



Tinkham Veale University Center
October 22, 2024

# **Schedule of Events**

| 8:00 am-<br>8:30 am    | Breakfast and Registration   | TVUC<br>upper lobby |   |
|------------------------|--|---------------------|---|
| 8:30 am                | Dean's Welcome<br>Speaker: Dean Gerson   | Ballroom C          |   |
| 8:40 am                | Keynote speaker introduction<br>Speaker: Marvin Nieman, PhD  |                     | Speaker<br>biography<br>on page 8                   |
| 8:45-<br>9:45 am       | Keynote address "Membrane<br>trafficking in platelets both exo-<br>and endocytosis, matters for<br>hemostasis and beyond"<br>Speaker: Sidney Whiteheart, PhD |                     |   |
| 10:00 am -<br>11:30am  | Morning Poster Presentations   | Ballroom AB         | Poster titles<br>and authors<br>on pages<br>12-26   |
| 11:30 am-<br>11:45 am  | Break to pick up lunch   | TVUC upper lobby    |   |
| 11:45 am -<br>1: 15 pm | Oral Presentations Session 1<br>Moderator: Grace McComsey, MD  | Ballroom C          | Presentation<br>titles and<br>authors on<br>page 10 |
| 1:30 pm-<br>3:00 pm    | Oral Presentations Session 2<br>Moderator: Bill Schiemann, PhD   |                     | Presentation titles and authors on page 11          |
| 3:00 pm-<br>4:30 pm    | Snacks and Afternoon Poster<br>Session   | Ballroom AB         | Poster titles<br>and authors<br>on pages<br>27-40   |
| 4:30 pm                | Closing remarks & Presentation of Student and Mentor Awards Speaker: Lia Logio, MD   | Ballroom C          | Event<br>evaluation,<br>page 41                     |

## Welcome

#### Dear Students, Faculty, Trainees, Staff and Guests:

Welcome to the second annual Case Western Reserve University School of Medicine Graduate and Medical Student Research Day. This important event combines two previous endeavors, the Medical Student Research Day and the Biomedical Graduate Student Symposium (BGSS), into a single opportunity to showcase the many research accomplishments of School of Medicine graduate and medical students. We hope that combining these events facilitates deep dialogue around research and cross-program exchanges between medical and graduate students, faculty and trainees.

Today we spotlight research conducted by almost 300 graduate and medical students, presented in oral and poster presentations. We welcome our keynote speaker, scientist and mentor Sidney Whiteheart, PhD, a professor visiting from the University of Kentucky. The variety of student presentations and Dr. Whitehearts's own work are a testament to the power of translational, clinical and basic science discovery and the contributions that research across the spectrum have on improving our understanding of biomedical science and improving care for patients.

Organizing a large event takes a team effort. We would like to thank the students, faculty and staff listed in this program who have contributed in many ways—as members of the planning committee, as abstract or presentation judges, and as moderators and presenters. The Dean's Office is pleased to provide financial support for this event as a

demonstration of the importance and diversity of research efforts across the CWRU School of Medicine.

To the students who are presenting today, we hope this is the beginning of a rewarding experience in the biomedical sciences and research. For those who are earlier on in their training or attending in the audience, we hope today will inspire you about what you can accomplish in research. We look forward to hearing your presentations at a future School of Medicine Graduate and Medical Student Research Day.

Part of what is so inspiring and important about research is making human connections between people whose ideas might be new and different from your own. In that spirit, we challenge each of you to put down your phone for a moment and talk to someone new today—visit as many posters as possible, ask questions or otherwise engage across disciplinary or programmatic silos. There is so much to learn and so many collaborations to be started—these connections are how breakthroughs are made!

Stan Gerson, MD Dean School of Medicine

Lia Logio, MD Vice Dean, Medical Education School of Medicine

Mark Jackson, PhD Vice Dean, Graduate Education School of Medicine

# **Special Thanks**

### Planning Committees

#### Keynote Speaker Committee

Alexander Zarouk, Masters student NaShea Kendrick, PhD student Gustavo Borjas, MSTP student Katie Zhang, MD student

#### Mentor Award Committee

Patrick Zhuang, MSTP student Sajan Patel, MD student

#### **Abstract Committee**

Himiede Wilson-Sesay, PhD student Brianna Busscher, PhD student Catherine Haering, MD student Ria Tilve, MD student

#### Faculty and Staff Organizing Committee

Rosa Hand, PhD, RDN; Director, Medical Student Research & Scholarship

Tessianna Misko, PhD; SOM Graduate Education Office Nicholas Ziats, PhD; Department of Pathology Sharon Callahan, Office of Medical Student Research Pora Cho, Office of Medical Education Debbie Noureddine, SOM Graduate Education Office

# **Special Thanks**

#### Faculty Abstract Reviewers

Oluyemi Aderibigbe, MD, MBBS; Cleveland Clinic Dilshad Hunain Al Arabia, MD; MetroHealth Medical Center Kristen Berg, PhD, CRC; MetroHealth Medical Center Mireya Diaz, PhD; Case Western Reserve University Raghavan Gopalakrishnan, PhD, MBA; Cleveland Clinic Sanjay Gupta, PhD; Case Western Reserve University Rosa Hand, PhD, RDN; Case Western Nutrition Umar Hayat, MD; University Hospitals Corrilynn Hileman, MD; MetroHealth Medical Center Hitoshi Hirose, MD, PhD; Cleveland Clinic Olivia Hogue, PhD; Cleveland Clinic Ke Jiang, PhD; Cleveland Clinic James Lieberman, MD; Case Western Reserve University Peder Lund, PhD; Case Western Reserve University Arnav Mahajan, MD; MetroHealth Medical Center Danny Manor, PhD; Case Western Nutrition Ryota Matsuoka, PhD; Cleveland Clinic Claire Mazahery, MD, PhD; University Hospitals Tessianna Misko, PhD; Case Western Reserve University Yee Peng Phoon, PhD; Cleveland Clinic John Pink, PhD; Case Western Reserve University Courtney Pisano, DO, MS, MPH; University Hospitals Tamara Randall, MS, RDN; Case Western Reserve University James Ross, MD; University Hospitals Neena Singh, MD, PhD; Case Western Reserve University Khalid Sossey-Alaoui, PhD; MetroHealth Medical Center Jim Spilsbury, PhD; Case Western Reserve University Alaina Tiani, PhD; Cleveland Clinic Jianguo Wu, PhD; Cleveland Clinic Nicholas Ziats, PhD; Case Western Reserve University

# **Special Thanks**

Faculty Presentation Reviewers (as of 10/10/24)

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Mary Qiu, MD; Cleveland Clinic

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Bradford Richmond, MD; Cleveland Clinic

Stephanie Schmit, PhD, MPH; Cleveland Clinic

Puneet Seth, PhD; Case Western Reserve University

Sajina Shakya, PhD; Case Western Reserve University

Carey Shive, PhD; Case Western Reserve University Anandakumar Shunmugavel, PhD; Case Western Reserve University

Neena Singh, MD,PhD; Case Western Reserve University Khalid Sossey-Alaoui, PhD; MetroHealth Medical Center Tara Sudhadevi, PhD; Case Western Reserve University Arvind Suguness, MD; MetroHealth Medical Center Sarah Sweeney, MD; MetroHealth Medical Center Pauline Terebuh, MD; Case Western Reserve University Adele Viguera, MD; Cleveland Clinic

Ming Wang, PhD; Case Western Reserve University Rosanna Watowicz, PhD, RDN; Case Western Reserve University

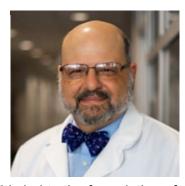
Belinda Yen-Lieberman, MD; Cleveland Clinic Lijun Zhang, PhD; Case Western Reserve University Nicholas Ziats, PhD; Case Western Reserve University

# **Keynote Speaker**

8:45-9:45 AM; Ballroom C

# Membrane trafficking in platelets both exo- and endocytosis, matters for hemostasis and beyond

Whiteheart earned his PhD at The Johns Hopkins University School of Medicine under the mentorship of Dr. Gerald W. Hart, in the field of glycosylation and glycosyltransferases. As a post-doctoral fellow with Dr. James E. Rothman, he was involved in the discovery of SNARE proteins that



mediate membrane fusion events. This led to the formulation of the "SNARE Hypothesis" to explain intracellular trafficking. In 2010, he was awarded a UK University Research Professorship, in 2013 the Kirwan Prize and in 2019 an endowed professorship. In the past 30+ years, his group has been a key contributor to dissecting the molecular mechanisms of platelet secretion. The team has been a leader in assigning SNAREs and SNARE regulators to specific platelet secretion events and in probing the roles of platelet exo- and endocytosis in hemostasis, innate immune responses and vascular integrity maintenance. This work has resulted in more than 150 publications. Whiteheart is strongly committed to training and mentoring graduate students, postdoctoral fellows and undergraduates; more than 60% have been women or underserved minorities. He was selected by trainees for the UK Alumni Association Great Teacher Award, as a Women in Medical Sciences Mentor Award nominee and the UK Center for Clinical and Translational Sciences Mentor Awardee. He is the Director of the MD/Ph.D. training program at UK.

## **Presentation Information**

Presentation titles and student author information are listed in the subsequent pages by session.

Some posterboards have intentionally been left blank, leading to nonconsecutive poster numbers.

The following abbreviations are used throughout the listing for student programs.

MD—UP: CWRU University Program for MD degree

MD—CP: CWRU/CCLCM College Program for MD degree

MSTP: Medical Scientist Training Program (MD/PhD program)

PREP: Postbaccalaureate Research Education Program

#### Full text of each abstract is available via QR code



## **Oral Presentation Session 1**

11:45 AM-1:15 PM; Ballroom C

Moderator Grace McComsey, MD

| # | Last name | First name | Academic<br>Program | Abstract title   |
|---|-----------|------------|---------------------|--|
| 1 | Curtis    | Kristen    | MDUP                | Racial Disparities in Pre-Diagnosis Dermatologic and Primary Care<br>Visits in Malignant Melanoma                          |
| 2 | DaCosta   | Carly      | PREP                | Genetics of postpartum depression in African American women  |
| 3 | Fry       | Sarah      | MDUP                | Respiratory Syncytial Virus Vaccine Effectiveness and Safety among Older Adults in the United States                       |
| 4 | Ingles    | Natasha    | MSTP                | The telomere protection protein, TPP1, suppresses tumor cell plasticity and pro-metastatic phenotypes                      |
| 5 | Song      | Ryan       | MDCP                | A Multivariate Approach to Quantifying Risk Factors Impacting Stereotactic Robotic-Guided Stereoelectroencephalography     |
| 6 | Zhang     | Katie      | MDUP                | Outcomes of Positive Cologuard Screens in Patients Aged 45-49:<br>Trends and Notable Findings in the Development of YO-CRC |
| 7 | Kim       | Brian      | MSTP                | Asprosin Transactivation Underlies Obesity Relapse and Inheritance   |

## **Oral Presentation Session 2**

1:30-3:00 PM; Ballroom C

## Moderator Bill Schiemann, PhD

| # | Last name   | First<br>name | Academic<br>Program | Abstract title  |
|---|-------------|---------------|---------------------|---|
| 1 | Klein       | Bailey        | PhD<br>program      | Mast Cell Derived Histamine Negatively Regulates Hematopoiesis  |
| 2 | Yu          | Haitong       | MDUP                | Music therapy to Address patient's JOuRneys with CHronic illness, Outcomes, and ReaDmission (MAJOR CHORD): A Single Arm Pilot Study |
| 3 | Chen        | Yi Fan        | MSTP                | XPO1 Beyond Nuclear Export  |
| 4 | Koster      | Karl          | MDUP                | The Effect of Bimatoprost Amide on Intraocular Pressure via<br>Lymphangiogenic Changes  |
| 5 | Medarametla | Lekha         | MDUP                | The impact of commonly used non-nutritive sweeteners on platelet responsiveness and thrombosis potential                            |
| 6 | Das         | Nikita        | MDUP                | Impact of Metabolic Syndrome on Epilepsy Surgery Outcomes: A Propensity Matched Cohort Study  |
| 7 | Wang        | Sabrina       | MSTP                | Lipocalin-2 orchestrates ferroptosis resistance in glioblastoma via Axl signaling   |

# **Morning Poster Presentations**

10:00-11:30 AM; Ballroom AB

| # | Last name           | First name | Academic<br>Program | Abstract title  |
|---|---------------------|------------|---------------------|---|
| 1 | O'Neill             | Steven     | MDUP                | Fascicular Merging and Splitting Events of the Human Accessory<br>Nerve with Lower Cranial Nerves   |
| 2 | Mohta               | Shivangi   | MDUP                | Comparing the effectiveness of the erector spinae plane block with no block for patients undergoing nephrectomy: a systematic review and meta-analysis  |
| 3 | Schindler           | Joseph     | MSTP                | S-nitrosylation alters RNA-binding domain conformation  |
| 4 | Yi                  | Soon       | MSTP                | Mapping RNA-Protein Interactions with Subcellular Resolution Using Colocalization CLIP  |
| 5 | Labrozzi            | Gabrielle  | PhD<br>program      | Center of Mass-Based Fuzzy Logic Control for Gait Post-Spinal Cord Injury   |
| 6 | Menendez-<br>Lustri | Dhariyat   | PhD<br>program      | Dexamethasone-loaded platelet inspired nanoparticles alter gene expression surrounding implanted intracortical microelectrodes in rats  |
| 7 | Blackledge          | Michael    | MDUP                | Antiviral Properties of ZnO Nanoparticles   |
| 8 | Pakalapati          | Nrupen     | PhD<br>program      | Low-Frequency Stimulation of Corpus Callosum Suppresses Epileptiform Activity in the Cortex through γ-aminobutyric acid-B Receptor and Slow After-Hyperpolarization Mediated Reduction in Tissue Excitability |

| #  | Last name | First name | Academic<br>Program | Abstract title  |
|----|-----------|------------|---------------------|---|
| 9  | Park      | Huijun     | PhD<br>program      | Role of Platelet Extracellular Vesicles in Arterial Dysplasia   |
| 10 | Sirek     | Jessica    | PhD<br>program      | A new conditional mouse model for investigating the role of Adamts6 in development, adult homeostasis, and disease phenotypes |
| 11 | Park      | Kevin      | MDUP                | Changes in the Left Atrium and Pulmonary Veins Predictive of Atrial Fibrillation Recurrence After Catheter Ablation           |
| 12 | Ji        | Karen      | MDUP                | Prevalence of Aortic Pathology Among Patients with Multifocal Fibromuscular Dysplasia   |
| 13 | Vohra     | Manu       | MDUP                | Regression of Left Ventricular Hypertrophy after Ross Procedure   |
| 14 | Liu       | Alice      | MSTP                | Barriers to Clinical Trial Participation in AAPI Communities in the Greater Cleveland Area                                    |
| 15 | Silfer    | Jessy      | MDUP                | A Community Health Center (CHC) Response to an Unprecedented Pandemic: Meeting the Healthcare Needs of Patients and Community |
| 17 | Fane      | Lauren     | MDUP                | Diversity, Equity, and Inclusion Efforts in Graduate Medical Education: Identifying Opportunities for Collaborative Learning  |
| 18 | Roncagli  | Connor     | MDUP                | Recreational Drug Use Places Individuals at Increased Risk of Adverse Events During Emergency Department Sedations            |
| 19 | Dillan    | Meghan     | MDUP                | Laceration Considerations During Prehospital Emergency Sports<br>Care   |

| #  | Last name  | First name | Academic<br>Program | Abstract title  |
|----|------------|------------|---------------------|---|
| 20 | Mukherjee  | Rishav     | MDUP                | Impact of Peer Recover Support and Services for Substance Use Disorder on Emergency Department Readmission Rates                                |
| 22 | Maytin     | Alexander  | MDUP                | Quality of ChatGPT responses to patient inquiries on post dermatologic surgery wound care   |
| 23 | Bernat     | Alexis     | MDUP                | Association of patients with nodular melanoma subtype and family history of cancer: A retrospective study                                       |
| 24 | Gilbert    | David      | MDUP                | Impact of Gender Affirming Feminizing Hormone Therapy on Melanoma Incidence in Transgender Female Patients                                      |
| 25 | Herrera    | Henry      | MDUP                | Risk of New-onset Metabolic Comorbidities in Hispanic Patients with Psoriasis: A Retrospective Cohort Analysis                                  |
| 26 | McLachlan  | Lydia      | MDUP                | Rates of Acne Vulgaris in Transgender and Gender Expansive Individuals With and Without Masculinizing Gender Affirming Hormone Therapy          |
| 27 | Ose        | Oscar      | MDUP                | Communicating risks associated with ambiguous prognoses: curated patient education decreases cognitive and affective ratings of subjective risk |
| 28 | Chen       | Jacky      | MDCP                | Effects of systemic biologic treatment on cardiovascular outcomes among patients with psoriasis   |
| 29 | Tabernacki | Tomasz     | MDUP                | Impact of Gender Affirming Masculinizing Hormone Therapy on Melanoma Incidence in Transgender Male Patients                                     |
| 30 | Ruesch     | Victoria   | MDUP                | Analysis of Congenital Menlanocytic Nevi on TikTok  |

| #  | Last name       | First name | Academic<br>Program | Abstract title   |
|----|-----------------|------------|---------------------|--|
| 31 | Hentati         | Nada       | MDUP                | Digital image correlation three-dimensional modeling of tissue deformation in facial reconstruction  |
| 32 | Thompson        | Calia      | PREP                | Specialized Enteric Glial Cells Coordinate Intestinal Motility   |
| 33 | Chin            | Diana      | MSTP                | RUNX2 drives 3D epigenetic landscape of osteosarcoma   |
| 34 | Hu              | Peinan     | PhD<br>program      | Mapping heritable chromatin loop variants with allele-specific Hi-C analysis   |
| 36 | Gabrielle       | Davis      | PREP                | Impact of Insulin and Non-insulin Diabetic Treatment on Cancer Incidence in Patients Diagnosed with Type 2 Diabetes  |
| 36 | Hubbard         | Aryn       | MDUP                | Social Relationships as a Mechanism for Improving Cardiovascular<br>Health in African American Men   |
| 37 | Litwiler        | Jevin      | MDUP                | Smoking Modulates Microbial Metabolism of Tryptophan and Bile Acids in Multiple Sclerosis  |
| 38 | Beattie         | Nicholas   | MDUP                | Content Assessment and Readability of Online Injury Prevention<br>Resources on Firearm Safety: A Cross-Sectional Analysis of Hospital<br>and National Injury Prevention Literature |
| 39 | Xuan            | Zherui     | MDUP                | Socioeconomic Influences on Colorectal Cancer Staging at Discovery at a County Level in the United States  |
| 40 | Mahableshwarkar | Aarohi     | MDUP                | Assessment of Patient Attitudes Towards Non-Endoscopic Barrett's Esophagus Screening: An Update  |
| 41 | Devorkin        | Brian      | MDUP                | Comparative Dietary Assessment Reveals Crohn's Patients Eat More Sugar and Artificial Sweeteners Compared to Healthy Controls  |

| #  | Last name         | First name  | Academic<br>Program | Abstract title  |
|----|-------------------|-------------|---------------------|---|
| 42 | Varlamos          | Christopher | MDUP                | Utility of Barrett's Aneuploidy Decision (BAD) Tool to Predict Barrett's Esophagus Refractory to Endoscopic Eradication Therapy |
| 43 | Host              | Derek       | PhD<br>program      | Gene Regulation of Glycolysis in the Cystic Fibrosis Small Intestine  |
| 44 | Kong              | Dana        | MDUP                | Mt-sDNA Screening Test Usage Across Demographics and Positive Test Follow-Up Rate   |
| 46 | Kamojjala         | Ruchika     | MDUP                | The Consequences of Parental Injury: Impacts on Children's Healthcare Utilization and Financial Barriers to Care                |
| 47 | Chen              | Josephine   | MDCP                | Investigating APE2 and ERLIN1/2 binding in radiation-induced brain injury   |
| 48 | Omoijuanfo        | Ese         | MDUP                | Screening for Hearing Loss in Hematologic Cancer Survivors  |
| 49 | Wang              | George      | MDUP                | Retrospective Single Center Study on Elderly and Non-elderly Patients with Glioblastoma Between 2021 and 2022                   |
| 50 | Nassief           | George      | MDCP                | Metabolomic Differences between Platinum-resistant and Platinum-responsive Ovarian Cancer Cells                                 |
| 51 | Urcuyo<br>Acevedo | Javier      | MSTP                | The Role of CDK5 in Medulloblastoma: Regulation of PD-L1 and MHC expression   |
| 52 | Lin-<br>Rahardja  | Kristi      | PhD<br>program      | Uncovering transcriptomic signatures of Ewings Sarcoma drug sensitivity during the evolution of resistance                      |
| 53 | Thierheimer       | Marisa      | MDUP                | Bladder Cancer Mortality Rates Vary by Region and Rurality: A Comprehensive Analysis (2000-2020)                                |
| 54 | Lu                | Sophie      | MDUP                | Gene Signatures for Prognosis in Glioblastoma   |

| #  | Last name  | First name | Academic<br>Program | Abstract title  |
|----|------------|------------|---------------------|---|
| 55 | Cho        | Sean       | MDUP                | Implementing a System-Level Precision Medicine Intervention for Stage IV Non-Small Cell Lung Cancer Patients: A Cost-Effectiveness Analysis   |
| 56 | Ang        | William    | Master's program    | Examining DNA damage signaling in ATR-inhibited ATM deficient cancer cells  |
| 58 | Goldberg   | Alissa     | MDUP                | A Community Health Center Response to an Unprecedented Pandemic: Meeting the Healthcare Needs of Patients and Community while Providing a Unique Medical Student Educational Opportunity                          |
| 59 | Hutchinson | Ellen      | MDUP                | Teaching Health Advocacy: Evaluating the impact of an advocacy curriculum and advocacy-related extracurricular activities on medical student engagement with advocacy   |
| 60 | Xu         | Katie      | MDUP                | Medical Professional Perceptions and Learning Outcomes of Virtual<br>Lecture Capture Technology in Graduate Medical Education: A<br>Randomized Controlled Trial Across Three Residency Programs                   |
| 61 | McLin      | Ronae      | MDUP                | Use of Generative AI in the Support of Medical Education  |
| 62 | Tkacenko   | Andrew     | MDUP                | The Identification of a Unique Variant of Epidermal Growth Factor<br>Receptor in the Extrachromosomal DNA of Certain Glioblastoma<br>Tumors and the Potential Implications for Cell Growth and Drug<br>Resistance |

| #  | Last name  | First name | Academic<br>Program | Abstract title  |
|----|------------|------------|---------------------|---|
| 63 | Nemecio    | Dali       | PhD<br>program      | Leveraging host gene-response signatures to identify microbiome metabolizers of drugs: A case study of Tenofovir metabolism by the vaginal microbiome.      |
| 64 | Heine      | Grace      | PhD<br>program      | The role of bacterial diversity in disease: characterizing commensal streptococcal-pathogen interactions in the oral microbiota                             |
| 65 | Pierson    | Lane       | PhD<br>program      | Development of cellular assays to characterize the impact of sequence variation on STING function in bats   |
| 66 | Lee        | Hyojin     | MDUP                | Spatial Transcriptomic Profiling Reveals Underexpression of Metallothionein Isoforms in Polyposis and Colon Carcinogenesis in PTEN Hamartoma Tumor Syndrome |
| 67 | Zhou       | Ruiting    | PhD<br>program      | STAT1 gain-of-function (GOF) mutations disrupt the conformational balance of STAT1 and lead to immunodeficiencies.  |
| 68 | Abrah      | Akua       | MDCP                | Characteristics and Clinical Significance of Initial MRI in anti-NMDA Receptor Encephalitis   |
| 69 | Mobed      | Claire     | MDUP                | Association between COVID-19 and Development of Early- and Typical-Onset Parkinson Disease  |
| 70 | Adams      | Hollie     | MDUP                | Sex Differences in Dementia Risk among Metformin Monotherapy Users  |
| 71 | Sargusingh | Mia        | PhD<br>program      | Improving Bladder Function via Pairing Vagus Nerve Stimulation with Voiding   |
| 72 | Suh        | Hanna      | MDUP                | Liver function tests and complete blood counts among adolescents with restrictive eating disorders: what are the differences?                               |

| #  | Last name | First name | Academic<br>Program | Abstract title   |
|----|-----------|------------|---------------------|--|
| 74 | Shapiro   | David      | PhD<br>program      | Microbiome modulation improves the morphology of meningeal lymphatics and sociability in a mouse model of Autism Spectrum Disorder                                       |
| 75 | Kennemer  | Austin     | MDUP                | Early Neurorehabilitation and Reduced Long-Term Risk of Cognitive Decline After Moderate to Severe Traumatic Brain Injury  |
| 76 | Abufarha  | Alona      | PREP                | Investigating DLK Neuronal Kinase as a Potential Regulator of Microglia and Synapse Loss in Dementia Mouse Model   |
| 77 | Mbow      | Cheikh     | PREP                | Genetic and Molecular Insights into Hox5-Mediated Regulation of Respiratory Motor Neurons.   |
| 78 | Obeid     | Hiba       | PhD<br>program      | Asprosin Modulates Thermal Pain through the Basolateral<br>Amygdala  |
| 79 | Pan       | Jianxian   | PhD<br>program      | Roles of Pathological Mutations of Amyloid Precursor Protein in Hippocampal Neuronal Intracellular pH Regulation   |
| 80 | Xiong     | Ying       | MSTP                | Pathological Inflammation Alters Oligodendrocyte Differentiation and Function  |
| 81 | Xu        | Crystal    | MDUP                | Deformity Parameters in Spinal Cord Stimulation  |
| 82 | Bruce     | Joshua     | MDUP                | Comparing Minimally Invasive Transforaminal Lumbar Interbody<br>Fusion (TLIF), Open TLIF, and Midline (MID)-LIF: Impact on Patient<br>Satisfaction and Surgical Outcomes |
| 83 | Shah      | Varunil    | MDUP                | A comparative analysis of the prevalence and rupture risk of intracranial aneurysms in patients with Autosomal Dominant Polycystic Kidney Disease                        |

| #  | Last name   | First name | Academic<br>Program | Abstract title   |
|----|-------------|------------|---------------------|--|
| 84 | Rosenthal   | Matthew    | MDUP                | Single Level Spinal Fusions: Does Postoperative Alignment Matter   |
| 85 | Burke       | Samantha   | MDUP                | Comparing Functional Outcomes Using Section GG Scoring for Frontal Lobe Intracerebral Hemorrhages: Bilateral Injury vs Unilateral Injuries and Right-Sided Injury vs Left-Sided Injury |
| 87 | Kwiatkowski | Lily       | MDUP                | Kitchen Kickstart: Feasibility and Effectiveness of a Culinary<br>Medicine Intervention for Emerging Adults with Mental Health<br>Needs  |
| 88 | Babu        | Ashvin     | MDUP                | Risk of glaucoma development among individuals with immune-<br>mediated inflammatory disease: a propensity-matched analysis  |
| 89 | Brewster    | Cammie     | PhD<br>program      | Role of Notch Signaling in Retinal Regeneration of Zebrafish Models of Inherited Retinal Dystrophy   |
| 90 | Zhang       | David      | MDUP                | Rate of retinal detachments subsequent to a diagnosis of myopia in the United States from 2018 to 2023   |
| 91 | Jeong       | Hejin      | MDUP                | Associations between Obstructive Sleep Apnea and the Development and Severity of Retinal Vein Occlusion  |
| 92 | Shirian     | Jonathan   | MDUP                | Long-Term Outcomes and Patient Experiences with the Argus II Retinal Prosthesis System   |
| 94 | Risser      | Kayleigh   | MDUP                | Expression of ALCAMA and other Retinal Cell Markers during Zebrafish Retinal Regeneration  |
| 95 | Baumann     | Liisa      | MDUP                | Potential for Corneal Biomechanical Modeling to Improve LASIK and PRK Outcomes   |

| #   | Last name | First name | Academic<br>Program | Abstract title  |
|-----|-----------|------------|---------------------|---|
| 97  | Nambiar   | Pooja      | MDUP                | Investigating the Neurological Basis of Visual Impairments in Parkinson's Disease   |
| 98  | Nahlawi   | Raya       | MDUP                | Characterizing Systemic and High-Risk OCT Features in Patients with IBD and AMD   |
| 99  | Haraguchi | Yulia      | MDUP                | Anisometropia and Refractive Errors in Down Syndrome Children with Congenital Nasolacrimal Duct Obstruction   |
| 100 | Birrell   | Seth       | MDUP                | Comparative Efficacy and Mechanisms of IOP Reduction: Rocklatan vs. Latanoprost and Vyzulta in POAG Mouse Model   |
| 101 | Shah      | Aakash     | MDUP                | H-Index and sex are associated with a higher likelihood of receiving private funding in orthopaedic sports medicine                                     |
| 102 | Bai       | Jessica    | MDUP                | Incidence and Risk Factors Associated With Need for Treatment of Vertebral Compression Fractures After Spine Stereotactic Radiosurgery                  |
| 103 | Laungani  | Dev        | MDUP                | Solitary Fibrous Tumor of the Proximal Femur: A Case Report and Review of Musculoskeletal Literature  |
| 104 | Porto     | Joshua     | MDUP                | Is Your Surgical Helmet System Compromising the Sterile Field? A Systematic Review of Contamination Risks and Preventive Measures in Joint Arthroplasty |
| 105 | Zaronias  | Kailey     | MDUP                | Sex Differences in Cam Lesion Size and Location among Patients with Symptomatic Isolated Cam-Type Femoroacetabular Impingement.                         |

| #   | Last name       | First name | Academic<br>Program | Abstract title   |
|-----|-----------------|------------|---------------------|--|
| 106 | Lavu            | Monish     | MDUP                | Contemporary Glucagon-like Peptide-1 (GLP-1) Receptor Agonists: What is the Impact on Hip and Knee Osteoarthritis Onset, Severity, and Conversion to Arthroplasty? |
| 107 | Sanghvi         | Parshva    | MDUP                | Hip Arthroscopy with Capsular Plication Improves Hip Function,<br>Sports Performance, and Pain in Borderline Hip Dysplasia   |
| 108 | Tilve           | Ria        | MDUP                | Skeletal Muscle-Fat Replacement and Patient-Reported Outcome<br>Measures in ACL Reconstruction Patients  |
| 109 | Haffke          | William    | MDUP                | Physiologic Parameters in the Operating Room   |
| 111 | Lee             | Austin     | MDUP                | Complications of Same-Day Aspirin after Head and Neck Free Flaps:<br>A national propensity score-matched cohort study  |
| 112 | Keuchel         | Connor     | MDUP                | Clinical Outcomes After Hyaluronic Acid Laryngeal Injection Augmentation   |
| 113 | Naganatanahalli | Manisha    | MDUP                | Diagnostic Factors, Surgical Intervention, and Follow-up Adherence in Chronic Rhinosinusitis: Implications for Optimal Patient Care                                |
| 114 | Katragadda      | Rishi      | MDUP                | The Role of Intraoperative Speech-Language Pathologists in Medialization Procedures for Vocal Fold Paralysis   |
| 115 | Gogula          | Shravya    | MDUP                | Management of globus in context of thyroid pathology: variability of work-up, presenting symptoms, and interventions   |
| 116 | Shang           | Trisha     | MDUP                | The Impact of Diabetes Medications on Chronic Rhinosinusitis   |
| 117 | Cheng           | Elaine     | MDCP                | Identifying and Localizing Natural Killer Cells in Antibody-Mediated Rejection of Kidney Transplants   |

| #   | Last name            | First name | Academic<br>Program | Abstract title  |
|-----|----------------------|------------|---------------------|---|
| 118 | O'Hare               | Katelyn    | PhD<br>program      | Cholesterol biosynthesis pathways in monocyte-derived macrophages link cytomegalovirus infection and HIV to atherosclerosis                   |
| 119 | Singer               | Jason      | MDUP                | Detection of Aberrant Right Subclavian Arteries in Postnatal Children with Down Syndrome: A Potential Marker?                                 |
| 120 | Pache                | Killian    | MDUP                | Effects of Pre-pregnancy BMI on Neonatal Preterm Birth and Low Birth Weight: A Burden of Proof Study  |
| 121 | Sanislow             | William    | MDUP                | QI Initiative to Improve Utilization of Interpreters in a Pediatric<br>Hospital: A Retrospective Analysis                                     |
| 122 | Lake                 | Derek      | Master's program    | Single-Cell RNA Sequencing Analysis Clarifies Conflicting Reports on PAR4 Expression in Neutrophils   |
| 123 | Liu                  | Mingda     | PhD<br>program      | Utilizing pharmacochaperones to rescue misfolding of equivalent mutants in rhodopsin and M-cone opsin linked to inherited retina degeneration |
| 124 | Encarnacion<br>Lopez | Gabrielys  | PREP                | In-vitro studies of protein-protein interactions of Ephrin receptors with Alzheimer's Disease-related proteins                                |
| 125 | Gregor               | William    | PhD<br>program      | Using EMAN2's Gaussian Mixture Model to Investigate The Structure and Dynamics of The Pseudomonas aeruginosa Efflux Pump MexY                 |
| 126 | Mordukhovich         | Isaac      | MDUP                | A Systematic Review of Wide Alveolar Cleft Repair   |
| 127 | Yacoub               | Sara       | MDUP                | Evaluating the Exciflex Electrotherapy Bandage using 3D Spatial Mapping of Chronic Wound Healing: A Clinical Pilot Study                      |

| #   | Last name       | First name | Academic<br>Program | Abstract title  |
|-----|-----------------|------------|---------------------|---|
| 128 | Raghnal         | Aijah      | MDUP                | Post-Pandemic Mental Health Risk in Americans across Demographics   |
| 129 | Makineni        | Pratheek   | MDUP                | The Association between Cannabis Use and Delirium in the Postoperative and Inpatient Settings   |
| 130 | Nakhla          | Timothy    | MDUP                | Teacher and Counselor Perception of High and Middle School<br>Student Communication and Mental Health: Results from a<br>Qualitative Study  |
| 131 | Thompson        | Avianna    | PREP                | Navigating Financial Toxicity: Lived Experiences of Food Insecurity Among U.S. Cancer Survivors   |
| 132 | Ogland-<br>Hand | Callie     | PhD<br>program      | How to model social norms in public health computational models   |
| 133 | Ifeanyi         | Ekpunobi   | MDUP                | Early Experience with Two-Fraction Spine Stereotactic Body<br>Radiation Therapy in Treating Metastatic Spine Cancer                         |
| 134 | Kanj            | Fayez      | MDUP                | Using Diffusion Tensor Imaging for the Detection of Early Cardiac<br>Amyloidosis in Carpal Tunnel Syndrome                                  |
| 135 | Zivkovic        | Mia        | MDUP                | Comparison of fracture detection with or without use of the Rayvolve computer-aided diagnostic medical device: A retrospective cohort study |
| 137 | Heath           | Alexis     | PhD<br>program      | Characterizing Heterogeneity of Estrogen Receptor Isoform Expression in Endometriosis: Rethinking the ERB Dominance Hypothesis              |

| #   | Last name   | First name | Academic<br>Program | Abstract title  |
|-----|-------------|------------|---------------------|---|
| 138 | Tang        | Cammy      | MDUP                | Subdividing Early Fetal Growth Restriction Based on Gestational Age at Diagnosis: Implications for Perinatal Management   |
| 139 | Suratkal    | Jessica    | MDUP                | BMI as a predictor for Ovarian Cancer Progression   |
| 141 | Sharma      | Mitali     | MDUP                | Assessing Pain Control Options for Intrauterine Device Placement: A Mystery Caller Study  |
| 142 | Shah        | Soham      | MDUP                | Associations Between COVID-19 Pandemic Conditions and Maternal Mental Health and Maternal-Infant Bonding  |
| 143 | Castellanos | Alicia     | MDUP                | Randomized, Placebo-Controlled Trial on the Efficacy of Transcutaneous Electrical Nerve Stimulation (TENS) for Pain Management During Intrauterine Device (IUD) Insertion in an Outpatient Gynecology Setting |
| 144 | Katta       | Anish      | MDUP                | Health Related Quality of Life Outcomes for Congenitally Corrected Transposition of the Great Arteries Patients Across the Therapeutic Spectrum   |
| 145 | Chennareddy | Chaitanya  | MDUP                | Incidence of Mesenteric Ischemia after Open Cardiac Surgery   |
| 146 | Maigrot     | Jean-Luc   | MDUP                | Time-Varying Analyses of Survival and Adverse Outcomes in Patients with a HeartMate 3 Left Ventricular Assist Device  |
| 147 | Chambers    | Kelly      | MDUP                | Outcomes after Per Oral Pyloromyotomy Based on Gastroparesis<br>Etiology  |
| 149 | Lee         | Michael    | MDUP                | Comparison of Intraoperative Metrics Between Robotic and Laparoscopic Approaches for Low- and Intermediate-difficulty Liver Resections  |

| #   | Last name | First name | Academic<br>Program | Abstract title   |
|-----|-----------|------------|---------------------|--|
| 150 | Fang      | Shannon    | MDUP                | Can Genomic Testing Help Refine Choosing Wisely the Omission of Axillary Staging in cNO Breast Cancer?                             |
| 151 | Haurin    | Sarah      | MDUP                | Insurance status and resolution of comorbidities in bariatric patients at a safety net hospital                                    |
| 152 | Hu        | Yue Lin    | MDUP                | Can Arterial Blood Gas Results Predict Anastomotic Leak After Esophagectomy?   |
| 154 | Turner    | Chase      | MDUP                | Assessing Incidence of Chronic Kidney Disease in Transgender Women Undergoing Gender-Affirming Hormone Therapy with Spironolactone |
| 155 | Shawe     | Isabella   | MDUP                | Effects of CGRP Inhibitors on Lower Urinary Tract Symptoms in Patients with Refractory Migraine: A Prospective Cohort Study        |

# **Afternoon Poster Presentations**

3:00-4:30 PM; Ballroom AB

| # | Last name | First name      | Academic<br>Program | Abstract title   |
|---|-----------|-----------------|---------------------|--|
| 1 | Raju      | Akash           | MDUP                | Implementation of a Battlefield Acupuncture Clinic at VA Northeast<br>Ohio Healthcare System                         |
| 2 | Owen      | Daniel          | MDUP                | Enhancing Readability of Anesthesia-Specific Patient Education Materials Using AI                                    |
| 3 | Grier     | Abby            | MDUP                | Branched Chain Amino Acid-Derived Ketoacids Underlie Altered<br>Hematological Parameters in Type 1 Diabetes Mellitus |
| 4 | Nakazzi   | Faith           | PhD<br>program      | Unraveling the role of Nicotinamide adenine dinucleotide in pancreatic cancer biology                                |
| 5 | Qian      | Alice           | MDUP                | Detecting Gaps in Radiofrequency Ablation Lines Using Polarization-<br>Sensitive Optical Coherence Tomography        |
| 6 | Alexander | Benjamin        | PhD<br>program      | The strength-duration curve can efficiently characterize functional electrical stimulation muscle recruitment        |
| 7 | Kotamraju | Bhanu<br>Prasad | PhD<br>program      | Selective Intrafascicular Multimodal Sensory Recordings in Pigs<br>Using Carbon Nanotube Yarn (CNTY) Electrodes      |
| 8 | Li        | Suzhou          | PhD<br>program      | A Sensory Neuroprosthesis Enhances Recovery from Treadmill-<br>Induced Stumbles for Individuals with Lower Limb Loss |
| 9 | Cotton    | Antoinette      | MDUP                | Projecting the burden of atherosclerotic cardiovascular disease in South Asia using Bayesian Modeling                |

| #  | Last name             | First name | Academic<br>Program | Abstract title   |
|----|-----------------------|------------|---------------------|--|
| 10 | Zhou                  | Amy        | MDUP                | Magnetic Resonance Fingerprinting Can Provide More Accurate Diagnostic Measures than Traditional T1 Mapping to Delineate Sex Specific Differences in Male and Female Hearts      |
| 11 | McDermott             | Grace      | MDUP                | Ventricular shape metrics as predictors of exercise capacity in repaired Tetralogy of Fallot   |
| 12 | Pak                   | Yea-Lyn    | MDUP                | Utilizing CEST CMR Imaging to Establish Baseline Cardiac Metabolism in Healthy Subjects  |
| 13 | D'Ambruoso            | Sarah      | MDUP                | Doctor communication is associated with better mental health for seriously ill patients.   |
| 14 | Jeong                 | Soowan     | MDUP                | Influences of Self-Perceived Health in the Teen LINK (Local Inventory of Needs and Knowledge) Survey   |
| 15 | Wade                  | Adam       | MDUP                | The Role of Social Determinants of Health in the Receipt of Systemic Treatment for Metastatic Melanoma   |
| 15 | Sanchez-<br>Feliciano | Abizairie  | MDUP                | Current Landscape and Future Potential of Glucagon-like Peptide-1<br>Agonists for the Adjunctive Treatment of Hidradenitis Suppurativa:<br>A Systematic Review of the Literature |
| 17 | Seibert               | Hailey     | MDUP                | Rates of Acne Vulgaris in Transgender and Gender Expansive<br>Individuals With and Without Feminizing Gender-Affirming<br>Hormone Therapy  |
| 18 | Kang                  | Hannah     | MDUP                | Sex differences in presentation and etiology of folliculitis: Analysis of the National Electronic Injury Surveillance System, 2012-2021  |

| #  | Last name          | First name       | Academic<br>Program | Abstract title   |
|----|--------------------|------------------|---------------------|--|
| 19 | Hong               | Jane             | MDUP                | Influence of Social Determinants of Health on Prescribing Patterns and Severity of Pediatric Atopic Dermatitis: A Retrospective Study in Cleveland (2013–2023) |
| 21 | Thomas             | Kaden            | MDUP                | Psychological impact of a cutaneous melanoma diagnosis: A retrospective population level cohort study  |
| 22 | Hill               | Marc             | MDUP                | Antibiotic Usage for Hidradenitis Suppurativa: Risk for Infection and Death  |
| 23 | Tejwani            | Priyanka         | MDUP                | Development of a Return Visit Telehealth Intake Tool for Patients with Hidradenitis Suppurativa: A Delphi Process  |
| 24 | Nguyen             | Trina            | MDUP                | Factors Contributing to Diagnostic Delays in Vulvar Lichen Sclerosus - Insights from Patient-Reported Misdiagnoses and Experiences                             |
| 25 | Guzman<br>Villegas | Nikole           | MDUP                | Delineating the role of the MC1R/MITF pathway in regulating the transcriptional profile of "red" melanocytes   |
| 26 | Jain               | Ainesh           | MDUP                | Performance of UH Emergency Department Patient Referral Process  |
| 27 | Lin                | Ching-Wen<br>Lin | Master's program    | Cell-Free Hemoglobin Mediates TNFα Release in Whole Blood:<br>Exploring the Role of Hemolysis in Trauma  |
| 28 | Gwo                | Pam Pam          | MDUP                | Sex differences in ROSC and Survival from Out of Hospital Cardiac Arrest   |
| 29 | Perczak            | Bailey           | MDUP                | COVID-19 Infection and Incidence of Rheumatoid Arthritis   |
| 30 | Kalick             | Jordan           | MDUP                | Epidemiology and Outcomes of Renal Replacement Therapy in Children with Inborn Errors of Metabolism  |
| 31 | Durodoye           | Razaq            | MSTP                | Deviations from additivity in APOE4-associated Alzheimer's disease   |

| #  | Last name     | First name   | Academic<br>Program | Abstract title   |
|----|---------------|--------------|---------------------|--|
| 32 | Nwoke         | Will         | MDUP                | Metabolomic profiling links multiple sclerosis with anemia through biomarker analysis  |
| 33 | Kamal         | Afra         | MDUP                | TMAO and Intestinal Fibrosis in Crohn's Disease  |
| 34 | Cumming       | Celine       | MDUP                | Sex-based differences in prescribed medications, surgical procedures, and disease-related complications in IBD   |
| 35 | Nadeem        | Daniyal      | MDUP                | PDE5 Inhibitor Use and IBD Incidence and Severity in a National Patient Cohort: A Propensity-Matched, Multi-Center Analysis                            |
| 36 | Khan          | Khyrul       | MDUP                | An Analysis of the Colonoscopy Yield of Patients Aged 18 to 40<br>Years Presenting with Acute Rectal Bleeding  |
| 37 | Mendoza       | Justin       | MDUP                | The Role of the DR3 Receptor in Crohn's disease-like Murine Ileitis  |
| 38 | Srivastava    | Meha         | MDUP                | Increased steroid prescriptions and complication rates in premenopausal women with inflammatory bowel disease (IBD) taking hormonal contraceptives     |
| 39 | Chathurvedula | Thrishna     | MDUP                | The Role of Tgfb1 in Primary Intestinal Epithelial Cells   |
| 40 | Udhayakumar   | Bhavatharini | PhD<br>program      | Uncovering Regulatory Mechanisms in MYOD1-mutant Rhabdomyosarcoma  |
| 41 | Bobbitt       | Jessica      | PhD<br>program      | Targeting the mitotic kinase NEK2 improves the efficacy of CDK4/6 inhibitors in breast cancer  |
| 42 | Asante        | Yaw          | PhD<br>program      | Perturbation-induced modes of failure at different stages of RNA Polymerase 2 life-cycle stratify classes of genes in fusion-positive rhabdomyosarcoma |

| #  | Last name  | First name | Academic<br>Program | Abstract title  |
|----|------------|------------|---------------------|---|
| 43 | Liu        | Yining     | PhD<br>program      | Identifying Rare Variants for Cognitive Preservation on Chromosome 2 in the Midwestern Amish  |
| 44 | Khawaja    | Zain       | MDUP                | Association of Median Income on Healthcare Quality and Patient Safety Using Patient Safety Indicators for New York City's Medicare Patients   |
| 46 | Bhan       | Aarushi    | MDUP                | Late Relapse after Allogeneic Hematopoietic Cell Transplant: Risk Factors and Outcomes  |
| 47 | Fritz      | Claire     | MSTP                | BAFF CAR-T cells for the treatment of hairy cell leukemia variant   |
| 48 | Seitz      | Elizabeth  | MDUP                | Sex differences in the colorectal tumor immune microenvironment   |
| 49 | Tejawinata | Felicia    | MDUP                | Demographic Disparities in the Epidemiology of Tenosynovial Giant Cell Tumor: A SEER Database Analysis  |
| 50 | Das        | Indrani    | MSTP                | Discovery & Characterization of Small Molecules to Enhance Natural Killer Cell Cytotoxicity Against Solid Tumors  |
| 51 | Wu         | Jerry      | MDCP                | Identification, selection, and enrichment of type-2 T cells in CAR T cell manufacturing for B cell acute lymphoblastic leukemia (B-ALL)   |
| 52 | Klatt      | Kayla      | MSTP                | Evaluating the Efficacy of B Cell Activating Factor (BAFF) CAR-T Cell Therapy in Scleroderma  |
| 53 | Lakhotiya  | Kartik     | PhD<br>program      | High Throughput Pipeline for Serotypic and TCR Clonotypic<br>Specificities in Aplastic Anemia and Large Granular Lymphocyte<br>Leukemia Uncovering Antigenic Peptides Relevant to Disease<br>Etiology |

| #  | Last name | First name | Academic<br>Program | Abstract title   |  |
|----|-----------|------------|---------------------|--|--|
| 54 | Kaur      | Rupleen    | MSTP                | A Computational Model Predicts Astrocyte-Mediated Therapeutic<br>Resistance in Breast Cancer Brain Metastases  |  |
| 55 | Singh     | Subha      | PhD<br>program      | Determinants of Fusobacterium invasion into head and neck squamous cell carcinoma cells and resulting signaling alterations  |  |
| 56 | Zaida     | Laventure  | PhD<br>program      | Developing Non-Cytotoxic Epigenetics Drugs to Treat p53-Null<br>Chemo-Refractory Leukemias   |  |
| 58 | Prichard  | Abby       | MDUP                | Ageism Awareness Education for Medical Students  |  |
| 59 | Drigotas  | Claire     | MDUP                | Medical Student Motivations for Participation and Learning Outcomes in a Clinical Opioid Prescribing Elective  |  |
| 60 | Hinnes    | Jessica    | MDUP                | Assessment of Dermatology Exposure in Third Year of Medical School Training  |  |
| 61 | Zhou      | Melody     | MDUP                | Best of both worlds? Otolaryngology applicant perceptions of hybrid residency interviews   |  |
| 62 | Gelles    | Shani      | MDUP                | Phase II Clinical Trial Design   |  |
| 63 | Mody      | Akash      | PhD<br>program      | Beyond the gene expression of the Latency-Associated Nuclear Antigen (LANA) protein of KSHV  |  |
| 64 | Honeycutt | Ethan      | PhD<br>program      | Blockade of m6A machinery in HIV latently infected primary CD4+ T cells enhances HIV-1 transcription, RNA export and protein translation, and sensitizes cells for apoptosis |  |
| 65 | Huff      | Johnathan  | PhD<br>program      | Characterizing and Differentiating the Physiological Response in Injuries Induced by Intracortical Microelectrode Implantation   |  |

| #  | Last name  | First name | Academic<br>Program | Abstract title  |  |
|----|------------|------------|---------------------|---|--|
| 66 | Butron     | Lynette    | MDUP                | The vaginal microbiome in health disparities in women with cervical high-risk HPV infection: the THRIVE HPV study   |  |
| 67 | Nantongo   | Mary       | PhD<br>program      | Exploring β-Lactam Interactions with DacB1: Unraveling Optimal Therapies for Combating Drug-Resistant Mycobacterium tuberculosis  |  |
| 68 | Nanavaty   | Vaani      | PhD<br>program      | Potential role of the gut microbiome in clear cell Renal Cell Carcinoma (ccRCC) progression and therapeutic response  |  |
| 70 | Rahman     | Atikur     | PhD<br>program      | C646 degrades Exportin-1 to modulate p300 chromatin occupancy and function  |  |
| 71 | Dinh       | Mina       | PhD<br>program      | Characterizing the evolution of osimertinib resistance in EGFR mutated non-small cell lung cancer   |  |
| 72 | Grimmett   | Zachary    | MSTP                | Cardioprotection by the metabolic regulator S-nitroso-CoA Reductase 2 (SCoR2)   |  |
| 74 | Mandavalli | Akhil      | MDUP                | Predictive Value of DOWN Questionnaire For Cervical Spondylotic Myelopathy Among Pain Management Patients   |  |
| 75 | O'Reilly   | Liam       | MDUP                | Saccadic Eye Movements in Patients with Cervical Dystonia   |  |
| 76 | Rai        | Samhitha   | MDUP                | Development of novel biomechanical upper extremity function outcomes using motion capture and their association with clinical characteristics of people with Multiple Sclerosis |  |
| 77 | Ерр        | Alexander  | PhD<br>program      | Protein Kinase G phosphorylates Drp1 at S637 and mediates neuroprotective effects of PDE2A inhibition   |  |

| #  | Last name     | First name | Academic<br>Program | Abstract title   |  |
|----|---------------|------------|---------------------|--|--|
| 78 | Basu          | Bijoya     | MSTP                | Asprosin Gene Therapy Restores Associative Memory Deficits in Alzheimer's Disease  |  |
| 79 | Lomax         | Evalynn    | MDUP                | Developing Blood Biomarkers in Alzheimer Disease and Mild Cognitive Impairment   |  |
| 80 | Muinos        | Jessica    | PREP                | Exploring the effect of pathological astrocytes on oligodendrocyte formation   |  |
| 81 | López de Boer | Raquel     | PhD<br>program      | Intrinsic and Extrinsic mechanisms of phrenic MN degeneration in the SOD1(G93A) mouse model of ALS   |  |
| 83 | Toth          | Carmen     | MDUP                | Quantification of Myogenic Evoked Potential Activity Induced by<br>Cerebellar Dentate Nucleus Deep Brain Stimulation in Human<br>Subjects                                    |  |
| 84 | Haberman      | Jared      | MDUP                | Seasonal trends in traumatic brain injury mechanism and severity of injury at a level 1 trauma center  |  |
| 85 | Xiao          | Tianqi     | MDUP                | Larger Tumor Volume Associated with Lower Response to Gamma<br>Knife Radiosurgery for Incidental Meningiomas   |  |
| 86 | Shepherd      | Jerry      | MDUP                | Particle Embolization of the Middle Meningeal Artery for Subdural Hematoma: Efficacy and Cost Considerations   |  |
| 87 | Begunova      | Liza       | MDUP                | Relationship Between Intracranial Hypertension and Inpatient<br>Rehabilitation Outcomes in Traumatic Brain Injury Patients: A Cross-<br>Sectional Retrospective Chart Review |  |
| 88 | Kosuru        | Sindhu     | MDUP                | Safety and Efficacy of Levetiracetam for Seizure Prophylaxis in Octogenarian Patients Following Traumatic Brain Injury   |  |

| #  | Last name | First name | Academic<br>Program | Abstract title  |  |
|----|-----------|------------|---------------------|---|--|
|    | Bowers    | Caitlin    | MDUP                | Exploring the relationship of early nutrition, human milk intake, and body composition in preterm, very low birthweight infants |  |
| 90 | Azar      | Alexander  | MDUP                | Ophthalmic manifestations of COVID-19: a large US National Database analysis  |  |
|    | Zhao      | Alison     | MDCP                | Longitudinal Outcomes in the Contralateral Eye following Goniotomy  |  |
| 92 | Jeppesen  | Bridger    | MDUP                | Health Disparity in Glaucoma Progression as Determined by The Need to Advance Medical Management: Time to Fail                  |  |
|    | Pan       | Bernard    | MDUP                | Impact of ophthalmic pharmaceutical clinical trial features on sponsor stock prices   |  |
| 94 | Mridha    | Krishna    | PhD<br>program      | DRNetAI: Enhanced Retinopathy Analysis using Explainable Self-<br>Attention Model   |  |
|    | Albrecht  | Emily      | MDUP                | Risk of Systemic Adverse Events in Higher and Lower Severity Cases of Retinal Vein Occlusion                                    |  |
| 96 | Trinh     | Ilene      | MDUP                | Fulminant Idiopathic Intracranial Hypertension and Potential Risk Factors   |  |
|    | Abbass    | Nadia      | MDUP                | Prevalence of Pediatric and Adult Optic Neuritis in the United States from 2016 to 2023   |  |
| 98 | Arnold    | Keith      | MDUP                | How is Ocular Surface Health in the Transgender Population Affected by Gender Affirming Hormone Therapy?                        |  |
|    | Schur     | Beck       | MDUP                | Assessing the Risk of Retina Disorders in Idiopathic Intracranial Hypertension within Aggregated Electronic Health Record Data  |  |

| #   | Last name | First name | Academic<br>Program | Abstract title   |  |
|-----|-----------|------------|---------------------|--|--|
| 100 | Gu        | Xinyu      | MDUP                | Eye diseases and dementia: association because of pathogenesis or visual impairment?   |  |
| 101 | Wylie     | Andrew     | MDUP                | Tolerance of hip dysplasia parameters to mal-positioning of an antero-posterior view of the pelvis   |  |
| 102 | Li        | Austin     | MDUP                | Bone marrow aspirate and bone marrow aspirate concentrate:  Does the literature support use in long-bone nonunion and provide new insights into mechanism of action? |  |
| 103 | Han       | David      | MDUP                | Outcomes Following Saucerization for Osteomyelitis in Obese Patients: A Comparison of 4,000 Patients   |  |
| 104 | Wiener    | Joshua     | MDUP                | GLP-1 Receptor Agonist Medications Alter Outcomes of Spine<br>Surgery: A National Database Study   |  |
| 105 | Morgan    | Kerry      | MDUP                | Systematic review of total joint arthroplasty outcomes and the role of perioperative hyponatremia as an indicator for post-operative complications                   |  |
| 106 | Burns     | Madison    | MDUP                | Radial Head Arthroplasty vs Open Reduction and Internal Fixation for Radial Head Fractures: A Retrospective Review   |  |
| 107 | Belt      | Nicholas   | MDUP                | Long-Term Efficacy and Risks of Vertebral Augmentation: A Multi-<br>Center Retrospective Analysis of Kyphoplasty and Vertebroplasty<br>Outcomes                      |  |
| 108 | O'Toole   | Riley      | MDCP                | Impact of Anatomical Parameters on Wound Complications Following Extremity Soft Tissue Sarcoma Resection: A Case-Control Study                                       |  |

| #   | Last name     | First name | Academic<br>Program | Abstract title   |  |
|-----|---------------|------------|---------------------|--|--|
| 109 | Fong          | Scott      | MDUP                | Patients with Seizure Disorders Undergoing Surgery for Recurrent<br>Anterior Shoulder Instability Demonstrate Variable Rates of<br>Recurrence – Postoperative Seizures Are the Most Common Cause<br>of Failure |  |
| 110 | Han           | Wonhee     | MDUP                | Health-Related Quality of Life Outcomes for Patients with Legg—<br>Calvé—Perthes Disease   |  |
| 112 | Kosanam       | Anish      | MDUP                | Preoperative Hypoalbuminemia Predicts 30-day Complications in Head and Neck Microvascular Surgery  |  |
| 113 | Wong          | Kaelan     | MDUP                | Leptin and Cytokine Interactions in Chronic Rhinosinusitis: Implications for Inflammation Modulation and Obesity   |  |
| 114 | Katragadda    | Nathan     | MDUP                | Management of Head and Neck Cancer and Financial Toxicity  |  |
| 115 | Patel         | Sajan      | MDUP                | Assessing Tympanic Membrane Perforations and Subsequent Repair Procedures Among Pediatric Patients With Tympanostomy Tubes   |  |
| 116 | Thatte        | Shvetali   | MDUP                | Bariatric Surgery is Associated with Decreased Incidence of Chronic Rhinosinusitis and Functional Endoscopic Sinus Surgeries in Patients with Obesity  |  |
| 117 | Huang         | Vincent    | MDUP                | The Impact of Surgeon and Surgical Technician Familiarity on Procedure Times and Surgical Outcomes   |  |
| 118 | Bryson        | Elizabeth  | PhD<br>program      | Uncovering a Role of Neuronal Pentraxin II in Inflammatory Bowel Disease   |  |
| 120 | Dunbar-Abbaei | Nancy      | MDUP                | Association of tobacco use diagnosis with suicidality in adolescents   |  |

| #   | Last name              | First name | Academic<br>Program | Abstract title   |  |
|-----|------------------------|------------|---------------------|--|--|
| 121 | Wahl                   | Katherine  | MDUP                | Epidemiology of ICU Admissions for Bronchiolitis in the United States: 2001-2019                                     |  |
| 123 | Hutson                 | Anelise    | PhD<br>program      | The Role of Disordered Regions on Dynamin-related protein 1 Structure and Function                                   |  |
| 124 | Scemama de<br>Gialluly | Marc       | MSTP                | TRIM21-dependent nucleoporin degraders as novel nuclear-<br>cytoplasmic trafficking inhibitors for cancer treatment  |  |
| 125 | Vincent                | Mary       | PhD<br>program      | NEK2 is a mitotic kinase that can be leveraged to improving the efficacy of mTOR inhibitors in breast cancer         |  |
| 127 | Gaston                 | James      | MDUP                | Recipient Vessels in Phalloplasty: A Systematic Review   |  |
| 128 | Belardo                | Zoe        | MDUP                | Estrogen Use and Complication Rates following Gender Affirming Vaginoplasty: A Systematic Review and Meta-Analysis   |  |
| 129 | Liu                    | Michael    | MDUP                | Racial and Ethnic Disparities in Ketamine and Esketamine Therapy for Major Depressive Disorder                       |  |
| 130 | Raja                   | Neelufar   | MDUP                | Trekking the Peaks and Valleys: Exploring Bipolar Disorder Through the Lens of Medical Graphic Novels                |  |
| 131 | Anantasagar            | Thwisha    | MDUP                | Correlation Between Adverse Childhood Experiences and Substance<br>Use Disorders in Alcohol-Associated Liver Disease |  |
| 133 | Gautam                 | Aishwarya  | MDUP                | Revisiting Electronic Hand Hygiene Monitoring and Group Feedback as a Hand Hygiene Intervention                      |  |
| 134 | Ansah                  | Afua       | MDUP                | A Longitudinal, Relationship-Based Model for Managing Complex<br>Chronic Disease in the Medicaid Population          |  |

| #   | Last name   | First name | Academic<br>Program | Abstract title   |  |
|-----|-------------|------------|---------------------|--|--|
| 135 | Rajoulh     | Celine     | MDUP                | Renal function after definitive local therapy for primary renal cell carcinoma: a meta-analysis  |  |
| 136 | Sorato      | Beatriz    | MDUP                | Use of immunotherapy on overall survival in women with advance cervical cancer: A National Cancer Database   |  |
| 138 | Josh        | Hunter     | MDUP                | Real-world use of high-pitch helical CT protocol for evaluation of cardiovascular pathologies in infants: Impact on radiation exposure, image quality, sedation requirement and patient throughput |  |
| 139 | Konda       | Samya      | MDUP                | Impact of Respiratory Motion on Nodule Displacement During CT-<br>Guided Lung Biopsy Without Breath Hold Technique   |  |
| 140 | Mitchell    | Carlee     | MDUP                | A National Survey of Medical Student Perceptions of Abortion<br>Education and Training in Undergraduate Medical Curricula  |  |
| 142 | Cumberbatch | Lauren     | MDUP                | A case for the clinical use of cannabinoids for the treatment of endometriosis-related symptoms and guidelines for clinicians: A scoping review protocol   |  |
| 143 | Hussaini    | Rimsha     | MDUP                | Characterizing the Natural History of Fetal Growth Restriction, Diagnosed Before 22 Weeks Gestational Age, Up to Birth   |  |
| 144 | Hailer      | Ashley     | MDUP                | The Impact of Medication for Opioid Use Disorder Prescribing during the Prenatal Period on Healthcare Utilization  |  |
| 145 | Cabulong    | Alexander  | MDUP                | Outcomes after Colorectal Surgery in Patients on General Surgery Service: An Institutional Review of ERAS Protocols  |  |
| 146 | Breitman    | Adi        | MDUP                | Metabolic surgery for obstructive sleep apnea  |  |
| 147 | Jaramillo   | Grace      | MDUP                | A Comparison of Acute Rejection in Organ Transplantation   |  |

| #   | Last name   | First name     | Academic<br>Program | Abstract title  |
|-----|-------------|----------------|---------------------|---|
| 148 | Putnam      | Jonathan       | MDUP                | Primary Aortic Coarctation Repair in Adolescents and Adults   |
| 149 | Harper      | Logan          | MDUP                | Determining HIPEC candidacy amongst Stage pT4 Colon Cancer  |
| 150 | Kosic       | Rachel         | MDUP                | Investigating Bariatric Surgery Patients Lost to Follow-Up in a Safety Net Hospital Setting                           |
| 151 | Shim        | Seung<br>Hyeon | MDUP                | Launching a per-oral pyloromyotomy practice — a framework for introducing endoscopic surgery within a hospital system |
| 152 | Syphan      | Thomas         | MDUP                | IVC Size Matters: Can a Chest CT Reveal Ventricular Dysfunction?  |
| 153 | Tomaszewski | Alicja         | MDUP                | Varicocele Thrombosis is Surprisingly Common and is Strongly Linked to COVID-19 Infection                             |
| 154 | Zhang       | Edward         | MDUP                | Gender disparities in bladder cancer diagnosis following hematuria or UTI symptom presentation                        |

#### Thank you for attending today's event!

Please help us improve this event for future years by providing your feedback via a brief survey, accessed through this QR code.

Thank you!

