37th Annual
Medical Student Research Day

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

Thursday, September 18, 2014
University of Maryland School of Medicine
Baltimore, MD 21201

Event Program
Office of Student Research

George T. Fantry, M.D.
Associate Professor of Medicine
Assistant Dean for Student Research and Education

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

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

Qi Cao, J.D.
Research Coordinator

Jean Marie Roth
Academic Coordinator

Alpha Omega Alpha Honor Society Members Event Staff

Jonah Abraham, MS IV  Alexandra Nolan Byrne, MS IV  Elyse McGlumphy, MS IV
MSRD Event Coordinator

Willard Applefeld, MS IV  An Chen, MS IV  Shannon Serlemitsos, MS IV
MSRD Event Coordinator

Sarah Britz, MS IV  Kristen Coletti, MS IV
MSRD Event Coordinator

Katherine Jacobs, MS IV
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, postdoctoral fellow, and AOA student member judges who so willingly provided their time and knowledge. Their names will be listed in the final electronic version of the program booklet that will be posted on the website.

Dr. Lawrence Adler              Natalie Held, MS IV (AOA)              Dr. Sandra Mooney
Dr. Jack Applefeld               Norman Vince Hill, MS IV (AOA)            Dr. Melissa Motta
Dr. Krystal Archer-Arroyo        Dr. Suma Hoffman                          Gopal Narang, MS IV (AOA)
Dr. Elizabeth Balcer-Kubiczek    Dr. Colleen Hughes Driscoll                Dr. Steven Prior
Dr. France Carrier               Dr. Xiaofeng Jia                            Dr. William Randall
Dr. Wan-Tsu Chang                Dr. Laundette Jones                      Dr. Lynn Schriml
Dr. Christina Christou           Dr. Pedro Jose                             Shannon Serlemitos, MS IV (AOA)
Dr. Christopher Coleman          Dr. Atul Kalanuria                        Dr. Scott Thompson
Kristen Coletti, MS IV (AOA)     Dr. Wendy Lane                            Dr. Vladimir Toschakov
Dr. David Dreizin                Dr. Robert Lavin                          Dr. Sheelu Varghese
Dr. Leslie Glickman              McGlumphy Elyse, MS IV (AOA)            Dr. Hao Zhang
Dr. Amit Golding                 Dr. Rosangela Mezghanni                  Dr. Zhiyong Zhao
Dr. Nader Hanna                  Dr. Pranshu Mohindra
37th Annual Medical Student Research Day
Thursday, September 18, 2014
Noon – 8:00 p.m.
University of Maryland School of Medicine
Baltimore, MD, 21201

7:00 a.m. - 12:20 p.m.  Poster Setup (Poster Sessions I & II only)
12:00 – 12:50 p.m.  Registration

Lunch & Opening Remarks  12:00 - 12:50 p.m.
12:00 - 12:50 p.m.  Lunch – MSTF Atrium
12:20 - 12:40 p.m.  Opening Remarks
Gregory B. Carey, Ph.D.
Assistant Professor of Microbiology and Immunology
Director of Student Summer Research and Community Outreach

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

Willard N. Applefeld, MS IV
President, Maryland Beta Chapter
Alpha Omega Alpha Medical Honor Society

12:40 - 12:50 p.m.  Schedule & Procedures
Qi Cao, J.D.
Research Coordinator

Oral Presentations  1:00 – 5:20 pm
1:00 - 3:05 p.m.  Oral Presentation Session I – Taylor Hall
Oral Presentation Session II – Hosick Hall
(5-minute break at 2:00 p.m.)
3:05 - 3:15 p.m.  Break
3:15 – 5:20 p.m.  Oral Presentation Session III – Taylor Hall
Oral Presentation Session IV – Hosick Hall
(5-minute break at 4:15 p.m.)

Poster Presentations  1:00 – 5:50 p.m.
1:00 – 2:00 p.m.  Poster Presentation Session I – Bressler First Floor
2:00 – 2:05 p.m.  Break
2:05 – 3:05 p.m.  Poster Presentation Session II – Bressler First Floor
3:05 – 3:15 p.m.  Poster Takedown (Poster Sessions I & II only)
3:15 – 3:45 p.m.  Poster Setup (Poster Sessions III & IV only)
3:45 – 4:45 p.m.  Poster Presentation Session III – Bressler First Floor
4:45 – 4:50 p.m.  Break
4:50 – 5:50 p.m.  Poster Presentation Session IV – Bressler First Floor
5:50 – 6:00 p.m.  Poster Takedown (Poster Sessions III & IV only)
**Awards Banquet**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>6:00 - 8:00 p.m.</td>
<td>Dinner – MSTF Atrium</td>
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<tr>
<td>6:00 - 6:20 p.m.</td>
<td>Welcome Address&lt;br&gt;<strong>Gregory B. Carey, Ph.D.</strong>&lt;br&gt;Student Representative, AOA Medical Honor Society</td>
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<td>6:20 - 7:00 p.m.</td>
<td>Keynote Address&lt;br&gt;<strong>Thomas M. Scalea, M.D., FACS</strong>&lt;br&gt;Professor of Surgery&lt;br&gt;Physician-in-Chief R Adams Cowley Shock Trauma Center&lt;br&gt;Francis X. Kelly Distinguished Professor in Trauma Surgery System&lt;br&gt;Chief for Critical Care Services&lt;br&gt;President of American Association for Surgery of Trauma (2014-2015)</td>
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<td>7:00 – 7:40 p.m.</td>
<td>Presentation of Awards &amp; Certificates&lt;br&gt;<strong>Gregory B. Carey, Ph.D.</strong>&lt;br&gt;<strong>George T. Fantry, M.D.</strong>&lt;br&gt;Associate Professor of Medicine&lt;br&gt;Assistant Dean for Student Research and Education</td>
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Oral Presentation Schedule

Oral presentations are 15 minutes each.

**Oral Presentation Session I**
1:00 – 3:05 p.m.
Taylor Lecture Hall

O.01 1:00 p.m.
EARLY MICROCHIMERISM AFTER FACE TRANSPLANTATION DETECTED BY QUANTITATIVE REAL-TIME POLYMERASE CHAIN REACTION OF INSERTION/DELETION POLYMORPHISMS. Benjamin Schultz*, Eduardo Rodriguez¹, Rolf Barth², and Jhade Woodall³, ¹Department of Plastic and Reconstructive Surgery, New York University School of Medicine, New York, NY and ²Division of Transplantation, ³Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.02 1:15 p.m.
TRANSVERSE INFRA-CLAVICULAR THORACOACROMIAL (TIC TAC): A NEW APPROACH TO A RARELY USED RECIPIENT IN MICROSURGICAL BREAST RECONSTRUCTION. Vasilios Mavrophilipos*, Karan Chopra, Jeffrey Zapora, Luther Hamilton Holton III, and Devinder Singh, Division of Plastic Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.03 1:30 p.m.
COMPARISON OF OPEN CARDIAC MASSAGE VERSUS CLOSED CHEST COMPRESSIONS IN TRAUMA USING END-TIDAL CARBON DIOXIDE MONITORING AS A MARKER FOR RESUSCITATION. Luke Chang*, Brandon Bonds, Matthew Bradley, and Deborah Stein, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.04 1:45 p.m.
INVESTIGATING THE ROLE OF PKD1 HOMOLOGS IN DROSOPHILA FERTILITy. Steven Chan*, Weizhe Li, Stacey Bridges, and Terry Watnick, Division of Nephrology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

**Break (2:00–2:05 p.m.)**

O.05 2:05 p.m.
THE ROLE OF PC1 CLEAVAGE AT ITS GPS DOMAIN IN THE DEVELOPMENT OF BLOOD AND LYMPHATIC VESSELS. Kathleen McAvoy*, Patricia Outeda, Feng Qian, and Terry Watnick, Division of Nephrology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.06 2:20 p.m.
CHARACTERIZATION OF GFR AND PATIENT-REPORTED OUTCOMES IN PATIENTS WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE (ADPKD). Anna Pham*, Stephen Seliger¹, Thomas Dowling², Charalett Diggs¹, and Terry Watnick¹, ¹Division of Nephrology, Department of Medicine, University of Maryland School of Medicine and ²Department
O.07 2:35 p.m.  
Abstract Retracted

O.08 2:50 p.m.  
“IS CT SLIC ENOUGH?” PARSING THE DIAGNOSTIC UTILITY OF CT AND MRI USING THE THE SUBAXIAL CERVICAL SPINE INJURY CLASSIFICATION (SLIC) SYSTEM.  
Daniel Mascarenhas*, David Dreizin, and Uttam Bodanapally, Division of Trauma and Emergency Radiology, Department of Diagnostic Radiology and Nuclear Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.09 1:00 p.m.  
IN VIVO TRACKING OF MESENCHYMAL PROGENITOR CELL SURVIVAL AND PROLIFERATION IN MURINE POSTEROLATERAL INTERTRANSVERSE LUMBAR SPINAL FUSION.  Ioan Lina*, Timothy Witham, and Christina Holmes, Division of Spine, Department of Neurosurgery, Johns Hopkins University School of Medicine, Baltimore, MD.

O.10 1:15 p.m.  
MAGNETIC NANOBEBDS FOR TARGETED DELIVERY OF HUMAN STEM CELLS IN REGENERATIVE MEDICINE.  Emily Shea Kowalski*, Michal Zalzman1, and Lorna Silipino2,  
1Department of Biochemistry and Molecular Biology and 2Department of Otorhinolaryngology - Head and Neck Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.11 1:30 p.m.  
KINEMATIC ANALYSIS OF ARM REACHING MOVEMENTS IN DIVERSE NEUROLOGIC POPULATIONS.  Christine Kang*, Susan Conroy1, Anindo Roy2, and Christopher Bever2,  
1Department of Physical Therapy and Rehabilitation Science and 2Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

O.12 1:45 p.m.  
L-655,708 INDUCED ELECTROPHYSIOLOGICAL CHANGES IN THE HIPPOCAMPUS AND NUCLEUS ACCUMBENS OF THE RAT BRAIN.  Natalie Hesselgrave* and Scott Thompson, Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

Break (2:00 – 2:05 p.m.)

O.13 2:05 p.m.  
THE AUDIOLOGICAL AND HISTOLOGICAL CONSEQUENCES OF NOISE TRAUMA IN B6/CBAF1/J MICE.  Virginia Drake* and Ronna Hertzano, Department of Otorhinolaryngology - Head and Neck Surgery, University of Maryland School of Medicine, Baltimore, MD.
O.14 2:20 p.m.
COMPARATIVE EFFECTS OF 3 CLINICALLY RELEVANT TREATMENTS IN SPINAL CORD INJURY. Hillary Hosier* and J. Marc Simard, Department of Neurosurgery, University of Maryland School of Medicine, Baltimore, MD.

O.15 2:35 p.m.
EFFECTS OF ROUTINE PATIENT CARE AND EXTERNAL STIMULI ON INTRACRANIAL PRESSURE LEVELS OF PATIENTS WITH SEVERE TRAUMATIC BRAIN INJURY. Anish Gonchigar*, Brandon Bonds¹, Peter Hu², and Deborah Stein¹. ¹Department of Surgery and ²Department of Anesthesiology, University of Maryland School of Medicine, Baltimore, MD.

O.16 2:50 p.m.
THE DOMINANT NEGATIVE EFFECT OF PC1 MUTANTS G593R AND G209R. Justin Cohen*, Elias Blancon, and Iris Lindberg, Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD.

Break (3:05 – 3:15 p.m.)

Oral Presentation Session III
3:15 – 5:20 p.m.
Taylor Lecture Hall

O.17 3:15 p.m.
EVALUATING THE ROLE OF ACTIN BUNDLING PROTEIN FASCIN IN AROMATASE INHIBITOR RESISTANT BREAST CANCER CELLS. Richa Kalsi*, Angela Brodie, and Amanda Scheh, Department of Pharmacology and Experimental Therapeutics, University of Maryland School of Medicine, Baltimore, MD.

O.18 3:30 p.m.
WHAT IS THE IMPACT OF RADIOTHERAPY ON CARDIAC FUNCTION IN PATIENTS RECEIVING TARGETED HER2 BASED SYSTEMIC THERAPY? Daphna Katz*, Katherine Tkaczuk¹, Kaitlin Baron², Kruti Patel¹, and Steven Feigenberg³. ¹Division of Hematology-Oncology, ²Department of Medicine and ³Department of Radiation Oncology, University of Maryland School of Medicine, Baltimore, MD.

O.19 3:45 p.m.
VEGF AND SDF-1 AS PREDICTORS OF WOUND HEALING. James Van Meerbeke* and Stephen Thom, Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.20 4:00 p.m.
CALCIUM SIGNALING IN ARTERIOLES AND SMALL ARTERIES OF CONSCIOUS OPTICAL BIOSENSOR MICE. Scarlett Hao*, Seth Fairfax, Joseph Mauban, Mark Rizzo, Jin Zhang, and W. Gil Wier, Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

Break (4:15 – 4:20 p.m.)
O.21 4:20 p.m.
PARENTAL OPINION ON WHOLE GENOME SEQUENCING AS A DIAGNOSTIC TOOL IN THE UMMC NICU. Jenna Maggin*, Linda Jenna, and Dina El-Metwally. Department of Biochemistry and Molecular Biology and Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

O.22 4:35 p.m.
ELUCIDATING THE UV-INDUCED TLR4/MYD88-DEPENDENT APOPTOTIC SIGNALING PATHWAY. Kerry Heitmiller*, Rita Fishelevich, Erin Harberts, and Gaspari Anthony. Department of Dermatology, and Department of Microbiology & Immunology, University of Maryland School of Medicine, Baltimore, MD.

O.23 4:50 p.m.
A NOVEL LARGE ANIMAL MODEL OF ACUTE RESPIRATORY DISTRESS SYNDROME INDUCED BY SEVERE TRAUMA. Diana Pratt*, Pablo Sanchez, and Bartley Griffith. Division of Cardiac Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.24 5:05 p.m.
RGC-32 AS A POTENTIAL MARKER OF RELAPSES AND RESPONSE TO TREATMENT WITH GLATIRAMER ACETATE IN MULTIPLE SCLEROSIS. Adam Kruszewski*, Cosmin Tegla, Cornelia Cudrici, and Horea Rus. Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

Oral Presentation Session IV
3:15 – 5:20 p.m.
Hosick Lecture Hall

O.25 3:15 p.m.
DISADVANTAGE, TRAUMA AND EMOTION REGULATION IN CHILDREN: THE ROLE OF FAMILIES IN MODERATING PHYSIOLOGICAL STRESS RESPONSES. Alice Zhang* and Laurel Kiser. Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD.

O.26 3:30 p.m.
EXERCISE, METABOLIC FLEXIBILITY, AND ENDOTHELIAL PROGENITOR CELL MOBILIZATION IN OLDER, INSULIN RESISTANT ADULTS. Andrew Lutz*, Steven Prior, and Andrew Goldberg. Division of Gerontology and Geriatric Medicine, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.27 3:45 p.m.
INDIVIDUAL CHROMOSOMAL TELOMERE LENGTH IN HEALTHY AMISH SENIORS: THE ROLE OF TELOMERE BIOLOGY IN HUMAN AGEING. Justin Donlan* and Ying Zou. Division of Clinical Cytogenetics Laboratory, Department of Pathology, University of Maryland School of Medicine, Baltimore, MD.
O.28 4:00 p.m.
DISPARITIES IN PRESCRIBING BIOLOGIC DMARDS IN OLDER PATIENTS WITH RHEUMATOID ARTHRITIS. Christopher Morrow*, Amit Golding, and Marc Hochberg, Division of Rheumatology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

Break (4:15 – 4:20 p.m.)

O.29 4:20 p.m.
PREGNANT WOMEN’S KNOWLEDGE AND ATTITUDES REGARDING ELECTRONIC CIGARETTES. Brooke Farquhar*, Mishka Terplan¹, Margaret S. Chisolm², and Katrina Mark³, ¹Department of Obstetrics, Gynecology and Reproductive Sciences, Behavioral Health Systems Baltimore, ²Department of Psychiatry, Johns Hopkins University School of Medicine, and ³Department of Obstetrics, Gynecology and Reproductive Sciences, University of Maryland School of Medicine, Baltimore, MD.

O.30 4:35 p.m.
CAN VIEWS OF THE PROXIMAL FEMUR BE RELIABLY USED TO PREDICT MALROTATION AFTER FEMORAL NAILING? Andrew Dubina*, Michael Rozak, and Robert O'Toole, Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.
Poster Presentation Schedule

Poster Presentation Session I
1:00 – 2:00 p.m.
Bressler First Floor

P.01  1:00 p.m.
CORRELATING ANTI-CD40 AND ANTI-CD154 TROUGH LEVELS WITH CARDIAC ALLOGRAFT OUTCOMES IN CYNOMOLGU MACAQUES. Anthony Kronfli*, Agnes Azimzadeh, and Richard Pierson, Division of Cardiac Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.02  1:00 p.m.
EVALUATION OF PLATELET AND NEUTROPHIL ACTIVATION IN A XENOGENIC LUNG PERFUSION MODEL. Aakash Shah*, Agnes Azimzadeh, and Richard Pierson, Division of Cardiac Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.03  1:00 p.m.
PROGNOSTIC VALUE OF CARDIAC TROPONIN I FOLLOWING SEVERE TRAUMATIC BRAIN INJURY. Stephen Cai*, Deborah Stein, and Brandon Bonds, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.04  1:00 p.m.
THE INTERACTIVE EFFECTS OF AGE AND COMORBIDITIES ON PHYSICAL FUNCTION IN THE ELDERLY. My-Linh Nguyen*, Steven Prior, and Jacob Blumenthal, Division of Gerontology and Geriatric Medicine, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.05  1:00 p.m.
PRELIMINARY ASSESSMENT OF THE MOTOR ACTIVITY LOG-28 IN PATIENTS WITH CHRONIC STROKE. Alexandra Simpson*, Christopher Bever, Jr.*, and Susan Conroy*, 1Department of Neurology and 2Department of Physical Therapy and Rehabilitation Science, University of Maryland School of Medicine, Baltimore, MD.

P.06  1:00 p.m.
GLAUCOMA MEDICATION ADHERENCE IN VETERANS OVER A 10 YEAR PERIOD. Elyse McGlumphy* and Osamah Saeedi, Division of Glaucoma, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

P.07  1:00 p.m.
SCHIZOPHRENIA AND HIGH RISK OF SMOKING: UNDERSTANDING A NEUROBIOLOGICAL LINK THROUGH FUNCTIONAL MAGNETIC RESONANCE IMAGING. Sarah Aronson* and L. Elliot Hong, Division of Maryland Psychiatric Research Center, Department of Psychiatry, University of Maryland School of Medicine, Catonsville, MD.
PSYCHOSOCIAL PREDICTORS OF HEALTHY AND UNHEALTHY INTERPREGNANCY INTERVALS. Ruth Young*, Wendy Lane¹, Bronwyn Mayden², Renee Fox³, and Stacey Stephens⁴, ¹Division of Preventive Medicine and ³Division of Pediatrics, Department of Epidemiology and Public Health, University of Maryland School of Medicine, and ²Department of Social Work, University of Maryland School of Social Work, and ⁴Department of Social work, Morgan State University School of Social Work, Baltimore, MD.

EVALUATING PERI-ICTAL MOOD CHANGES IN PATIENTS IN AN EPILEPSY MONITORING UNIT. Mary Richert*, Jennifer Hopp¹, and Scott Thompson², ¹Department of Neurology and ²Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

INTERPLAY OF HEALTH LOCUS OF CONTROL, HIV-RELATED CONSPIRACY BELIEFS, AND GENERAL DISTRUST AMONG HIV-POSITIVE ADULTS IN BALTIMORE. Jamie Nichols*, Seth Himelhoch¹, and Melanie Bennett², ¹Division of Psychiatric Services Research and ²Division of Psychology, Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD.

A SMARTPHONE INTERVENTION TO IMPROVE ADHERENCE TO ANTIPSYCHOTIC MEDICATIONS. Elizabeth Record* and Julie Kreyenbuhl, Division of Psychiatric Services Research, Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD.

EFFECT OF PEAR1 GENOTYPE ON SOLUBLE P-SELECTIN LEVELS AFTER ASPIRIN THERAPY. Molly Bloom*, Alan Shuldiner¹, Joshua Lewis¹, and Adam Fisch², ¹Division of Endocrinology, Diabetes, and Nutrition, ²Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

PHARMACOGENETICS IN THE HOSPITAL SETTING: IMPLEMENTATION CHALLENGES AND OPPORTUNITIES. Chelsea Goodier* and Alan Shuldiner, Division of Endocrinology, Diabetes and Nutrition, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

RACIAL DIFFERENCES IN INFANT TELOMERE LENGTH AND THE MODERATION OF EXPOSURE TO INTERPERSONAL VIOLENCE. Margaret Woodbury*, Kyle Esteves¹, Katherine Theall², and Stacy Drury¹, ¹Department of Psychiatry, Tulane University School of Medicine, Baltimore, MD.
THE IMPACT OF ENTEROPATHOGENIC E. COLI TYPE III SECRETION SYSTEM EFFECTORS ON RNASE-L ACTIVITY. Jackline Joy Lasola*, Heather Ezelle, and Bret Hassel, Department of Microbiology and Immunology, University of Maryland School of Medicine, Baltimore, MD.

UTILITY OF ROUTINE HEMOCULT TESTING IN PREDICTION OF NECROTIZING ENTEROCOLITIS IN PREMATURE NEONATES. Aimee Pickering*, Rachel White*, and Natalie Davis, Division of Neonatology, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

LYMPHOCYTES ADOPTIVELY TRANSFERRED INTO CHRONICALLY STRESSED RAG2-/- MICE CONFER RAPID ANTIDEPRESSANT EFFECTS. Mitra Haeri* and Miles Herkenham, Department of Neuroscience, National Institute of Mental Health, Bethesda, MD.

NEUROMUSCULAR JUNCTION LOCATION AND SARCOLEMMAL MECHANICS ARE ALTERED IN DYSTROPHIC MUSCLE. Kathleen Twomey*, Stephen J.P. Pratt1, Karla P. Garcia-Pelagio2, and Richard M. Lovering1, 1Department of Orthopaedics and 2Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

EXPRESSION AND FUNCTIONS OF BITTER TASTE RECEPTORS IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE. Wei Qi* and Kathryn Robinett, Division of Pulmonary and Critical Care Medicine, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

SELF-EFFICACY IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE. Mahoussi Aholoukpe*, Raymond Cross, and Guruprasad Jambaulikar, Division of Gastroenterology and Hepatology, Department of Medicine, University of Maryland School of Medicine, University of Maryland School of Medicine, Baltimore, MD.

LOCUS OF CONTROL IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE. Joy Lee* and Raymond Cross, Division of Gastroenterology and Hepatology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

PRENATAL DRUG EXPOSURE, CORTISOL STRESS REACTIVITY AND ADOLESCENT PROBLEM BEHAVIORS AND WEIGHT STATUS. Dayna Mazza*, Maureen Black, and Stacy Buckingham-Howes, Division of Growth and Nutrition, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.
P.23  3:45 p.m.
PHOSPHODIESTERASE9A REGULATES NATRIURETIC PEPTIDE-STIMULATED CGMP AND CARDIAC HYPERTROPHY.  Xueying Hu*, Dong Ik Lee, and David Kass, Department of Cardiology, Johns Hopkins University School of Medicine, Baltimore, MD.

P.24  3:45 p.m.
VISUALIZING THE STRUCTURE OF HYBRID BIOMATERIALS INVOLVING POLYPROPYLENE FUMARATE (PPF) USING QUANTUM DOTS.  Michael Lee* and John Fisher, Department of Bioengineering, University of Maryland School of College Park, College Park, MD.

P.25  3:45 p.m.
SITE-SPECIFIC TARGETING PLATELET-RICH PLASMA VIA SUPERPARAMAGNETIC NANOPARTICLES.  Tara Talae*, Richard Lovering¹, Stephen Pratt¹, Su Xu², Paul Yarowsky³, ¹Department of Orthopaedics, University of Maryland School of Medicine, ²Department of Diagnostic Radiology and Nuclear Medicine, and ³Department of Pharmacology, University of Maryland School of Medicine, Baltimore, MD.

P.26  3:45 p.m.
OPTIMIZATION OF NANOPARTICLES FOR EFFECTIVE DRUG TRANSPORT IN THE TREATMENT OF GlioBLASTOMA.  Philip Smith*, Graeme Woodworth, and Anthony Kim, Department of Neurosurgery, University of Maryland School of Medicine, Baltimore, MD.

P.27  3:45 p.m.
THE ROLE OF SRC FAMILY KINASES IN THE THERAPEUTIC TARGETING OF CD99 IN ACUTE MYELOID LEUKEMIA.  Yue Li*, Stephen Chung, and Christopher Park, Human Oncology and Pathogenesis Program, Memorial Sloan Kettering Cancer Center, New York, NY.

P.28  3:45 p.m.
IDENTIFICATION OF A NOVEL T CELL RECEPTOR FOR GENE THERAPY OF HPV-ASSOCIATED MALIGNANCIES.  Lindsey Draper*, Tracy E. Campbell, Steven A. Rosenberg, and Christian S. Hinrichs, Tumor Immunology Section, Department of Surgery, National Cancer Institute, Bethesda, MD.

P.29  3:45 p.m.
THE EFFECTS OF LEFT VENTRICULAR ASSIST DEVICES ON CARDIOPROTECTIVE β-ARRESTIN-MEDIATED SIGNAL TRANSDUCTION IN A LARGE ANIMAL HEART FAILURE MODEL.  Isa Mohammed*, Progyaparamita Saha, Pablo Sanchez, Bartley Griffith, and Keshava Rajagopal, Division of Cardiac Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.
P.30 3:45 p.m.
PREOPERATIVE ASPIRIN AND ACUTE LUNG INJURY AFTER AORTIC VALVE REPLACEMENT SURGERY. Woderyelesh Kassa* and Micheal Mazzeffi, Department of Anesthesiology, University of Maryland School of Medicine, Baltimore, MD.

P.31 3:45 p.m.
IDENTIFICATION OF NOVEL VARIANTS RESPONSIBLE FOR EXCEPTIONALLY HIGH HDL-C. Darya Malinina*, Jeff Rhyne, and Michael Miller, Division of Cardiology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.32 3:45 p.m.
THE USE OF CARDIAC PET TO PREDICT MYOCARDIAL ELECTROPHYSIOLOGY TISSUE PROPERTIES. Nathan Maassel*, Mark Smith1, Timm Dickfeld2, and Vasken Dilsizian1, 1Department of Diagnostic Radiology and Nuclear Medicine and 2Division of Cardiology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.33 3:45 p.m.
A PROSPECTIVE RANDOMIZED TRIAL OF TRICUSPID ANNULOPLASTY FOR MODERATE TRICUSPID REGURGITATION IN PATIENTS UNDERGOING MITRAL VALVE OPERATION. Eddy Zandee van Rilland*, James Gammie, and Faisal Cheema, Division of Cardiac Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

Break (4:45 – 4:50 p.m.)

Poster Presentation Session IV
4:50 – 5:50 p.m.
Bressler First Floor

P.34 4:50 p.m.
EVALUATION OF PATIENTS WITH VASOVAGAL SYNCOPE AND HEADACHE DURING HUT-TEST. Sara Van Meerbeke* and Ramesh Khurana, Department of Neurology, MedStar Union Memorial Hospital, Baltimore, MD.

P.35 4:50 p.m.
CAN WEBSITE INFORMATION BE USED TO IDENTIFY GUIDELINE-CONCORDANT WEIGHT LOSS PROGRAMS IN THE COMMUNITY? Benjamin Bloom*, Ambereen Mehta2, and Kimberly Gudzune1, 1Welch Center for Epidemiology, Prevention, and Clinical Research, 2Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD.

P.36 4:50 p.m.
ASSOCIATION BETWEEN TOTAL CHOLESTEROL AND AT-RISK PSYCHOSES SYMPTOMS AMONG HELP-SEEKING ADOLESCENTS. Xavier Diao*, Caroline Demro1, Elizabeth Thompson1, Jason Schiffman1, and Gloria Reeves2, 1Department of Psychology, University of Maryland, Baltimore County and 2Division of Child and Adolescent Psychiatry, Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD.
P.37 4:50 p.m.
HYDROPHOBICALLY MODIFIED BIOPOLYMER FOR CONTROL OF MASSIVE HEMORRHAGE. Apurva Chaturvedi*, Matthew Dowling1, Srinivasa Raghavan2, and Ian MacIntire3, and Mayur Narayan4, 1Department of Bioengineering and 2Department of Chemical and Biomolecular Engineering, University of Maryland, College Park, College Park, MD, 3Department of Research and Development, Remedium Technologies, Inc., College Park, MD, and 4Division of Trauma, Critical Care, Acute Care and Emergency General Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.38 4:50 p.m.
REPLICATION OF ASSOCIATION OF A LOSS-OF-FUNCTION MUTATION IN HORMONE-SENSITIVE LIPASE WITH METABOLIC TRAITS IN THE AMISH. Donique Parris*, Toni Pollin, Alan Shuldiner, and Coleen Damcott, Division of Endocrinology, Diabetes, and Nutrition, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.39 4:50 p.m.
ACCURACY OF CONTINUOUS NONINVASIVE HEMOGLOBIN MONITORING FOR THE PREDICTION OF BLOOD TRANSFUSIONS IN TRAUMA PATIENTS. David Hanna* and Samuel Galvagno Jr., Division of Trauma Anesthesiology and Critical Care Medicine, Department of Anesthesiology, University of Maryland School of Medicine, Baltimore, MD.

P.40 4:50 p.m.
ACUTE LOWER EXTREMITY ISCHEMIA AS A POTENTIAL MAJOR COMPLICATION AFTER CARDIOTHORACIC (CT) SURGERY. Angelina She*, Dr. Robert S. Crawford1, Donald Harris2, and Adriana Laser2, 1Division of Vascular Surgery, 2Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.41 4:50 p.m.
IS INCISIONAL NEGATIVE PRESSURE WOUND THERAPY ASSOCIATED WITH DECREASED SURGICAL SITE INFECTIONS? Nina Semsarzadeh*, Karan Chopra1, Kashyap Tadisina2, John Maddox1, and Devinder Singh1, 1Division of Plastic Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD and 2University of Illinois at Chicago College of Medicine, Chicago, IL.

P.42 4:50 p.m.
DOES MARIJUANA USE LEAD TO POOR OUTCOMES AFTER KIDNEY TRANSPLANTATION? Garrett Greenan*, Silke Niederhaus1, Jonathan Bromberg1, Megan Anders2, and Alexia Leeser3, 1Department of Surgery and 2Department of Anesthesiology, University of Maryland School of Medicine and 3Sandy Spring Friends School, Baltimore, MD.

P.43 4:50 p.m.
OUTCOMES OF TROCHANTERIC OSTEOTOMIES FOR ACETABULAR FRACTURE SURGERY. Andrew Dubina*, Niluka Wickramaratne1, Robert O'Toole2, and Theodore Manson1, 1Department of Surgery, Virginia Commonwealth University Health System, Richmond, VA and 2Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.
AN INVESTIGATION OF THE COST OF GLAUCOMA-BASED DISEASE SURVEILLANCE. Emily Schelelein* and Osamah Saeedi, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.