



UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE

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
MSRD Event Coordinator

Willard Applefeld, MS IV
MSRD Event Coordinator

Sarah Britz, MS IV

Alexandra Nolan Byrne, MS IV

An Chen, MS IV

Kristen Coletti, MS IV

Katherine Jacobs, MS IV
MSRD Event Coordinator

Elyse McGlumphy, MS IV

Shannon Serlemitsos, 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 Serlemitsos, 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

6:00 – 8:00 p.m.

6:00 - 8:00 p.m.

Dinner – MSTF Atrium

6:00 - 6:20 p.m.

Welcome Address

Gregory B. Carey, Ph.D.

Student Representative, AOA Medical Honor Society

6:20 - 7:00 p.m.

Keynote Address

Thomas M. Scalea, M.D., FACS

Professor of Surgery

Physician-in-Chief R Adams Cowley Shock Trauma Center

Francis X. Kelly Distinguished Professor in Trauma Surgery System

Chief for Critical Care Services

President of American Association for Surgery of Trauma (2014-2015)

7:00 – 7:40 p.m.

Presentation of Awards & Certificates

Gregory B. Carey, Ph.D.

George T. Fantry, M.D.

Associate Professor of Medicine

Assistant Dean for Student Research and Education

7:40 – 7:55 p.m.

Closing Remarks

Participants

Last Name	First Name	Class	Session	ID	Time	Location
Aholoukpe	Mahoussi	2017	Poster II	P.20	2:05 PM	Bressler First Floor
Aronson	Sarah	2018	Poster I	P.07	1:00 PM	Bressler First Floor
Bloom	Benjamin	2017	Poster IV	P.35	4:50 PM	Bressler First Floor
Bloom	Molly	2017	Poster II	P.12	2:05 PM	Bressler First Floor
Cai	Stephen	2017	Poster I	P.03	1:00 PM	Bressler First Floor
Chan	Steven	2017	Oral I	O.04	1:45 PM	Taylor Lecture Hall
Chang	Luke	2017	Oral I	O.03	1:30 PM	Taylor Lecture Hall
Chaturvedi	Apurva	2017	Poster IV	P.37	4:50 PM	Bressler First Floor
Cohen	Justin	2017	Oral II	O.16	2:50 PM	Hosick Lecture Hall
Diao	Xavier	2017	Poster IV	P.36	4:50 PM	Bressler First Floor
Donlan	Justin	2017	Oral IV	O.27	3:45 PM	Hosick Lecture Hall
Drake	Virginia	2017	Oral II	O.13	2:05 PM	Hosick Lecture Hall
Draper	Lindsey	2017	Poster III	P.28	3:45 PM	Bressler First Floor
Dubina	Andrew	2015	Oral IV	O.30	4:35 PM	Hosick Lecture Hall
Dubina	Andrew	2015	Poster IV	P.43	4:50 PM	Bressler First Floor
Farquhar	Brooke	2017	Oral IV	O.29	4:20 PM	Hosick Lecture Hall
Gonchigar	Anish	2017	Oral II	O.15	2:35 PM	Hosick Lecture Hall
Goodier	Chelsea	2017	Poster II	P.13	2:05 PM	Bressler First Floor
Greenan	Garrett	2017	Poster IV	P.42	4:50 PM	Bressler First Floor
Haeri	Mitra	2017	Poster II	P.17	2:05 PM	Bressler First Floor
Hanna	David	2017	Poster IV	P.39	4:50 PM	Bressler First Floor
Hao	Scarlett	2017	Oral III	O.20	4:00 PM	Taylor Lecture Hall
Heitmiller	Kerry	2017	Oral III	O.22	4:35 PM	Taylor Lecture Hall
Hesselgrave	Natalie	2017	Oral II	O.12	1:45 PM	Hosick Lecture Hall
Hosier	Hillary	2017	Oral II	O.14	2:20 PM	Hosick Lecture Hall
Hu	Xueying	2017	Poster III	P.23	3:45 PM	Bressler First Floor
Kalsi	Richa	2017	Oral III	O.17	3:15 PM	Taylor Lecture Hall
Kang	Christine	2017	Oral II	O.11	1:30 PM	Hosick Lecture Hall
Kassa	Woderyelesh	2017	Poster III	P.30	3:45 PM	Bressler First Floor
Katz	Daphna	2017	Oral III	O.18	3:30 PM	Taylor Lecture Hall
Kronfli	Anthony	2017	Poster I	P.01	1:00 PM	Bressler First Floor
Kruszewski	Adam	2017	Oral III	O.24	5:05 PM	Taylor Lecture Hall
Lasola	Jackline Joy	2018	Poster II	P.15	2:05 PM	Bressler First Floor
Lee	Joy	2017	Poster II	P.21	2:05 PM	Bressler First Floor
Lee	Michael	2018	Poster III	P.24	3:45 PM	Bressler First Floor
Li	Yue (Claire)	2017	Poster III	P.27	3:45 PM	Bressler First Floor
Lina	Ioan	2017	Oral II	O.09	1:00 PM	Hosick Lecture Hall

Last Name	First Name	Class	Session	ID	Time	Location
Lutz	Andrew	2017	Oral IV	O.26	3:30 PM	Hosick Lecture Hall
Maassel	Nathan	2017	Poster III	P.32	3:45 PM	Bressler First Floor
Maggin	Jenna	2017	Oral III	O.21	4:20 PM	Taylor Lecture Hall
Malinina	Darya	2017	Poster III	P.31	3:45 PM	Bressler First Floor
Mascarenhas	Daniel	2017	Oral I	O.08	2:50 PM	Taylor Lecture Hall
Mavrophilipos	Vasilios	2016	Oral I	O.02	1:15 PM	Taylor Lecture Hall
Mazza	Dayna	2017	Poster II	P.22	2:05 PM	Bressler First Floor
McAvoy	Kathleen	2017	Oral I	O.05	2:05 PM	Taylor Lecture Hall
McGlumphy	Elyse	2015	Poster I	P.06	1:00 PM	Bressler First Floor
Mohammed	Isa	2017	Poster III	P.29	3:45 PM	Bressler First Floor
Morrow	Christopher	2017	Oral IV	O.28	4:00 PM	Hosick Lecture Hall
Nguyen	My-Linh	2017	Poster I	P.04	1:00 PM	Bressler First Floor
Nichols	Jamie	2017	Poster I	P.10	1:00 PM	Bressler First Floor
Parris	Donique	2017	Poster IV	P.38	4:50 PM	Bressler First Floor
Pham	Anna	2017	Oral I	O.06	2:20 PM	Taylor Lecture Hall
Pickering	Aimee	2017	Poster II	P.16	2:05 PM	Bressler First Floor
Pratt	Diana	2017	Oral III	O.23	4:50 PM	Taylor Lecture Hall
Qi	Wei (Maggie)	2017	Poster II	P.19	2:05 PM	Bressler First Floor
Record	Elizabeth	2017	Poster I	P.11	1:00 PM	Bressler First Floor
Richert	Mary	2017	Poster I	P.09	1:00 PM	Bressler First Floor
Schehlein	Emily	2017	Poster IV	P.44	4:50 PM	Bressler First Floor
Schultz	Benjamin	2015	Oral I	O.01	1:00 PM	Taylor Lecture Hall
Semsarzadeh	Nina	2017	Poster IV	P.41	4:50 PM	Bressler First Floor
Shah	Aakash	2017	Poster I	P.02	1:00 PM	Bressler First Floor
She	Angelina	2017	Poster IV	P.40	4:50 PM	Bressler First Floor
Shea Kowalski	Emily	2015	Oral II	O.10	1:15 PM	Hosick Lecture Hall
Simpson	Alexandra	2017	Poster I	P.05	1:00 PM	Bressler First Floor
Smith	Philip	2018	Poster III	P.26	3:45 PM	Bressler First Floor
Talaie	Tara	2017	Poster III	P.25	3:45 PM	Bressler First Floor
Twomey	Kathleen	2017	Poster II	P.18	2:05 PM	Bressler First Floor
Van Meerbeke	James	2017	Oral III	O.19	3:45 PM	Taylor Lecture Hall
Van Meerbeke	Sara	2017	Poster IV	P.34	4:50 PM	Bressler First Floor
White	Rachel	2017	Poster II	P.16	2:05 PM	Bressler First Floor
Woodbury	Margaret	2017	Poster II	P.14	2:05 PM	Bressler First Floor
Young	Ruth	2017	Poster I	P.08	1:00 PM	Bressler First Floor
Zandee van Rilland	Eddy	2017	Poster III	P.33	3:45 PM	Bressler First Floor
Zhang	Alice	2017	Oral IV	O.25	3:15 PM	Hosick Lecture Hall

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

of Pharmacology and Experimental Therapeutics, University of Maryland School of Pharmacy, Baltimore, MD.

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.

Oral Presentation Session II

1:00 – 3:05 p.m.

Hosick Lecture Hall

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 NANOBeadS 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 Patel³, 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 WHOLES GENOME SEQUENCING AS A DIAGNOSTIC TOOL IN THE UMMC NICU. Jenna Maggin*, Linda Jenna¹, and Dina El-Metwally², ¹Department of Biochemistry and Molecular Biology and ²Department 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 Fishlevich¹, Erin Harberts², and Gaspari Anthony¹, ¹Department of Dermatology, and ²Department 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.¹, and Susan Conroy², 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.

P.08 1:00 p.m.

PSYCHOSOCIAL PREDICTORS OF HEALTHY AND UNHEALTHY INTERPREGNANCY INTERVALS. Ruth Young*, Wendy Lane¹, Bronwyn Maiden², 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 ⁴ Department of Social work, Morgan State University School of Social Work, Baltimore, MD.

P.09 1:00 p.m.

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.

P.10 1:00 p.m.

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.

P.11 1:00 p.m.

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.

Break (2:00 – 2:05 p.m.)

Poster Presentation Session II

2:05 – 3:05 p.m.

Bressler First Floor

P.12 2:05 p.m.

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.

P.13 2:05 p.m.

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.

P.14 2:05 p.m.

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 and ²Department of Global Community Health and Behavioral Sciences, Tulane University School of Public Health and Tropical Medicine, New Orleans, LA.

P.15 2:05 p.m.

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.

P.16 2:05 p.m.

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.

P.17 2:05 p.m.

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.

P.18 2:05 p.m.

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.

P.19 2:05 p.m.

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.

P.20 2:05 p.m.

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.

P.21 2:05 p.m.

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.

P.22 2:05 p.m.

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.

Poster Takedown (3:05 – 3:15 p.m.)

Poster Setup (3:15 – 3:45 p.m.)

Poster Presentation Session III

3:45 – 4:45 p.m.

Bressler First Floor

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 Talaie*, 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 B-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. Woderyesh 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 Gudzone¹, 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 PSYCHOSIS 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 Leaser³, 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 Manson², ¹Department of Surgery, Virginia Commonwealth University Health System, Richmond, VA and ²Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

P.44 4:50 p.m.

AN INVESTIGATION OF THE COST OF GLAUCOMA-BASED DISEASE SURVEILLANCE. Emily Schehlein* and Osamah Saeedi, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.