



UNIVERSITY *of* MARYLAND
SCHOOL OF MEDICINE

38th Annual
Medical Student Research Day

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

Thursday, September 17, 2015
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

The names of all of the AOA student member event staff will be listed in the final electronic version of the program booklet that will be posted on the website.

Christian Larsen, MS IV
MSRD Event Coordinator

Rachel Smith, MS IV
MSRD Event Coordinator

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, 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.

38th Annual Medical Student Research Day

Thursday, September 17, 2015

Noon – 7:00 p.m.

University of Maryland School of Medicine

Baltimore, MD, 21201

7:00 a.m. – 12:20 p.m.	<i>Poster Setup (Poster Sessions I & II only)</i>
12:00 – 1:20 p.m.	Registration
Lunch & Keynote Address	12:00 – 1:30 p.m.
12:00 – 1:20 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
	Rachel W. Smith, MS IV Member, Maryland Beta Chapter Alpha Omega Alpha Medical Honor Society
12:40 – 1:10 p.m.	Keynote Address Nevins W. Todd, M.D. Associate Professor of Medicine Director of Pulmonary and Critical Care Medicine Fellowship
1:10 – 1:20 p.m.	Schedule & Procedures Qi Cao, J.D. Research Coordinator
1:20 – 1:30 p.m.	<i>Break</i>
Oral Presentations	1:30 – 4:50 pm
1:30 – 3:05 p.m.	Oral Presentation Session I – Taylor Hall Oral Presentation Session II – Hosick Hall (5-minute break at 2:15 p.m.)
3:05 – 3:15 p.m.	<i>Break</i>
3:15 – 4:50 p.m.	Oral Presentation Session III – Taylor Hall Oral Presentation Session IV – Hosick Hall (5-minute break at 4:00 p.m.)
Poster Presentations	1:30 – 5:25 p.m.
1:30 – 2:30 p.m.	Poster Presentation Session I – Bressler First Floor
2:30 – 2:35 p.m.	<i>Break</i>
2:35 – 3:35 p.m.	Poster Presentation Session II – Bressler First Floor
3:35 – 3:45 p.m.	<i>Poster Takedown (Poster Sessions I & II only)</i>

3:45 – 4:15 p.m. *Poster Setup (Poster Sessions III only)*
4:15 – 5:15 p.m. Poster Presentation Session III – Bressler First Floor
5:15 – 5:25 p.m. *Poster Takedown (Poster Sessions III only)*

Awards Banquet

5:30 – 7:00 p.m.

5:30 – 7:00 p.m. Dinner – MSTF Atrium

5:50 – 6:30 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

6:30 – 6:45 p.m. Closing Remarks

Presentation Schedule

Session	PID	Time	Location	Last Name	First Name	Class	Program
Oral I	O.01	1:30 PM	Taylor Lecture Hall	Douglas	Taylor	2017	EMRA
Oral I	O.02	1:45 PM	Taylor Lecture Hall	Dewan	Ramita	2018	AOA, ABTA
Oral I	O.03	2:00 PM	Taylor Lecture Hall	Trent	Graham	2018	PRISM
Oral I	O.04	2:20 PM	Taylor Lecture Hall	Oates	Connor	2018	PRISM
Oral I	O.05	2:35 PM	Taylor Lecture Hall	Sayre	David	2018	PRISM
Oral I	O.06	2:50 PM	Taylor Lecture Hall	Lasola	Jackline Joy	2018	Independent
Oral II	O.07	1:30 PM	Hosick Lecture Hall	Francomacaro	Sara	2018	PRISM
Oral II	O.08	1:45 PM	Hosick Lecture Hall	Kumar	Kalyani	2018	PRISM
Oral II	O.09	2:00 PM	Hosick Lecture Hall	Arai	Allison	2018	MSTP
Oral II	O.10	2:20 PM	Hosick Lecture Hall	Bae	Crystal	2017	Independent
Oral II	O.11	2:35 PM	Hosick Lecture Hall	Rosen	Claire	2018	PRISM
Oral II	O.12	2:50 PM	Hosick Lecture Hall	Yin	Serena	2018	PRISM
Oral III	O.13	3:15 PM	Taylor Lecture Hall	Chang	Sarah	2018	Independent
Oral III	O.14	3:30 PM	Taylor Lecture Hall	Le	Gloribel	2018	PRISM
Oral III	O.15	3:45 PM	Taylor Lecture Hall	Fischer	Andrew	2018	PRISM
Oral III	O.16	4:05 PM	Taylor Lecture Hall	Lu	Michael	2018	SPORT
Oral III	O.17	4:20 PM	Taylor Lecture Hall	So	Conan	2018	Hosp for Spec Surgery
Oral III	O.18	4:35 PM	Taylor Lecture Hall	Ross	Keir	2018	Independent
Oral IV	O.19	3:15 PM	Hosick Lecture Hall	Klepfer Rivera	Stephen Carlos	2018 2018	PRISM Independent
Oral IV	O.20	3:30 PM	Hosick Lecture Hall	Grill Slack	Elena Daniel	2018 2018	FAER PRISM
Oral IV	O.21	3:45 PM	Hosick Lecture Hall	DeLaurentis	Clare	2018	PRISM
Oral IV	O.22	4:05 PM	Hosick Lecture Hall	Donthi	Nisha	2018	PRISM
Oral IV	O.23	4:20 PM	Hosick Lecture Hall	Kleiman	Hannah	2018	PRISM
Oral IV	O.24	4:35 PM	Hosick Lecture Hall	Qureshi	Azam	2018	Independent
Poster I	P.01	1:30 PM	Bressler First Floor	Olexa	Joshua	2018	Independent
Poster I	P.02	1:30 PM	Bressler First Floor	Khan	Zulqarnain	2018	PRISM
Poster I	P.03	1:30 PM	Bressler First Floor	Lotz	Matthew	2018	PRISM
Poster I	P.04	1:30 PM	Bressler First Floor	Donald	Elena	2018	PRISM
Poster I	P.05	1:30 PM	Bressler First Floor	Hayon Huffner	Solomon Michael	2017 2017	Independent Independent
Poster I	P.06	1:30 PM	Bressler First Floor	Rouse	Michael	2018	PRISM

Presentation Schedule

Session	PID	Time	Location	Last Name	First Name	Class	Program
Poster I	P.07	1:30 PM	Bressler First Floor	Posner	Andrew	2018	Independent
Poster I	P.08	1:30 PM	Bressler First Floor	Gourishetti	Saikrishna	2018	PRISM
Poster I	P.09	1:30 PM	Bressler First Floor	Lancaster	Tim	2018	PRISM
Poster I	P.10	1:30 PM	Bressler First Floor	Ye	Nancy	2018	PRISM
Poster I	P.11	1:30 PM	Bressler First Floor	Rotunno	Giuliana	2018	Independent
Poster I	P.12	1:30 PM	Bressler First Floor	Muscatelli	Stefano	2018	Shock Trauma Ortho Group
Poster II	P.13	2:35 PM	Bressler First Floor	Desai Danquah	Neal Jonathan	2018 2016	Independent Independent
Poster II	P.14	2:35 PM	Bressler First Floor	Cherian	Nuval	2018	NIDDK
Poster II	P.15	2:35 PM	Bressler First Floor	Green	Hallie	2018	Independent
Poster II	P.16	2:35 PM	Bressler First Floor	Waldrop	Greer	2018	Independent
Poster II	P.17	2:35 PM	Bressler First Floor	Xiang	Jing	2018	Univ Colorado Cancer Research
Poster II	P.18	2:35 PM	Bressler First Floor	Brao	Kristen	2018	MSTP
Poster II	P.19	2:35 PM	Bressler First Floor	Bahmani Kazerooni	Leila	2018	Independent
Poster II	P.20	2:35 PM	Bressler First Floor	Kalutkiewicz	Katelyn	2018	Independent
Poster II	P.21	2:35 PM	Bressler First Floor	Heffernan	Maura	2018	PRISM
Poster II	P.22	2:35 PM	Bressler First Floor	Reid	Jennifer	2018	SPORT
Poster III	P.23	4:15 PM	Bressler First Floor	Danoff	Jacob	2018	PRISM
Poster III	P.24	4:15 PM	Bressler First Floor	Doran	Sarah	2018	MSTP
Poster III	P.25	4:15 PM	Bressler First Floor	Grimes	Kathryn	2018	PRISM
Poster III	P.26	4:15 PM	Bressler First Floor	Hewes	Daniel	2018	PRISM, FCMSC
Poster III	P.27	4:15 PM	Bressler First Floor	Iqbal	Tahreem	2018	AAN
Poster III	P.28	4:15 PM	Bressler First Floor	Schuh	Brittany	2017	Independent
Poster III	P.29	4:15 PM	Bressler First Floor	Turlington Cassady	Kate Maureen	2018 2018	Independent Independent
Poster III	P.30	4:15 PM	Bressler First Floor	Wied	Heather	2016	Independent
Poster III	P.31	4:15 PM	Bressler First Floor	Winer	Jeremy	2018	PRISM
Poster III	P.32	4:15 PM	Bressler First Floor	Zhang	Jackie	2018	PRISM
Poster III	P.33	4:15 PM	Bressler First Floor	Shi	Vivian	2018	PRISM

Participants

Last Name	First Name	Class	Program	Session	PID	Time	Location
Arai	Allison	2018	MSTP	Oral II	O.09	2:00 PM	Hosick Lecture Hall
Bae	Crystal	2017	Independent	Oral II	O.10	2:20 PM	Hosick Lecture Hall
Bahmani Kazerooni	Leila	2018	Independent	Poster II	P.19	2:35 PM	Bressler First Floor
Brao	Kristen	2018	MSTP	Poster II	P.18	2:35 PM	Bressler First Floor
Cassady	Maureen	2018	Independent	Poster III	P.29	4:15 PM	Bressler First Floor
Chang	Sarah	2018	Independent	Oral III	O.13	3:15 PM	Taylor Lecture Hall
Cherian	Nuval	2018	NIDDK	Poster II	P.14	2:35 PM	Bressler First Floor
Danoff	Jacob	2018	PRISM	Poster III	P.23	4:15 PM	Bressler First Floor
Danquah	Jonathan	2016	Independent	Poster II	P.13	2:35 PM	Bressler First Floor
DeLaurentis	Clare	2018	PRISM	Oral IV	O.21	3:45 PM	Hosick Lecture Hall
Desai	Neal	2018	Independent	Poster II	P.13	2:35 PM	Bressler First Floor
Dewan	Ramita	2018	AOA, ABTA	Oral I	O.02	1:45 PM	Taylor Lecture Hall
Donald	Elena	2018	PRISM	Poster I	P.04	1:30 PM	Bressler First Floor
Donthi	Nisha	2018	PRISM	Oral IV	O.22	4:05 PM	Hosick Lecture Hall
Doran	Sarah	2018	MSTP	Poster III	P.24	4:15 PM	Bressler First Floor
Douglas	Taylor	2017	EMRA	Oral I	O.01	1:30 PM	Taylor Lecture Hall
Fischer	Andrew	2018	PRISM	Oral III	O.15	3:45 PM	Taylor Lecture Hall
Francomacaro	Sara	2018	PRISM	Oral II	O.07	1:30 PM	Hosick Lecture Hall
Gourishetti	Saikrishna	2018	PRISM	Poster I	P.08	1:30 PM	Bressler First Floor
Green	Hallie	2018	Independent	Poster II	P.15	2:35 PM	Bressler First Floor
Grill	Elena	2018	FAER	Oral IV	O.20	3:30 PM	Hosick Lecture Hall
Grimes	Kathryn	2018	PRISM	Poster III	P.25	4:15 PM	Bressler First Floor
Hayon	Solomon	2017	Independent	Poster I	P.05	1:30 PM	Bressler First Floor
Heffernan	Maura	2018	PRISM	Poster II	P.21	2:35 PM	Bressler First Floor
Hewes	Daniel	2018	PRISM, FCMSC	Poster III	P.26	4:15 PM	Bressler First Floor
Huffner	Michael	2017	Independent	Poster I	P.05	1:30 PM	Bressler First Floor
Iqbal	Tahreem	2018	AAN	Poster III	P.27	4:15 PM	Bressler First Floor
Kalutkiewicz	Katelyn	2018	Independent	Poster II	P.20	2:35 PM	Bressler First Floor
Khan	Zulqarnain	2018	PRISM	Poster I	P.02	1:30 PM	Bressler First Floor
Kleiman	Hannah	2018	PRISM	Oral IV	O.23	4:20 PM	Hosick Lecture Hall
Klepfer	Stephen	2018	PRISM	Oral IV	O.19	3:15 PM	Hosick Lecture Hall
Kumar	Kalyani	2018	PRISM	Oral II	O.08	1:45 PM	Hosick Lecture Hall

Participants

Last Name	First Name	Class	Program	Session	PID	Time	Location
Lancaster	Tim	2018	PRISM	Poster I	P.09	1:30 PM	Bressler First Floor
Lasola	Jackline Joy	2018	Independent	Oral I	O.06	2:50 PM	Taylor Lecture Hall
Le	Gloribel	2018	PRISM	Oral III	O.14	3:30 PM	Taylor Lecture Hall
Lotz	Matthew	2018	PRISM	Poster I	P.03	1:30 PM	Bressler First Floor
Lu	Michael	2018	SPORT	Oral III	O.16	4:05 PM	Taylor Lecture Hall
Muscatelli	Stefano	2018	Shock Trauma Ortho Group	Poster I	P.12	1:30 PM	Bressler First Floor
Oates	Connor	2018	PRISM	Oral I	O.04	2:20 PM	Taylor Lecture Hall
Olexa	Joshua	2018	Independent	Poster I	P.01	1:30 PM	Bressler First Floor
Posner	Andrew	2018	Independent	Poster I	P.07	1:30 PM	Bressler First Floor
Qureshi	Azam	2018	Independent	Oral IV	O.24	4:35 PM	Hosick Lecture Hall
Reid	Jennifer	2018	SPORT	Poster II	P.22	2:35 PM	Bressler First Floor
Rivera	Carlos	2018	Independent	Oral IV	O.19	3:15 PM	Hosick Lecture Hall
Rosen	Claire	2018	PRISM	Oral II	O.11	2:35 PM	Hosick Lecture Hall
Ross	Keir	2018	Independent	Oral III	O.18	4:35 PM	Taylor Lecture Hall
Rotunno	Giuliana	2018	Independent	Poster I	P.11	1:30 PM	Bressler First Floor
Rouse	Michael	2018	PRISM	Poster I	P.06	1:30 PM	Bressler First Floor
Sayre	David	2018	PRISM	Oral I	O.05	2:35 PM	Taylor Lecture Hall
Schuh	Brittany	2017	Independent	Poster III	P.28	4:15 PM	Bressler First Floor
Shi	Vivian	2018	PRISM	Poster III	P.33	4:15 PM	Bressler First Floor
Slack	Daniel	2018	PRISM	Oral IV	O.20	3:30 PM	Hosick Lecture Hall
So	Conan	2018	Hosp for Spec Surgery	Oral III	O.17	4:20 PM	Taylor Lecture Hall
Trent	Graham	2018	PRISM	Oral I	O.03	2:00 PM	Taylor Lecture Hall
Turlington	Kate	2018	Independent	Poster III	P.29	4:15 PM	Bressler First Floor
Waldrop	Greer	2018	Independent	Poster II	P.16	2:35 PM	Bressler First Floor
Wied	Heather	2016	Independent	Poster III	P.30	4:15 PM	Bressler First Floor
Winer	Jeremy	2018	PRISM	Poster III	P.31	4:15 PM	Bressler First Floor
Xiang	Jing	2018	Univ Colorado Cancer Research	Poster II	P.17	2:35 PM	Bressler First Floor
Ye	Nancy	2018	PRISM	Poster I	P.10	1:30 PM	Bressler First Floor
Yin	Serena	2018	PRISM	Oral II	O.12	2:50 PM	Hosick Lecture Hall
Zhang	Jackie	2018	PRISM	Poster III	P.32	4:15 PM	Bressler First Floor

Oral Presentation Schedule

Oral presentations are 15 minutes each.

Oral Presentation Session I

1:30 – 3:05 p.m.

Taylor Lecture Hall

O.01 1:30 p.m.

CLINICAL CHARACTERISTICS OF PEDIATRIC PATIENTS WITH CARBON MONOXIDE TOXICITY. Taylor Douglas*, Angela Comer¹, Jon Mark Hirshon², Robert Rosenthal³, and Kinjal Sethuraman³, ¹Department of Epidemiology and Public Health and ³Division of Hyperbaric Medicine, ²Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.02 1:45 p.m.

WHOLE-EXOME SEQUENCING AND COPY-NUMBER VARIATION ANALYSIS OF 20 NEUROFIBROMATOSIS TYPE 2-ASSOCIATED SPINAL AND INTRACRANIAL MENINGIOMAS. Ramita Dewan*, Alexander Pemov¹, Ashok Asthagiri², and Douglas Stewart¹, ¹Clinical Genetics Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD and ²Department of Neurosurgery, University of Virginia, Charlotte, VA.

O.03 2:00 p.m.

OF EARS AND TEETH - AN UNEXPECTED CONNECTION. Graham Trent*, Maggie Matern, Lorna Silipino, and Ronna Hertzano, Department of Otorhinolaryngology - Head and Neck Surgery, University of Maryland School of Medicine, Baltimore, MD.

Break (2:15– 2:20 p.m.)

O.04 2:20 p.m.

UNDERSTANDING THE GENETIC BASIS OF VERY HIGH HDL THROUGH NOVEL GENETIC ASSOCIATIONS. Connor Oates*, Michael Miller, and Jeff Rhyne, Division of Cardiovascular Medicine, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.05 2:35 p.m.

X-RAY CRYSTAL STRUCTURE DETERMINATION OF THE N-TERMINAL IGV-LIKE DOMAIN OF CEACAM16. David Sayre*, Eric Sundberg, Daniel Bonsor, and Michael Loukeris, Department of Microbiology and Immunology, University of Maryland School of Medicine, Baltimore, MD.

O.06 2:50 p.m.

CELLULAR SENESCENCE ALTERS THE MITOCHONDRIA-ASSOCIATED MICRORNA PROFILE OF WI-38 CELLS. Jackline Joy Lasola*, Ji Heon Noh, and Myriam Gorospe, National Institute on Aging, National Institutes of Health, Bethesda, MD.

Oral Presentation Session II

1:30 – 3:05 p.m.

Hosick Lecture Hall

O.07 1:30 p.m.

IMMUNOMODULATION OF POST-NAION M1 UPREGULATION WHEN TREATING WITH IL4, TGFB, AND GLATIRAMER ACETATE (COPAXONE) IN A RODENT MODEL. Sara Francomacaro*, Zara Mehrabyan, and Steven Bernstein, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

O.08 1:45 p.m.

BCL-2 INHIBITORS AND ARTEMISININS COOPERATE AGAINST LEUKEMIAS. Kalyani Kumar*, Jennifer Fox¹, Xiaochun Chen, and Curt Civin, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

O.09 2:00 p.m.

DEVELOPMENTAL REGULATION OF THE OLFACTORY BULB-LATERAL ENTORHINAL CORTEX AXIS IN MICE. Allison Arai* and Sandra Jurado, Department of Pharmacology, University of Maryland School of Medicine, Baltimore, MD.

Break (2:15 – 2:20 p.m.)

O.10 2:20 p.m.

EMERGENCY CARE ASSESSMENT TOOL FOR HEALTH FACILITIES. Crystal Bae*, Emilie Calvello¹, and Lee Wallis², ¹Department of Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD and ²Division of Emergency Medicine, Department of Surgery, University of Cape Town School of Medicine, Cape Town, South Africa.

O.11 2:35 p.m.

RETROSPECTIVE REVIEW OF ROUTINE REPEAT CRANIAL CT FOR PATIENTS WITH MILD TBI. Claire Rosen*, Molly Deane, and Deborah Stein, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.12 2:50 p.m.

CHARACTERIZING PERI-ICTAL MOOD CHANGES IN PATIENTS WITH PSYCHOGENIC NONEPILEPTIC SEIZURES. Serena Yin*, Scott Thompson¹, Jennifer Hopp², ¹Department of Physiology and ²Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

Break (3:05 – 3:15 p.m.)

Oral Presentation Session III

3:15 – 4:50 p.m.
Taylor Lecture Hall

O.13 3:15 p.m.

IN-VITRO EVALUATION OF BREAST PROSTHETIC IRRIGATION SOLUTION EFFECT ON BIOFILM. Sarah Chang*, Karan Chopra, Devinder Singh, and Yvonne Rasko, Division of Plastic Surgery, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.14 3:30 p.m.

EFFECTS OF IN VIVO INJURY ON THE NEUROMUSCULAR JUNCTION IN HEALTHY AND DYSTROPHIC MUSCLES. Gloribel Le*, Stephen J.P. Pratt¹, Ana P. Valencia¹, Sameer B. Shah², and Richard M. Lovering¹, ¹Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD and ²Department of Orthopaedics, University of California San Diego School of Medicine, San Diego, CA.

O.15 3:45 p.m.

EFFECT OF EXTERNAL FIXATION ON TERRIBLE TRIAD OF THE ELBOW OUTCOMES. Andrew Fischer*, Karan Dua, and Joshua Abzug, Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

Break (4:00 – 4:05 p.m.)

O.16 4:05 p.m.

EFFECTS OF REVASCULARIZATION ON MICROVASCULAR PERFUSION AND PHYSICAL FUNCTION IN PATIENTS WITH PERIPHERAL ARTERY DISEASE. Michael Lu*, Odessa Addison, and Steven Prior, Division of Gerontology and Geriatric Medicine, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

O.17 4:20 p.m.

TRAUMATIC PEDIATRIC PATELLA DISLOCATION UTILITIES ACQUISITION AND DECISION ANALYSIS. Conan So*, Benedict Nwachukwu¹, William Schairer¹, Daniel Green², and Emily Dodwell², ²Division of Pediatric, ¹Department of Orthopaedics, Hospital for Special Surgery, New York, NY.

O.18 4:35 p.m.

AUTOLOGOUS OSTEOCHONDRAL TRANSPLANTATION FOR OSTEOCHONDRAL LESIONS OF THE TALUS: DOES PREVIOUS BONE MARROW STIMULATION AFFECT CLINICAL OUTCOME? Keir Ross*, Andrew Ross¹, Ethan Fraser², Timothy Deyer³, and John Kennedy², ¹Touro College of Osteopathic Medicine, ²Division of Foot and Ankle, Department of Orthopaedics, Hospital for Special Surgery, and ³East River Imaging, New York, NY.

Oral Presentation Session IV

3:15 – 4:50 p.m.
Hosick Lecture Hall

O.19 3:15 p.m.

LIVER BIOENGINEERING: NEONATAL RECELLULARIZATION OF AN ADULT RAT LIVER SCAFFOLD. Stephen Klepfer*, Carlos Rivera-Pratts*, Wessam Hassanein, Mehmet Uluer, Dawn Parsell, and John LaMattina, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

O.20 3:30 p.m.

CAN THE PERIOPERATIVE SURGICAL HOME RESCUE TRAUMA SURVIVORS? A PILOT STUDY OF PATIENT'S NEEDS FOLLOWING TRAUMATIC INJURY. Elena Grill*, Daniel Slack*, DANIEL SLACK, ERIN HALL¹, FRANCES GRISSOM², Maureen McCunn³, ¹Department of Surgery and ³Department of Anesthesiology, University of Maryland School of Medicine and ² Trauma Survivor Network, University of Maryland School of Nursing, Baltimore, MD.

O.21 3:45 p.m.

THE RATES OF PARENTAL STRESS IN A PEDIATRIC OPHTHALMOLOGY POPULATION. Clare DeLaurentis*, Osamah Saeedi¹, Sachin Kalarn¹, Lorraine Tran², and Roni Levin¹, ¹Department of Ophthalmology and Visual Sciences and ²Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD.

Break (4:00 – 4:05 p.m.)

O.22 4:05 p.m.

DEVELOPMENT OF NOVEL PREDICTIVE ALGORITHMS FOR RETINOPATHY OF PREMATURITY (ROP). Nisha Donthi*, Osamah Saeedi¹, Janet Alexander², and Sachin Kalarn³, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

O.23 4:20 p.m.

DYNAMIC MODELING OF PHYSICIAN EYE GAZE TO UNDERSTAND THE EFFECTS OF ELECTRONIC HEALTH RECORDS ON PATIENT SATISFACTION IN AN OPHTHALMOLOGY PRACTICE. Hannah Kleiman* and Osamah Saeedi, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

O.24 4:35 p.m.

ANTERIOR SEGMENT ULTRASOUND BIOMICROSCOPY IMAGE MEASUREMENTS USING IMAGE J SOFTWARE: INTRA-OBSERVER REPEATABILITY AND INTER-OBSERVER AGREEMENT. Azam Qureshi*, Haoxing Chen, Mona Kaleem, Osamah Saeedi, and Janet Alexander, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

Poster Presentation Schedule

Poster Presentation Session I

1:30 – 2:30 p.m.

Bressler First Floor

P.01 1:30 p.m.

SYNTHETIC NANOPARTICLES THAT MIMIC LIPOPROTEINS AND APOPTOTIC CELLS. Joshua Olexa* and Andrei Maiseyeu¹, ¹Division of Cardiovascular Medicine, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.02 1:30 p.m.

EVALUATING THE ROLE OF BK CHANNEL IN BLOOD PRESSURE REGULATION USING A SMOOTH MUSCLE DELETION OF BK (*SM22-CRE; KCNMA1^{FL/FL}*). Zulqarnain Khan* and Andrea Meredith¹, ¹Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

P.03 1:30 p.m.

BIG DATA: TESTING THE EFFECT OF USING DOMAIN INFORMATION TO CHARACTERIZE DISEASE-ASSOCIATED SNPS IN THE PREDICTION OF CORONARY ARTERY DISEASE. Matthew Lotz* and Michael Grasso, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.04 1:30 p.m.

OUTCOMES OF NEWBORN SCREENING FOR CRITICAL CONGENITAL HEART DISEASE (CCHD) AT UNIVERSITY OF MARYLAND CHILDREN'S HOSPITAL. Elena Donald*, Maura Heffernan¹, and Natalie Davis², ²Division of Neonatology, Department of Pediatrics, ¹University of Maryland School of Medicine, Baltimore, MD.

P.05 1:30 p.m.

TREATMENT OF FOCAL AORTIC DISEASE BY TEVAR: HIGH SUCCESS, LOW MORBIDITY AND MORTALITY. Solomon Hayon*, Michael Huffner*, Donald Harris¹, Solomon Hayon², Michael Huffner², and Robert Crawford³, ¹Department of Surgery and ³Division of Vascular, Department of Surgery, ²University of Maryland School of Medicine, Baltimore, MD.

P.06 1:30 p.m.

MODULATING LUNG INJURY WITH STEM CELLS. Michael Rouse*, Mandheer Wadhwa, Pablo Sanchez, Si Pham, and Bartley Griffith, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.07 1:30 p.m.

RESOLUTION OF DONOR NON-ALCOHOLIC FATTY LIVER DISEASE FOLLOWING LIVER TRANSPLANTATION. Andrew Posner* and John LaMattina, Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.08 1:30 p.m.

THE EFFICACY OF HM-CHITOSAN IN THE IN VIVO RAT EPISTAXIS MODEL. Saikrishna Gourishetti*, Mayur Narayan¹, Kalpesh Vakharia², Ronna Hertzano², and Lorna Silipino², ¹Department of Surgery and ²Department of Otorhinolaryngology - Head and Neck Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.09 1:30 p.m.

WHEN ARE STATIC/MOVING TWO POINT DISCRIMINATION AND SEMMES-WEINSTEIN MONOFILAMENT TESTS RELIABLE IN CHILDREN?. Tim Lancaster*, Karan Dua, and Joshua Abzug, Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

P.10 1:30 p.m.

SELECTIN BLOCKADE USING RHPSGL-1 ON HUMAN NEUTROPHIL ADHESION TO GALT.KO.HCD46 PORCINE ENDOTHELIAL CELLS IN THE CONTEXT OF XENOTRANSPLANTATION. Nancy Ye*, Beth French¹, Agnes Azimzadeh², and Richard Pierson², ¹Department of Microbiology and Immunology and ²Department of Surgery, University of Maryland School of Medicine, Baltimore, MD.

P.11 1:30 p.m.

SMALL-FRAGMENT PLATE FIXATION OF HUMERAL SHAFT FRACTURES. Giuliana Rotunno*, Robert O'Toole, Marcus Sciadini, and Andrew Eglseder, Division of Traumatology, Department of Orthopaedics, University of Maryland School of Medicine, Baltimore, MD.

P.12 1:30 p.m.

PREVALENCE OF DEPRESSION AND PTSD FOLLOWING ACUTE ORTHOPAEDIC TRAUMA. Stefano Muscatelli*, Hayley Spurr¹, and Gerard Slobogean², ¹Royal College of Surgeons in Ireland School of Medicine, Dublin, Ireland and ²Department of Orthopaedics, 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.

Bressler First Floor

P.13 2:35 p.m.

EFFICACY OF PAIN CONTROL IN POST-RENAL TRANSPLANT PATIENTS USING TRANSABDOMINAL PLANE NERVE BLOCK WITH BUPIVICAINE/LIPOSOMAL BUPIVICAINE MIXTURE. Neal Desai*, Jonathan Danquah*, Neal Desai, and Paul Bigeleisen, Department of Anesthesiology, University of Maryland School of Medicine, Baltimore, MD.

P.14 2:35 p.m.

THE ROLE OF HEPATIC KISSPEPTIN AND ESTROGEN RECEPTOR IN REGULATING METABOLIC AND REPRODUCTIVE ACTIVITY. Nuval Cherian*, Prerana Chatty¹, Shuiqing Qui², and Andrew Wolfe², ¹Department of Biology, Cornell University School of Undergraduate, Ithaca, NY and ²Department of Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD.

P.15 2:35 p.m.

CAREGIVER-ADOLESCENT PHYSIOLOGICAL SYNCHRONY AMONG YOUTH WHO VARY IN PRENATAL DRUG EXPOSURE. Hallie Green*, Stacy Buckingham-Howes, and Maureen Black, Division of Growth and Nutrition, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.16 2:35 p.m.

IMPACT OF CHANGES IN URINE CULTURE ORDERING PRACTICES ON ANTIMICROBIAL UTILIZATION IN INTENSIVE CARE UNITS AT AN ACADEMIC MEDICAL CENTER. Greer Waldrop*, Surbhi Leekha¹, Mohamed Sarg², Mona Beier¹, and Emily Heil², ¹Department of Epidemiology and Public Health, University of Maryland School of Medicine, and ²Department of Pharmacology, University of Maryland School of Pharmacy, Baltimore, MD.

P.17 2:35 p.m.

THE PRESENCE AND ROLE OF EXOSOMES IN YOUNG WOMEN'S BREAST CANCER. Jing Xiang*, Kimberly Jordan, and Virginia Borges, Division of Medical Oncology, Department of Medicine, University of Colorado School of Medicine, Baltimore, MD.

P.18 2:35 p.m.

THE EFFECT OF MATERNAL MALARIA ON FETAL HUMORAL IMMUNE PRIMING. Kristen Brao*, Sarah Boudova¹, and Miriam Laufer², ¹Department of Microbiology and Immunology and ²Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.19 2:35 p.m.

DIFFERENTIAL EXPRESSION OF GENES INVOLVED IN WOUND HEALING BY NEONATAL AND ADULT DERMAL FIBROBLASTS. Leila Bahmani Kazerooni* and Sripriya Sundararajan, ¹Division of Neonatology, Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.20 2:35 p.m.

THE ROLE OF POLYCYSTIN-PAR3/APKC INTERACTION IN ESTABLISHING ENDOTHELIAL CELL POLARITY. Katelyn Kalutkiewicz*, Patricia Outeda, and Terry Watnick, Division of Nephrology, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD.

P.21 2:35 p.m.

CRITICAL CONGENITAL HEART DISEASE SCREENING VS. INFANT CAR SEAT CHALLENGES FOR DETECTING INFANTS AT RISK FOR DESATURATION EVENTS IN THE NURSERY. Maura Heffernan*, Elena Donald¹, and Natalie Davis², ²Division of Neonatology, ¹Department of Pediatrics, University of Maryland School of Medicine, Baltimore, MD.

P.22 2:35 p.m.

IRON STATUS AND HOUSEHOLD WEALTH: A CROSS-SECTIONAL STUDY ON INFANT DEVELOPMENT IN RURAL INDIA. Jennifer Reid*, Nicholas Tilton, and Maureen Black, Division of Growth and Nutrition, Department of Pediatrics, 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.
Bressler First Floor

P.23 4:15 p.m.

SINGLE NEURON DEEP BRAIN IMAGING IN THE HORIZONTAL DIAGONAL BAND OF BROCA. Jacob Danoff* and Adam Puche, Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD.

P.24 4:15 p.m.

MMP9 AND ACTIVATED MACROPHAGES ARE INCREASED IN THE BRAIN 30 DAYS AFTER POLYTRAUMA. Sarah Doran*, Philip Chan¹, Julie Proctor², Adam Puche³, and Gary Fiskum², ¹Department of Medicine, Tufts University School of Medicine, Boston, MA and ²Department of Anesthesiology and ³Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD.

P.25 4:15 p.m.

CORRELATING PERI-ICTAL MOOD SCORES TO HIPPOCAMPAL VOLUME IN PATIENTS WITH EPILEPSY. Kathryn Grimes*, Maureen Cassady¹, Serena Yin¹, Scott Thompson², and Jennifer Hopp¹, ¹Department of Neurology and ²Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

P.26 4:15 p.m.

SIRT1 AS A POTENTIAL MARKER OF DISEASE ACTIVITY AND RESPONSE TO TREATMENT WITH GLATIRAMER ACETATE IN MULTIPLE SCLEROSIS. Daniel Hewes*, Adam Kruszewski, Alexandru Tatomir, and Horea Rus, Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

P.27 4:15 p.m.

KINEMATIC AND KINETIC OUTCOMES OF ROBOT ASSISTED NEUROREHABILITATION IN CHRONIC MODERATE-TO-SEVERE HEMIPARETIC STROKE. Tahreem Iqbal*, Susan S. Conroy¹, Anindo Roy², and Christopher T. Bever³, ¹VA Maryland Health Care System, ²Division of Robotics Neurorehabilitation, ³Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

P.28 4:15 p.m.

ANATOMIC SPECIALIZATION OF MICROGLIA ALONG ADULT NEURONAL MIGRATORY PATHWAYS IN THE OLFACTORY BULB. Brittany Schuh* and Adam Puche, Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD.

P.29 4:15 p.m.

EPILEPTIC SEIZURES PRODUCE A TRANSIENT IMPROVEMENT IN MOOD IN EPILEPTIC PATIENTS WITH DEPRESSION. Katherine Turlington*, Maureen Cassady*, Mary

Richert¹, Jennifer Hopp², and Scott Thompson³, ²Department of Neurology and ³Department of Physiology, ¹University of Maryland School of Medicine, Baltimore, MD.

P.30 4:15 p.m.

SCA2 PRESENTING AS A FOCAL DYSTONIA. Heather Wied* and Stephen Reich, Department of Neurology, University of Maryland School of Medicine, Baltimore, MD.

P.31 4:15 p.m.

NUCLEUS ACCUMBENS MITOCHONDRIAL DYNAMICS IN DRUG ABUSE AND DEPRESSION. Jeremy Winer*, Mary Kay Lobo, Ramesh Chandra, and Chase Francis, Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD.

P.32 4:15 p.m.

RAPID ANTIDEPRESSANT ACTION OF AN ALPHA5-SELECTIVE BENZODIAZEPINE PARTIAL INVERSE AGONIST: RESTORATION OF EXCITATORY SYNAPTIC STRENGTH. Jackie Zhang*, Jonathan Fischell¹, and Scott Thompson², ¹Department of Medicine and ²Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

P.33 4:15 p.m.

MORPHOLOGICAL AND FUNCTIONAL CHANGES IN RETINAL INTERNEURON POPULATIONS IN A HUNTINGTON'S DISEASE RAT MODEL. Vivian Shi*, Steven Bernstein, and Mary Johnson, Department of Ophthalmology and Visual Sciences, University of Maryland School of Medicine, Baltimore, MD.

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