID-19 patients |
| 49 | Daniel Lam | Daniel Horton, MD | Patterns of Psychotropic Prescription Prescriptions and Psychiatric Comorbidities in Youth with ADHD, 2002-2018 |
| 50 | Eileen Lee | Soko Setoguchi Iwata, MD, MPH, DrPH | "Healthy" Diet Perception vs. Actual Diet Quality: Prevalence and Risk Factors Among US Adults |
| 51 | Karen Makar | Jeremy Sinkin, MD | Practice Patterns and Surgeon Preferences for Gender-Affirming Surgery in New Jersey |
| 52 | Emilia Maliborski | Hilary Grosso Jasutkar, MD, PhD | The effect of Atg7 gene deactivation on hippocampal muscarinic acetylcholinergic synapses. |
| 53 | Sapir Mashiach | Nancy Philipps, MD | Association of Lateral Pain in Vulvodynia and co-morbidity of Bowel disorders |
| 54 | Moira McGevna | William Beckerman, MD | Perioperative outcomes for the treatment of juxtarenal aortic aneurysms. |
| 55 | Meghan McMullin | Gloria Bachmann, MD | Extreme ticklish sensation with vulvar-vaginal contact: a case report |
| 56 | Eric Muller | Ankit Shah, MD | Assessment of Clinical Correlates to Plasma Kisspeptin Levels in Patients with Nonalcoholic Fatty Liver Disease |
| 57 | Ricardo Munoz | Jason Womack, MD | Understanding the interaction of menstrual cycle function and injury in female athletes |
| 58 | Sorasicha Nithikasem | Saum Rahimi, MD | Using 3D Reconstruction Software to Measure Intraluminal Thrombus Burden in Patients with Abdominal Aortic Aneurysms |
| 59 | Sarah Oh | Salma Jabbour, MD | Dose-painting stereotactic body radiotherapy for central lung tumors adjacent to critical organs: an analysis of tumor control |
| 60 | Temitope Oshinowo | Cheryl Dreyfus, PhD | Interactions Between the TrkB Pathway and the mTOR Pathway in Response to Demyelination |

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| 61 | Akhil Patel | Cynthia Koziol-White, PhD | Specific SNPs within CDHR3 and GSDMB Genome may be Associated with Heightened Response to Rhinovirus Infection and Attenuated Response to a β -2 Agonist |
| 62 | Khushi Patel | William Beckerman, MD | Smoking Based Differences in Autogenous Vein Versus Prosthetic Grafts for Open Lower Extremity Infrainguinal Bypass |
| 63 | Kush K. Patel | Zeeshan Ahmed, PhD | Exploring Genome Wide Association Studies in Precision Medicine |
| 64 | Mann Patel | Saum Ghodoussipour, MD | Contemporary Analysis of the Tolerability of Induction Bacille Calmette-Guerin Immunotherapy for Non-muscle Invasive Bladder Cancer: Retrospective Data from a Single Institution |
| 65 | Nimi Patel | Jennifer Amico, MD, MPH | Option of Self-Collected HPV Testing Effect on Cervical Cancer Screening Rates |
| 66 | Riya Patel | Gloria Bachmann, MD | Examining Factors that Influence a Woman's Choice Between Surgical Interventions In The Case of Breast Cancer |
| 67 | Joseph Phelan | Sally Radovick, MD | Growth and Metabolic Effects of Hypopituitarism Associated with POU1F1 Gene Mutations Remediated by Treatment with Growth Hormone |
| 68 | Aaliyah Phillips | Cande Ananth, MD | Stroke-related Maternal Mortality in the United States, 2000-2020: Epidemiological Trends and Race/Ethnic Disparities |
| 69 | Kayla Piiwaa | Adrian Balica, MD | Deep Learning with Image Enhancement for Ultrasound Imaging of Endometriosis |
| 70 | Alyssa Pilch | Sabiha Hussain, MD | Assessing the Effectiveness of an Opera-Based Breathing and Wellness Program in the Management of Long COVID Patients |
| 71 | Aravind Rajagopalan | Saum Ghodoussipour, MD | Development of a Novel Procedure-Specific Risk Calculator for Radical Cystectomy with Machine Learning |
| 72 | Sonya Rao | Thomas Hegyi, MD | Assessing the Knowledge Baseline of Medical Students on Sudden Infant Death Syndrome |
| 73 | Tricia Mae Raquepo | David Zald, PhD | Contingency Perception |
| 74 | Sahithi Reddi | Craig Bollig, MD | Virtual Surgical Planning in Head and Neck Osseous Free Flaps —A Multi-Institutional Study |
| 75 | Valerie Ricciardi | Vadim Ten, MD | A model of neonatal brain injury induced by asphyxia with circulatory arrest in mice |
| 76 | Leena Rijhwani | Soko Setoguchi Iwata, MD, MPH, DrPH | Temporal Trends in Intravenous Iron Use among Medicare Beneficiaries, 2008-2019 |
| 77 | Shaheer Rizwan | John Noshier, MD | Investigation of tumor texture as a biomarker predicting response to yttrium-90 radioembolization for patients with primary or metastatic hepatocellular carcinoma |
| 78 | Brian Rust | Benton Purnell, Detlev Boison, PhD | Determining the role of adenosine in the postictal hypercapnic ventilatory response |
| 79 | Chandravathi Sayani | William Beckerman, MD | Impact of IMA Patency on Aortic Remodeling Following Endovascular Aortic Aneurysm Repair (EVAR) |
| 80 | Jake Schade | Nur Zeinomar, PhD, MPH | An Evaluation of Clinical and Demographic Factors that Predict Smoking Cessation in Black Breast Cancer Survivors |

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| 81 | Samantha Shave | Matin Imanguli, MD | Patient Outcomes Following Observation, Reirradiation, or Reirradiation with Chemotherapy After Salvage Surgery for Head and Neck Cancer |
| 82 | Jordan Shinn | James Coromilas, MD | Survival After In-Hospital Cardiac Arrest and its Relationship to the Cardiac Rhythm at the Time of Arrest |
| 83 | Trisha Sindhu | Juana Hutchinson-Colas, MD Dr. Girda | Examining Hospice Care Service Utilization among Ovarian Cancer Patients at Rutgers Cancer Institute of New Jersey |
| 84 | Sidharth Srinivasan | Gian Pal, MD | Characterization of the Clinical Phenotype of Parkinson's Disease in South Asian Patients |
| 85 | Julie Sumski | Hari S. Tunuguntla, MD | Postoperative Outcomes in Patients Receiving InterStim® Therapy for the Treatment of Overactive Bladder |
| 86 | Namita Thomas | Daniel Horton, MD | Racial and Ethnic Disparities in Eye Screenings for Juvenile Idiopathic Arthritis |
| 87 | Aaron Tucker | Todd Mowery, MD | Animal model of Third Window Syndrome: Insight into semicircular canal dehiscence induced CNS dysfunction in humans |
| 88 | Anisha Tyagi | Patrick Buckley, MD | Distraction Related Complications after Hip Arthroscopy: A Systematic Review of Distraction Techniques |
| 89 | Athmika Vaseeharan | Zhongren Zhou | Investigation of the Role of Zonula Occludin-1 in the Pathogenesis of Barrett's Epithelium and Esophageal Adenocarcinoma |
| 90 | Madhir Vyas | Bo Qin, PhD | Sleep Disturbance in a Population-Based Longitudinal Cohort of Black Breast Cancer Survivors |
| 91 | Joyce Xu | X.F. Steven Zheng, PhD | SOD1 Regulates Metabolism in Non-Small Cell Lung Cancer |
| 92 | Sara Youssef | Cindy Wassef, MD | Assessing the Effectiveness of Valacyclovir in the Treatment of Pityriasis Rosea: A Literary Review and Case Series |
| 93 | Joshua Yu | Rachel Choron, MD | Use of Diaphragmatic Ultrasound in Predicting Extubation Success or Failure in the Surgical Intensive Care Unit |
| 94 | Kailyn Ramirez | Albert S. Khouri, MD | Health Literacy as Measured by The Short Assessment of Health Literacy as a Predictor of Glaucomatous Severity |

THANK YOU

Thank you for attending the **2022 Medical Student Summer Research Symposium.**

We truly appreciate your participation and continued support.

A special thank you to all faculty mentors, lecturers, faculty who served on the fellowship selection committee, facilitators, students, and Research Office staff for their participation in the program.

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