41st Annual
Medical Student Research Day

Hosted by
Office of Student Research, Dean’s Office
Alpha Omega Alpha Honor Society

Wednesday, November 14, 2018
University of Maryland School of Medicine
Baltimore, MD 21201

Event Program
Office of Student Research

Kerri A. Thom, M.D., M.S.
Associate Professor of Epidemiology and Public Health
Assistant Dean for Student Research and Education
Director of the Office of Student Research

Gregory B. Carey, Ph.D.
Associate Professor of Microbiology and Immunology
Director of Student Research and Community Outreach

Donald R. Matteson, Ph.D.
Associate Professor of Physiology
Executive Director of Student Research Education and Dual Degree Programs

Qi Cao, J.D.
Research Coordinator

Eileen M. Eldridge
Administrative Assistant

Alpha Omega Alpha Honor Society Members Event Staff

Carly Blatt, MS IV
MSRD Event Coordinator

Charlie Fleming, MS IV

Josef Jolissant, MS IV
MSRD Event Coordinator

Paige Kennedy, MS IV
MSRD Event Coordinator

Kevin Kim, MS I

Justin Kung, MS I

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MSRD Event Coordinator

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Ben Nosrati, MS I

Jordan Parker, MS IV
MSRD Event Coordinator

Stephanie Payton, MS IV

Jake Quaytman, MS IV

Shuvodra Routh, MS IV

Jesse Stokum, MS IV
MSRD Event Coordinator

Stephen Semick, MS I
Acknowledgements

We would like to express our gratitude to the Dean’s Office for providing the financial support for Medical Student Research Day.

We would also like to express our appreciation for all the research programs, faculty mentors and other mentors who supported and guided the students in their research.

Our special thanks go to the faculty, resident, fellow, post-doctoral fellow and AOA student member judges who so willingly provided their time and knowledge.

Dr. Pavlos Anastasiadis
Dr. Daya Bagdure
Dr. Elizabeth Balcer-Kubiczek
Dr. Aditi Banerjee
Dr. Jonathan Bromberg
Dr. Laura Buchanan
Dr. France Carrier
Dr. Firas El Chaer
Dr. Svetlana Chapoval
Dr. William Chiu
Dr. Kenechukwu Chudy-Onwugaje
Dr. Natalie Davis
Dr. Vasken Dilsizian
Dr. Joseph Gillespie
Dr. Archana Gopalakrishnan
Dr. Jacob Hamm
Dr. Kim Hankey
Dr. Bret Hassel

Dr. Xiaofeng Jia
Josef Jolissant, MS IV
Dr. Kimberly Lumpkins
Dr. Yuko Ota
Dr. Jason Molitoris
Dr. Jessica Mong
Dr. Veronica Njie-Carr
Dr. Edna Pereira
Dr. Mohammed Rahman
Dr. Rekha Rapaka
Dr. Chozha Rathinam
Dr. Krishanu Ray
Dr. William Regenold
Dr. Stephanie Rice
Dr. Katharina Richard
Dr. Boris Sabirzanov
Dr. Chinnoy Sarkar
‘Dr. Vikas Saxena

Dr. Kari Ann Shirey
Dr. Giovannino Silvestri
Dr. James Snider, III
Dr. Kristen Stafford
Dr. Nanette Steinle
Dr. Sriipriya Sundararajan
Dr. Ramya Swamy
Dr. Sui-Seng Tee
Dr. Kerri Thom
Dr. Franklin Toapanta
Dr. Leonardo Tonelli
Dr. Mohan Tulapurkar
Dr. Shifa Turan
Dr. Melissa Vyfhuis
Dr. Aniket Wadajkar
Dr. Mike Winters
Dr. Zhiyong Zhao
Dr. Lin Zou
41st Annual Medical Student Research Day
Wednesday, November 14, 2018
Noon – 6:45 p.m.
University of Maryland School of Medicine
Baltimore, MD, 21201

General Schedule

7:00 a.m. – 12:20 p.m. Poster Setup (Poster Sessions I & II only)
12:00 – 1:20 p.m. Registration

Lunch & Keynote Address
12:00 – 1:20 p.m. Lunch – MSTF Atrium
12:20 – 12:40 p.m. Opening Remarks
Gregory B. Carey, Ph.D.
Associate Professor of Microbiology and Immunology
Director of Student Research and Community Outreach

E. Albert Reece, M.D., Ph.D., M.B.A.
Executive President for Medical Affairs, UM Baltimore
John Z. and Akiko K. Bowers Distinguished Professor
Dean, University of Maryland School of Medicine

Kerri A. Thom, M.D., M.S.
Associate Professor of Epidemiology and Public Health
Assistant Dean for Student Research and Education
Director of the Office of Student Research

Josef Jolissant, MS IV
President, Maryland Beta Chapter
Alpha Omega Alpha Honor Medical Society

12:40 – 1:10 p.m. Keynote Address
Graeme F. Woodworth, M.D., B.S.
Professor of Neurosurgery, Anatomy and Neurobiology, and
Diagnostic Radiology and Nuclear Medicine

1:10 – 1:20 p.m. Schedule & Procedures
Qi Cao, J.D.
Research Coordinator

1:20 – 1:30 p.m. Break
Oral Presentations 1:30 – 5:20 p.m.

1:30 – 3:20 p.m. Oral Presentation Session I – Leadership Hall
Oral Presentation Session II – Hosick Hall
Oral Presentation Session V – Taylor Hall
(5-minute break at 2:30 p.m.)

3:20 – 3:30 p.m. Break

3:30 – 5:20 p.m. Oral Presentation Session III – Leadership Hall
Oral Presentation Session IV – Hosick Hall
(5-minute break at 4:30 p.m.)

Poster Presentations 1:30 – 5:25 p.m.

1:30 – 2:30 p.m. Poster Presentation Session I – MSTF Second Floor

2:30 – 2:35 p.m. Break

2:35 – 3:35 p.m. Poster Presentation Session II – MSTF Second Floor

3:35 – 3:45 p.m. Poster Takedown (Poster Sessions I & II only)

3:45 – 4:15 p.m. Poster Setup (Poster Sessions III only)

4:15 – 5:15 p.m. Poster Presentation Session III – MSTF Second Floor

5:15 – 5:25 p.m. Poster Takedown (Poster Sessions III only)

Awards Banquet 5:30 – 6:45 p.m.

5:30 – 6:45 p.m. Dinner – MSTF Atrium

5:50 – 6:15 p.m. Honoring Faculty Mentors

6:20 – 6:40 p.m. Presentation of Awards & Certificates
Gregory B. Carey, Ph.D.
Kerri A. Thom, M.D., M.S.

6:40 – 6:45 p.m. Closing Remarks
### Oral Presentation Schedule

Oral presentations are 15 minutes each. Presenters are indicated with “*” next to their names.

#### Oral Presentation Session I

1:30 – 3:20 p.m.
Leadership Hall (MSTF)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenters</th>
<th>Institution</th>
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<tbody>
<tr>
<td>O.01</td>
<td>1:30 p.m. COMBINED ELECTRICAL STIMULATION AND STEM CELL TRANSPLANTATION</td>
<td>Huanwen Chen*, Jian Du, and Xiaofeng Jia, Department of Neurosurgery</td>
<td>University of Maryland School of Medicine, Baltimore, MD.</td>
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<td></td>
<td>AUGMENTS PERIPHERAL NERVE REGENERATION AND FUNCTIONAL RECOVERY.</td>
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<td>O.02</td>
<td>1:45 p.m. DEVELOPING MODEL SYSTEMS TO INVESTIGATE THE ROLE OF LRPI</td>
<td>Saif Yasin* and Dudley Strickland, Center for Vascular and Inflammatory</td>
<td>University of Maryland School of Medicine, Baltimore, MD.</td>
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<td>PATIENT MUTATIONS ON ABDOMINAL AORTIC ANEURYSMS.</td>
<td>Diseases, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.</td>
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<td>O.03</td>
<td>2:00 p.m. EFFECTS OF DYSREGULATED NF-KB ON HEMATOPOIETIC STEM CELLS AND</td>
<td>Huanwen Chen*, Masahiro Nakagawa¹, and Chozha Rathinam², Department of Genetics and Development, Columbia University School of Medicine, New York, NY and University of Maryland School of Medicine, Baltimore, MD.</td>
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<td>THEIR FUNCTION.</td>
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<td>O.04</td>
<td>2:15 p.m. THE HEART-PLACENTAL AXIS: THE RELATIONSHIP BETWEEN TYPE OF</td>
<td>Gabrielle Siegel*, Elizabeth Cutting, Ozhan Turan, and Shifa Turan,</td>
<td>Department of Obstetrics, Gynecology and Reproductive Sciences, University of Maryland School of Medicine, Baltimore, MD.</td>
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<td>CONGENITAL HEART DEFECT AND THE PLACENTA.</td>
<td>Department of Obstetrics, Gynecology and Reproductive Sciences,</td>
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<td>University of Maryland School of Medicine, Baltimore, MD.</td>
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<td><strong>Break (2:30–2:35 p.m.)</strong></td>
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<td>O.05</td>
<td>2:35 p.m. DOES GDF15 KNOCKDOWN ELIMINATE MESENCHYMAL STEM CELL THERAPY</td>
<td>Gregory Boyajian*, Sunjay Kaushal¹, Gregory Bittle¹, David Morales²,</td>
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<td>FUNCTIONAL PRESERVATION OF THE MYOCARDIUM IN SETTINGS OF PRESSURE</td>
<td>Rachana Mishra², and Sudhish Sharma², ¹Division of Cardiothoracic Surgery,</td>
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<td>OVERLOAD?</td>
<td>University of Maryland School of Medicine, Baltimore, MD.</td>
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<td>O.06</td>
<td>2:50 p.m. A POROUS COLLAGEN-GAG SCAFFOLD PROMOTES MUSCLE REGENERATION</td>
<td>Nicole Hays*, Adriana Panayi, Lucindì Smit, Dennis Orgill, and Indranil</td>
<td>Department of Surgery, Department of Surgery, Brigham and Women's Hospital, Boston, MA.</td>
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<td>OF VML INJURED QUADRICEPS MUSCLES IN A MURINE MODEL.</td>
<td>Sinha, Division of Plastic Surgery, Department of Surgery, Department of</td>
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<td>Surgery, Department of Surgery, Brigham and Women's Hospital, Boston, MA.</td>
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O.07 3:05 p.m.
ADVERSE EVENTS IN PATIENTS WITH IMPLANTABLE CARDIAC DEVICES UNDERGOING RADIOTHERAPY: IS IT TIME TO REVISE GUIDELINES?  Muhammad Hamza*, Pranshu Mohindra, and Stephanie Rice, Department of Radiation Oncology, University of Maryland School of Medicine, Baltimore, MD.

Oral Presentation Session II
1:30 – 3:20 p.m.
Hosick Lecture Hall (Bressler)

O.08 1:30 p.m.
PRIMARY-CARE AND ACUTE CARE ELECTION: NON-URGENT CARE DECISION MAKING IN A PRIMARY CARE PEDIATRIC POPULATION. Shannon Kirby* and Adam Spanier, Division of General Pediatrics, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

O.09 1:45 p.m.
IDENTIFYING THE COMPONENTS OF INFORMED TREATMENT DECISION-MAKING IN PATIENTS WITH PANCREATIC CANCER RECEIVING PREOPERATIVE THERAPY (INFORMED). Christine Server* and Ryan Nipp, Massachusetts General Hospital, Boston, MA.

O.10 2:00 p.m.
TANGIBLE BENEFITS: INCORPORATING NEW VARIABLES INTO THE RISK-BENEFIT ANALYSIS OF LIVING ORGAN DONATION DECISIONS. Miriam Robin*, Sarah Rasmussen, Macey Henderson, Madeleine Waldram, Ann Eno, and Dorry Segev, Epidemiology Research Group in Organ Transplantation, Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD.

O.11 2:15 p.m.
EFFECT OF TELE-MEDICINE FOR INFLAMMATORY BOWEL DISEASE (TELE-IBD) ON PATIENT ACTIVATION AND SELF-EFFICACY. Zaid Bilgrami*, Raymond Cross, and Ameer Abutaleb, Division of Gastroenterology and Hepatology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

Break (2:30 – 2:35 p.m.)

O.12 2:35 p.m.
DELAYED PRESENTATION OF BOWEL OBSTRUCTION CAUSED BY BLUNT TRAUMA. Nicholas George* and Siamak Moayedi, Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD.
O.13 2:50 p.m.
PROSPECTIVE, RANDOMIZED CONTROLLED COMPARISON OF A FLASH-TIP CATHETER AND A TRADITIONAL IV CATHETER IN AN URBAN EMERGENCY DEPARTMENT. Nicholas George*, Michael Witting¹, Jon Mark Hirschon¹, Alise Burke², Stephen Schenkel¹, and Siama Moayedi¹. ¹Department of Emergency Medicine, ²University of Maryland School of Medicine, Baltimore, MD.

O.14 3:05 p.m.
EFFECT OF TELEMEDICINE ON QUALITY OF LIFE AND DEPRESSIVE SYMPTOMS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE. Matthew Schliep*, Raymond Cross, and Kenechukwu Chudy-Onwugaje, Division of Gastroenterology and Hepatology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

Break (3:20 – 3:30 p.m.)

Oral Presentation Session V
1:30 – 3:20 p.m.
Taylor Lecture Hall (Bressler)

O.15 1:30 p.m.
SURGERY IS ASSOCIATED WITH OPIOID OVERDOSE AND NEW-ONSET OPIOID USE DISORDER AMONG US VETERANS. Jonathan Siglin*, Khodadad Namiranian¹, and John Sorkin². ¹Department of Anesthesiology, Veterans Affairs Medical Center Fresno, Fresno, CA and ²Veterans Affairs Medical Center Geriatrics, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.16 1:45 p.m.
PREDICTIVE FACTORS OF REPORTED SEXUAL ABUSE AND REVICTIMIZATION FOR AN URBAN CHILDREN’S ADVOCACY CENTER. Gabriella Miller*, Cydney Nguyen*, and Wendy Lane, Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD.

O.17 2:00 p.m.
BURDEN OF GUN VIOLENCE IN PEDIATRIC INTENSIVE CARE UNITS (PICUS) IN THE UNITED STATES. Jessica Lee*, Cortney Foster, and Dayanand Bagdure, Division of Pediatric Critical Care Medicine, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

O.18 2:15 p.m.
ANALYSIS OF MALARIA INFECTION AND DISEASE IN THE FIRST TWO YEARS OF LIFE. Kieran Tebben* and Miriam Laufer, Division of Associate Director for Malaria Research, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

Break (4:30 – 4:35 p.m.)
O.19 2:35 p.m.
IDENTIFICATION OF HOST TARGETS FOR INFLUENZA A VIRUS USING A YEAST SCREEN. Alexandra Vlk*, Stuart Weston, and Matthew Frieman, Department of Microbiology and Immunology, University of Maryland School of Medicine, Baltimore, MD.

O.20 2:50 p.m.
RISK FACTORS FOR INCREASED SHOULDER CUTIBACTERIUM ACNES BURDEN. Samir Kaveeshwar*, Derek Jones, and Mohit Gilotra, Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

O.21 3:05 p.m.
COMORBIDITY AND SEVERITY OF ILLNESS RISK ADJUSTMENT FOR HOSPITAL-ONSET CLOSTRIDIUM DIFFICILE INFECTION. Stephanie Cabral*, Kerri Thom, Lisa Pineles, Natalia Blanco, Yuan Wang, and Anthony Harris, Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD.

Oral Presentation Session III
3:30 – 5:20 p.m.
Leadership Hall (MSTF)

O.22 3:30 p.m.
GLUCOSE-6-PHOSPHATE DEHYDROGENASE ACTIVITY IN BIPOLAR DISORDER AND SCHIZOPHRENIA: RELATIONSHIP TO MITOCHONDRIAL IMPAIRMENT. Joseph Puthumana* and William Regenold, Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD.

O.23 3:45 p.m.
IMPACT OF PHAGOCYTOSIS ON MICROGLIAL ACTIVATION IN THE INJURED BRAIN. Alexa Ciesinski*, Rodney Ritzel, and David Loane, STAR-ORC, University of Maryland School of Medicine, Baltimore, MD.

O.24 4:00 p.m.
EXPANSION OF TRAUMATIC HEMORRHAGIC CONTUSION IN CERVICAL SPINAL CORD INJURY. Noah Lessing*, Harry Mushlin1, Timothy Chryssikos1, Jeffrey Oliver1, Bizhan Aarabi2, and Gary Schwartzbauer3, 2Division of Neurotrauma and 3Program in Trauma, R. Adams Cowley Shock Trauma Center, 1Department of Neurosurgery, University of Maryland School of Medicine, Baltimore, MD.

O.25 4:15 p.m.
ALTERATIONS IN PARIETAL LOBE RESTING STATE FUNCTIONAL CONNECTIVITY CORRELATE WITH STRESS PERCEPTION IN TYPE 1 DIABETES. Muhammad Hamza* and Janice Hwang, Division of Endocrinology, Department of Medicine, Yale University School of Medicine School of Medicine, New Haven, CT.

Break (4:30 – 4:35 p.m.)
O.26 4:35 p.m.
OBSERVATION OF ERYTHROCYTE DYNAMICS IN THE GLAUCOMATOUS OPTIC NERVE USING ERYTHROCYTE MEDIATED ANGIOGRAPHY. Victoria Chen*, Christopher Le*, Breanna Tracey1, Lakyn Mayo2, Ginger Thompson2, and Osamah Saeedi2, 2Department of Ophthalmology and Visual Sciences, 1University of Maryland School of Medicine, Baltimore, MD.

O.27 4:50 p.m.
CILIARY BODY CHANGES IN PEDIATRIC PATIENTS WITH GLAUCOMA. Joy Li*, Mona Kaleem1, Osamah Saeedi1, Moran R. Levin1, Azam Qureshi2, and Janet Alexander1, 1Department of Ophthalmology and Visual Sciences, 2University of Maryland School of Medicine, Baltimore, MD.

O.28 5:05 p.m.
STRUCTURAL CHANGES FOLLOWING EARLY CHILDHOOD LENSECTOMY AND THE RISK FOR SECONDARY GLAUCOMA. Libby Wei*, Sachin Kalarn, Osamah Saeedi, Moran Roni Levin, and Janet Alexander, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

Oral Presentation Session IV
3:30 – 5:20 p.m
Hosick Lecture Hall (Bressler)

O.29 3:30 p.m.
STRESS IN A DISH: MODELING PRECONCEPTUAL STRESS IN MOUSE EPIDIDYMAL EPITHELIAL CELLS. Nickole Kanyuch*, Christopher Morgan1, Jennifer Chan1, Weiliang Huang2, Maureen Kane2, and Tracy Bale1, 1Department of Pharmacology, University of Maryland School of Medicine and 2University of Maryland School of Pharmacy, Baltimore, MD.

O.30 3:45 p.m.
SURGICAL MANAGEMENT OF DIASTASIS RECTI: A SYSTEMATIC REVIEW OF INSURANCE COVERAGE IN THE UNITED STATES. Carly Rosen*, LediBabari M. Ngaage1, Erin Rada1, Sheri Slezak1, Stephen Kavic2, and Yvonne Rasko1, 1Division of Plastic Surgery and 2Division of General Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.31 4:00 p.m.
TRANSPLANTING THE WAY TO CLEARANCE: LESSONS LEARNED FROM DEVELOPMENT OF A HIDRADENITIS SUPPURATIVA (HS) XENOGRAFT MOUSE MODEL. Qaren Quartey*, Robert J. Miller3, Uchechukwu J. Okoh1, Lloyd S. Miller1, Ginette A. Okoye2, and Angel S. Byrd2, 1Department of Dermatology, Johns Hopkins University School of Medicine, Baltimore, MD, and 2Department of Dermatology, Howard University College of Medicine, Washington, D.C.
O.32 4:15 p.m.
EVALUATION OF THE THERAPEUTIC POTENTIAL OF MULTIVALENT HER3 AFFIBODIES IN OVARIAN CANCER TREATMENT. Daphine Kwesiga*, Steven Jay, and John Schardt, Division of Engineering, Department of Bio-Engineering, University of Maryland, College Park School of Engineering, College Park, MD.

Break (2:30–2:35 p.m.)

O.33 4:35 p.m.
SURVIVAL OUTCOMES OF INITIAL LOCAL THERAPY ON CLINICALLY LOCALIZED GLEASON 9-10 PROSTATE CANCER: A SEER DATABASE ANALYSIS. Amy Nemirovsky*, Hubert Huang, Michael Nasland, and Mohummad Minjah Siddiqui, Division of Urology, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.34 4:50 p.m.
CLINICAL AND MOLECULAR CHARACTERISTICS OF LONG TERM SURVIVORS OF CNS TUMORS: A REPORT FROM THE NEURO-ONCOLOGY BRANCH NATURAL HISTORY STUDY. James Frisbie*, Elizabeth Vera, Mark Gilbert, Terri Armstrong, National Institute of Health - Neuro Oncology Branch (NCI), Bethesda, MD.

O.35 5:05 p.m.
THE FUTURE OF DRUG DESIGN: PREDICTING ZTA-DNA MOLECULAR INTERACTIONS IN EBV USING METADYNAMICS SIMULATIONS. Netsanet Woldegerima*, Debabrata Pramanik, and Pratyush Tiwary, Institute of Physical Science and Technology, University of Maryland, College Park, College Park, MD.
Poster Presentation Schedule

Presenters are indicated with “*” next to their names.

Poster Presentation Session I
1:30 – 2:30 p.m.
MSTF Second Floor

P.01  1:30 p.m.
A QUALITY IMPROVEMENT PROJECT ASSESSING COMPLIANCE TO NEWLY IMPLEMENTED RBC TRANSFUSION GUIDELINES IN THE NICU. Cara Lee*, Alexandre Medina de Jesus1, Kelly Tracey1, and Sripiya Sundararajan2, 2Division of Neonatology, 1Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.02  1:30 p.m.
IMPACT OF OBTAINING ADMISSION LABORATORY TESTS FROM CORD BLOOD IN PRETERM INFANTS ≤ 28 WEEKS GESTATION. Simin Hossain*, Nina Shah1, Alexandre Medina2, and Alison Falck1, 1Division of Neonatology, 2Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.03  1:30 p.m.
LVOTD MODEL FOR CARDIAC OUTPUT DETERMINATION IN CRITICALLY ILL PATIENTS. Ehson Aligholizadeh*, Rajan Patel1, Sveya Fatima1, Samuel Galvagno, Jr.2, Daniel Haase3, and Sarah Murthi4, 1Department of Trauma, 2Department of Anesthesiology, 3Department of Critical Care, and 4Division of Trauma and Critical Care, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.04  1:30 p.m.
ANESTHETIC MANAGEMENT OF PATIENTS FOLLOWING TRAUMATIC INJURY WITH RESUSCITATIVE ENDOVASCULAR BALLOON OCCLUSION OF THE AORTA (REBOA). Christopher Parrino*, Ashton Engdahl1, Philip Wasicek2, Samuel Galvagno Jr.3, Megan Brenner4, and Maureen McCunn5, 3Division of Trauma Anesthesiology, Department of Anesthesiology, and 4Division of Trauma and Surgical Critical Care, 5Department of Surgery, and 1University of Maryland School of Medicine, Baltimore, MD.

P.05  1:30 p.m.
PREDICTORS OF EARLY POSTOPERATIVE PAIN FOLLOWING ORTHOPAEDIC SURGERY. Jamie Kator*, Ali Aneizi1, Patrick Sajak2, Min Zhan2, and R. Frank Henn III1, 1Department of Orthopaedics and 2Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD.

P.06  1:30 p.m.
PREDICTORS OF EARLY PATIENT SATISFACTION FOLLOWING ORTHOPAEDIC SURGERY. Bailey Howard*, Ali Aneizi1, Vidushan Nadarajah1, Patrick Sajak2, Min Zhan3, and R. Frank Henn III1, 1Division of Sports Medicine, 2Department of Orthopaedics and 3Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD.
P.07  1:30 p.m.
THE RELATIVE IMPORTANCE OF SOCIOECONOMIC AND CLINICAL CONCERNS OF ORTHOPAEDIC TRAUMA PATIENTS FOLLOWING INJURY. Stephan Olaya*, Katherine Ordonio, Alexandra Mulliken, Gerard Slobogean, and Nathan O'Hara, Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

P.08  1:30 p.m.
PROMIS PHYSICAL FUNCTION TWO WEEKS FOLLOWING ORTHOPAEDIC SURGERY. Gregory Perraut*, Ali Aneizi1, Patrick Sajak1, Vidushan Nadarajah1, Min Zahn1, and R. Frank Henn III2, 2Division of Sports Medicine, 1Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

P.09  1:30 p.m.
PREOPERATIVE EXPECTATIONS AND EARLY POSTOPERATIVE MET EXPECTATIONS OF EXTREMITY ORTHOPAEDIC SURGERY. Leah Henry*, Ali Aneizi, Vidushan Nadarajah, Michael Smuda, Jonathan Packer, and R. Frank Henn III, Division of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

P.10  1:30 p.m.
DURATION OF FOLEY BALLOON PLACEMENT AS A PREDICTOR OF SUCCESSFUL INDUCTION IN SINGLETON PREGNANCIES. Martha Coghlan*, Julie Hurvitz1, Ruofan Yao2, Kristin Atkins3, and Sarah Crimmins4, 2Division of Maternal Fetal Medicine, Department of Obstetrics, Gynecology and Reproductive Sciences, Loma Linda University Health, Loma Linda, CA, 3Division of Maternal Fetal Medicine, Department of Obstetrics, Gynecology and Reproductive Sciences, Howard University College of Medicine, Washington, D.C., and 4Division of Maternal Fetal Medicine, 1Department of Obstetrics, Gynecology and Reproductive Sciences, University of Maryland School of Medicine, Baltimore, MD.

P.11  1:30 p.m.
THE BENEFITS OF IMPROVED DISEASE RECOGNITION ON PATIENT SAFETY AND DISEASE OUTCOMES IN CHRONIC KIDNEY DISEASE. Eli Farhy* and Jeffrey Fink, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.13  1:30 p.m.
ASSESSING THE CAPABILITY OF KIDNEY DONOR DEMOGRAPHICS AND BASELINE BIOPSY SCORES IN PREDICTING FUTURE GRAFT FUNCTION. Grahya Guntur*, Jonathan Bromberg1, Kevin Chen1, and Tapatiri Stalam2, 1Division of Transplant, Department of Surgery and 2Department of Internal Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.14  1:30 p.m.
TRANSPLANTOMIC STUDY OF THE DETERMINANTS INVOLVED IN BIFIDOACTERIUM PSEUDOLONGUM ANTI-INFLAMMATORY ACTIVITY. Julie Gutekunst*, Emmanuel Mongodin, and Lauren Hittle, Institute for Genome Sciences, Department of Microbiology and Immunology, University of Maryland School of Medicine, Baltimore, MD.
P.15  1:30 p.m.
STRUCTURE-FUNCTION ANALYSIS OF THE PROSAAS CHAPERONE IN NEURODEGENERATION-RELATED ASSAYS. Hannah Kass*, Tim Jarvela, and Iris Lindberg, Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD.

P.16  1:30 p.m.
EVALUATION OF EFFICACY AND MARKERS FOR POSITIVE OUTCOMES IN A TRAUMA-FOCUSED MULTI-FAMILY GROUP. Harris Feldman*, Eryn Trauben1, Deborah Medoff2, and Laurel Kiser3, 3Division of Psychiatric Services Research, 2Department of Psychiatry, 1University of Maryland School of Medicine, Baltimore, MD.

P.17  1:30 p.m.
VIOLENT INJURY AS A PREDICTOR OF FUTURE VIOLENT INJURY AND VIOLENT CRIME COMMISSION. Joshua Finkel* and Zachary Dezman, Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD.

Break (2:30 – 2:35 p.m.)

Poster Presentation Session II
2:35 – 3:35 p.m.
MSTF Second Floor

P.18  2:35 p.m.
USING METABOLIC PATHWAYS TO IMPROVE DIAGNOSIS AND RISK-STRATIFICATION OF PROSTATE CANCER. Harrison Bell*, Aymen Alqazzaz1, Dexue Fu2, Arman Karimi3, Mary McKenna3, and M. Minhaj Siddiqui4, 2Division of Oncology and 4Division of Urologic Oncology, Department of Surgery and 3Department of Pediatrics, 1University of Maryland School of Medicine, Baltimore, MD.

P.19  2:35 p.m.
LEARNING CURVE FOR MAGNETIC RESONANCE IMAGING/ULTRASOUND FUSION BIOPSY IN DETECTING PROSTATE CANCER USING CUSUM ANALYSIS. Linhan Xu*, Nancy Ye1, Michael Naslund1, Jade Wong2, Amelia Wnorowski2, and Mohummad M. Siddiqui1, 1Division of Urology, Department of Surgery and 2Department of Diagnostic Radiology and Nuclear Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.20  2:35 p.m.
USE OF 3D PRINTED PROSTATE MODELS IN PREOPERATIVE PLANNING TO ASSIST RADICAL PROSTATECTOMY. Zachary Bolten*, Hubert Huang1, Amelia Wnorowski2, Jeffrey Hirsch2, and M. Minhaj Siddiqui3, 2Department of Diagnostic Radiology and Nuclear Medicine and 3Division of Urology, Department of Surgery, 1University of Maryland School of Medicine, Baltimore, MD.

41st Annual Medical Student Research Day  13
P.21 2:35 p.m.
COMBINATION OF MAGNETIC RESONANCE IMAGING AND DECRYPTER TEST PROVIDE IMPROVED PREDICTIVE VALUE OF EXTRACAPSULAR EXTENSION IN PROSTATE CANCER. Michael Tzeng*, Michael Naslund1, Jade Wong-You-Cheong2, Amelia Wnorowski2, and M. Minhaj Siddiqui1, 1Division of Urology, Department of Surgery and 2Department of Diagnostic Radiology and Nuclear Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.22 2:35 p.m.
VALIDATION OF AN MRI-BASED PROSTATE CANCER GLEASON SCORE PREDICTIVE NOMOGRAM. Adrianna Lee*, Amelia Wnorowski1, Nancy Ye2, Linhan Xu2, Bradford Wood1, and M. Minhaj Siddiqui2, 1Department of Radiology and 2Department of Urology, University of Maryland School of Medicine, Baltimore, MD and 3Department of Molecular Imaging, National Cancer Institute, National Institutes of Health, Bethesda, MD.

P.23 2:35 p.m.
FN14-RELATED ALTERATIONS IN GLIOBLASTOMA CELL MOVEMENT AND NUCLEAR INTEGRITY IN THE SETTING OF CONFINED MIGRATION. Neila Kline*, Graeme Woodworth1, and Jeff Winkles2, 1Department of Neurosurgery and 2Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.24 2:35 p.m.
EFFECT OF DECREASED ADHESIVITY RECEPTOR TARGETED NANOPARTICLE DELIVERY IN A MELANOMA BRAIN METASTASIS MODEL. Lucy Wang*, Jeffrey Winkles1, Graeme Woodworth2, Nathan Roberts1, Aniket Wadajkar1, and Rebeca Galisteo1, 2Division of Neurosurgery, 1Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.25 2:35 p.m.
LNC-RNA DANCR PROMOTES LUNG CANCER THROUGH INVOLVEMENT IN WNT/β-CATENIN SIGNALING. Nicholas Musacchio*, Pang-Kuo Lo, and Qun Zhou, Department of Biochemistry and Molecular Biology, University of Maryland School of Medicine, Baltimore, MD.

P.26 2:35 p.m.
STAGE III NON-SMALL CELL LUNG CANCER CLINICAL OUTCOMES WITH SURGICAL RESECTION AFTER DEFINITIVE NEOADJUVANT CHEMORADIOThERAPY. Ilaria Caturegli*, Melissa Vyfhuis1, Whitney Burrows2, Mohan Suntharalingam1, Shahed Badiyan1, and Pranshu Mohindra1, 1Department of Radiation Oncology, and 2Division of Thoracic Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.
P.27  2:35 p.m.
IMPROVING HIV OUTCOMES AMONG HIV-INFECTED PATIENTS WITH CANCER FOLLOWED IN AN INTEGRATED, MULTIDISCIPLINARY, INFECTIOUS DISEASE/CANCER CLINIC. Helen Cheung*, Kristen Stafford1, and David Riedel2. 1Division of Genomic Epidemiology and Clinical Outcomes, Department of Epidemiology and Public Health and 2Division of Infectious Diseases, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.28  2:35 p.m.
SUPPORTING THE UNMET CARE NEEDS OF OLDER ADULTS WITH ADVANCED CANCER. Christine Server* and Ryan Nipp, Massachusetts General Hospital, Boston, MA.

P.29  2:35 p.m.
STRIATAL MICROCIRCUIT DYNAMICS OF ETHANOL HABITS. Cecelia Kim* and Brian Mathur, Department of Pharmacology, University of Maryland School of Medicine, Baltimore, MD.

P.30  2:35 p.m.
BARRIERS TO BYSTANDER NALOXONE DISTRIBUTION AND ADMINISTRATION IN BALTIMORE. Valerie Jenkins*, Brent Hurt*, Atizaz Hussain1, Ilya Lazzeri1, Siamak Moayedi2, Hong Kim3, and Stephen Schenkel2. 1Department of Emergency Medicine, 2University of Maryland School of Medicine, Baltimore, MD.

P.31  2:35 p.m.
PREVALENCE OF FENTANYL EXPOSURE AMONG ED PATIENTS WITH HISTORY OF OPIOID ABUSE. Ilya Lazzeri*, Atizaz Hussain*, Brenten Hurt1, Valerie Jenkins1, Siamak Moayedi2, Stephen Schenkel2, and Hong Kim3. 1Department of Emergency Medicine, 2University of Maryland School of Medicine, Baltimore, MD.

P.32  2:35 p.m.
BRIVARACETAM: A NOVEL NON-OPIOID TREATMENT FOR PAIN ASSOCIATED WITH PERIPHERAL NERVE INJURY. Solomiya Tsymbalyuk*, Madeleine Smith1, Orest Tsymbalyuk1, and Marc J. Simard2. 1Department of Neurosurgery, 2University of Maryland School of Medicine, Baltimore, MD.

P.33  2:35 p.m.
provider attitudes toward naloxone distribution in the clinical setting. Nora Loughry*, Deborah Stein1, and Erin Hall2. 1Division of Trauma, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD, and 2Division of Critical Care, Department of Surgery, MedStar Washington Hospital Center, Washington, DC.

P.34  2:35 p.m.
LIPID FINDINGS FROM THE DIABETES EDUCATION TO LOWER INSULIN, SUGARS, AND HUNGER (DELISH) STUDY. Samantha Schleicher*, Ashley Mason1, Laura Saslow2, Patricia Moran3, Elissa Epel5, and Frederick Hecht4. 1Osher Center for Integrative Medicine and Aging, Metabolism, and Emotions Center, Department of Psychiatry, University of California, San Francisco School of Medicine, San Francisco, CA and 2Department of Health Behavior and Biological Sciences, University of Michigan School of Nursing, Ann Arbor, MI.
P.34A 2:35 p.m.
EFFECT OF INTRAVITREAL ANTI-VEGF AGENTS ON INTRAOCULAR PRESSURE. David Na*, Ramya Swamy, and Sachin Kalarn, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

Poster Takedown for Poster I and Poster II (3:35 – 3:45 p.m.)
Poster Setup for Poster III (3:45 – 4:15 p.m.)

**Poster Presentation Session III**
4:15 – 5:15 p.m.
MSTF Second Floor

P.35 4:15 p.m.
CORRELATING MRI EVIDENCE OF CEREBRAL ISCHEMIA WITH MORTALITY FOLLOWING DECOMPRESSIVE CRANIECTOMY. Wesley Shoap* and Bizhan Aarabi, 1Department of Neurosurgery, University of Maryland School of Medicine, Baltimore, MD.

P.36 4:15 p.m.
UNDERSTANDING THE SHORT-TERM NEUROLOGICAL IMPACT OF EXPOSURE TO HYPEROXIA FOLLOWING CANINE CARDIAC ARREST. Da Bin Lee*, Timothy Pearson1, Julie Proctor1, Robert Rosenthal2, and Gary Fiskum1, 1Department of Anesthesiology and 2Division of Hyperbaric Medicine, Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.37 4:15 p.m.
CORRELATING HOME-BASED UPPER EXTREMITY ACTIVITY MONITORING WITH CLINICAL EVALUATIONS IN PATIENTS WITH CHRONIC STROKE. Kavita Bhatnagar*, Susan Conroy1, and Christopher Bever2, 1Department of Physical Therapy and Rehabilitation Science and 2Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

P.38 4:15 p.m.
SICKLE CELL TRAIT AND RISK FOR EARLY-ONSET ISCHEMIC STROKE. Rebecca Zhang*, Kathleen Ryan1, Haley Lopez2, Zachary Flair2, and Steven Kittner2, 1Division of Endocrinology, Diabetes and Nutrition, Department of Medicine and 2Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

P.39 4:15 p.m.
CHARACTERIZING PERI-ICTAL MOOD CHANGES IN PATIENTS WITH EPILEPSY. Autusa Pahlavan*, Scott Thompson1, and Jennifer Hopp2, 1Department of Physiology and 2Division of Epilepsy, Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

P.40 4:15 p.m.
ALTERED MITOCHONDRIAL FUNCTION MEDIATE THE EFFECT OF HIGH GLUCOSE ON THE PLURIPOTENCY OF EMBRYONIC STEM CELLS. Ben Cornwell* and Peixin Yang, Department of Obstetrics, Gynecology and Reproductive Sciences, University of Maryland School of Medicine, Baltimore, MD.
P.41 4:15 p.m.
MATERNAL DEPRESSION AS POTENTIAL MODERATOR BETWEEN FOOD INSECURITY AND CHILD HEALTH. Bo Peng*, Bridget Armstrong, Yan Wang, and Maureen Black, Division of Growth and Nutrition, Department of Pediatrics, and University of Maryland School of Medicine, Baltimore, MD.

P.42 4:15 p.m.
PATIENT PREFERENCE AND CONTRACEPTION CONSISTENCY IN SELF-IDENTIFIED LATINA WOMEN IN BALTIMORE: PRELIMINARY REPORT. Meredith Grover* and Diana Carvajal, Department of Family and Community Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.43 4:15 p.m.
MEAN ADMISSION TEMPERATURES IN INFANTS <32 WEEKS GA SUSTAINED AFTER MOVE TO NEW NEONATAL INTENSIVE CARE UNIT. Kelly Pham*, Natalie Davis, and Sara Mola, Division of Neonatology, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.44 4:15 p.m.
THE IMPACT OF FOOD AND HOUSING INSECURITY ON CHILDHOOD OBESITY IN BALTIMORE CITY. Natalia Perez*, Maureen Black, and Yan Wang, Division of Nutrition and Childhood Development, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.45 4:15 p.m.
FOOD ACCESS AND FOOD SECURITY AMONG MEDICAID-INSURED YOUTH TREATED WITH ANTIPSYCHOTIC MEDICATION. Nicole Rangos*, Kristin Bussell1, Heidi Wehring2, Meredith Roberts2, Emily Steiner3, and Gloria Reeves1, 1Division of Child Psychiatry, 2Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD.

P.46 4:15 p.m.
QUALITY OF LIFE IN PATIENTS WITH DELAYED RADIATION INJURY TREATED WITH HYPERBARIC OXYGEN THERAPY. Sam Famenini*, Kinjal Sethuraman, and Melissa Schroeder, Division of Hyperbaric Medicine, Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.47 4:15 p.m.
VIRTUAL REALITY COMPUTER GAMING MAY ENCOURAGE UPPER EXTREMITY USE IN PERSONS WITH RETT SYNDROME. Molly Himmelrich*, Grace Omotunde1, Matthew Foreman2, Jack Engsberg2, and Pamela Diener1, 1Department of Neuroscience, Georgetown University School of Medicine, Washington, D.C. and 2Department of Neuroscience, Washington University in St. Louis School of Medicine, St. Louis, MO.
P.48 4:15 p.m.
SURGICAL MANAGEMENT OF GYNECOMASTIA: A REVIEW OF THE CURRENT INSURANCE COVERAGE CRITERIA*. Carly Rosen*, Ledibabari M. Ngaage1, Chineziemu Ihenatu1, Adekunle Edegbed2, Sheri Slezak1, and Yvonne Rasko1, 1Division of Plastic Surgery and 2Division of Shock Trauma and Plastic Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.49 4:15 p.m.
GRADUATE PERCEPTION OF COSMETIC SURGERY TRAINING IN PLASTIC SURGERY RESIDENCY AND FELLOWSHIP PROGRAMS. Cecelia Kim*, Ledibabari M Ngaage1, Carly Rosen2, Colton McNicholls3, Fan Liang4, and Yvonne Rasko1, 1Division of Plastic surgery and 4Division of Plastic and Reconstructive Surgery, Department of Surgery, 2University of Maryland School of Medicine and 3Division of Plastic surgery, Department of Surgery, Johns Hopkins Hospital, Baltimore, MD.

P.50 4:15 p.m.
EVALUATING THE THREAT OF CARBAPENEM-RESISTANT ENTEROBACTER IN CRITICAL CARE PATIENTS. Matthew Tinkham* and Kristie Johnson, Department of Pathology, University of Maryland School of Medicine, Baltimore, MD.

P.51 4:15 p.m.
CLINICAL FEATURES AND QUALITY OF LIFE IN PATIENTS WITH COMPLEX DEFECTS OF THE ABDOMINAL WALL. Lauren Pace*, Adekunle Edegbed1, Yvonne Rasko2, Fan Liang3, Michael Grant3, and Arthur Nam3, 1Department of Plastic and Reconstructive Surgery, Johns Hopkins, 2Division of Plastic and Reconstructive Surgery, University of Maryland Medical Center, and 3Division of Plastic, Reconstructive, and Maxillofacial Surgery, Department of R. Adams Cowley Shock Trauma Center, University of Maryland School of Medicine, Baltimore, MD.

P.52 4:15 p.m.
OUTCOMES OF ABDOMINAL RECONSTRUCTION AT THE TIME OF CRS AND HIPEC. Brigit Baglien*, Ledibabari Millie Ngaage1, Carly Rosen1, Erin Rada1, Nader Hanna2, and Yvonne Rasko1, 1Division of Plastic Surgery and 2Division of Oncology, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.53 4:15 p.m.
CHILDREN WITH BOTH CEREBRAL MALARIA AND SEVERE MALARIAL ANEMIA HAVE A MALARIA EXPOSURE PROFILE DISTINCT FROM THOSE WITH OTHER SEVERE MALARIA SYNDROMES. Abby Goron* and Mark Travassos, Division of Infectious Diseases and Tropical Pediatrics, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

Poster Takedown for Poster III (5:15 – 5:25 p.m.)