

Memo

TO: University of Maryland School of Medicine

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

Qi Cao, J.D., Program Coordinator

Willard N. Applefeld, MS IV, President of Maryland Beta Chapter, Alpha Omega Alpha
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Katherine Jacobs, MS IV, Member of Maryland Beta Chapter, Alpha Omega Alpha Medical
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DATE: September 26, 2014

RE: **Medical Student Research Day 2014 Award Recipients**

On behalf of the Office of Student Research and the Alpha Omega Alpha (AOA) Honor Society, we would like to congratulate all of the award recipients for the 37th Annual Medical Student Research Day (MSRD) held on September 18, 2014. MSRD is a proud tradition for the University of Maryland's medical students to present their research accomplishments to the school and the campus. The presentations are judged, and competitive prizes are awarded in recognition of outstanding research and presentations. This year, 73 presentations were held during eight presentation sessions. Out of the 73 medical students who participated in MSRD, 25 received First, Second, or Third Place awards in their respective presentation sessions.

We extend our sincerest thanks and appreciation to all the judges, mentors, and participants.

Attached are the names of award recipients, the names of their mentors and co-investigators, and the titles of their presentations.

Medical Student Research Day 2014 Award Recipients

(By Presentation Session)

Oral Session I

First Place: Benjamin Schultz, MS IV
Second Place: a tie between
Kathleen McAvoy, MS II &
Daniel Mascarenhas, MS II

Oral Session II

First Place: Natalie Hesselgrave, MS II
Second Place: Hillary Hosier, MS II
Third Place: Justin Cohen, MS II

Oral Session III

First Place: Scarlett Hao, MS II
Second Place: Adam Kruszewski, MS II
Third Place: Kerry Heitmiller, MS II

Oral Session IV

First Place: Andrew Lutz, MS II
Second Place: Christopher Morrow, MS II
Third Place: Brooke Farquhar, MS II

Poster Session I

First Place: Anthony Kronfli, MS II
Second Place: Elizabeth Record, MS II
Third Place: Mary Richert, MS II

Poster Session II

First Place: Wei Qi, MS II
Second Place: Margaret Woodbury, MS II
Third Place: Aimee Pickering, MS II &
Rachel White, MS II
(co-presenters)

Poster Session III

First Place: a tie among
Michael Lee, MS I &
Philip Smith, MS I &
Eddy Zandee van Rilland, MS II

Poster Session IV

First Place: Donique Parris, MS II
Second Place: Emily Schehlein, MS II
Third Place: Nina Semsarzadeh, MS II

Presentation Abstract Titles

(By Award Recipient)

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.

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.

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.

ELUCIDATING THE UV-INDUCED TLR4/MYD88-DEPENDENT APOPTOTIC SIGNALING PATHWAY. Kerry Heitmiller*, Rita Fischelevich¹, Erin Harberts², and Gaspari Anthony¹, ¹Department of Dermatology, and ²Department of Microbiology & Immunology, University of Maryland School of Medicine, Baltimore, MD.

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.

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.

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.

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.

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.

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.

“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.

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.

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.

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.

UTILITY OF ROUTINE HEMOCCULT 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.

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.

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.

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.

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.

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.

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.

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.

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.