Program of Events

49th Annual

Medical Student Research Conference
September 13-15, 2017

University of Iowa
Roy J. & Lucille A. Carver College of Medicine

Free to University of Iowa Students
Medical Student Research Conference

Welcome to the 49th Annual Carver College of Medicine Student Medical Research Conference. This Conference provides an opportunity for medical students who have conducted research to present their results, receive feedback, and compete for awards.

September 13, 2017

8:00 – 10:00 AM    Oral Presentations (concurrent sessions)
                   1117, 2117, 2123, 2135, 2155, 2165, 2189 MERF

12:00 – 12:50 PM   Poster Session #1
                   Medical Student Poster Presentations in MERF Atrium

September 14, 2017

12:00 – 12:50 PM   Poster Session #2
                   Medical Student Poster Presentations in MERF Atrium

September 15, 2017

Awards Banquet

5:30 – 6:00 PM     Social Time
                   Second Floor Ballroom, IMU

6:00 – 8:00 PM     Buffet Dinner, Keynote, and Awards
                   Second Floor Ballroom, IMU

Keynote Speaker

Lucy Wibenmeyer, MD
Clinical Professor of Surgery-
Acute Care Surgery

For student presenters, research mentors, & invited guests
AWARDS BANQUET
Friday, September 15, 2017

There are several Research Day awards, including three Foundation Awards, given to outstanding oral and outstanding poster presentations, and departmental and college sponsored general awards given to the top oral and poster presentations in eligible categories.

FOUNDATION AWARDS

THE BORTS AWARD

The Borts Award was established by the Alpha Psi Chapter of Alpha Kappa Kappa Medical Fraternity in 1974 to honor Dr. I. H. Borts, a graduate of the University of Iowa College of Medicine and long-time supporter of the AKK. He is a distinguished scientist who has long been associated with the State Hygienic Laboratory. As a student he was influential in founding the Alpha Psi Chapter and for over thirty years remained one of their most loyal alumni. This award is open to all students.

THE EDWARD HEATH AWARD

In honor of Dr. Edward Heath, this award recognizes outstanding medical research. As Professor and Chairman of the Biochemistry Department at the University of Iowa, Dr. Heath was an outstanding example of a physician-scientist and supported excellence in research. His commitment to excellence was exemplified by the quality of research done in his laboratory as well as the many years spent teaching students. This award recognizes the student whose performance best represents outstanding achievement in the laboratory and the ability to communicate that achievement. All students will automatically be considered for this award.

MELVIN MARCUS CLINICAL RESEARCH AWARD

This award was originally established as the Iowa Student Medical Research Club (ISMRC) Award in 1989. We are honored to dedicate this award to the memory of Dr. Melvin L. Marcus, faculty supervisor of the ISMRC for over a decade. Dr. Marcus was instrumental in maintaining the club as an integral part of the University of Iowa research community. Dr. Marcus was also actively involved in clinical research and teaching of students, both in the laboratory and on the wards. He was frequently honored by his colleagues for his achievements. In keeping with this tradition, the Marcus Clinical Research Award is presented to the student whose presentation reflects outstanding work performed within a clinical area involving intact organ physiology. This prize is open to students involved in such research.
DEPARTMENTAL AWARDS

ANESTHESIOLOGY
The Department of Anesthesia will sponsor The Margaret V. Lunsford Award for Research in Anesthesia, for the best oral or poster presentation by a medical student doing research in anesthesia.

BIOCHEMISTRY
The Department of Biochemistry will sponsor The Arthur A. Spector Award in Basic Biomedical Research for the best oral or poster presentation by a medical student doing research in biochemistry.

DERMATOLOGY
The Department of Dermatology will sponsor the Excellence in Dermatology Research award. The award will be designated for the best poster or oral presentation by a medical student in the discipline of dermatology.

EMERGENCY MEDICINE
The Department of Emergency Medicine will sponsor an award for Excellence in Emergency Medicine research. The award will be designated for the best poster or oral presentation by a medical student in the discipline of emergency medicine.

FAMILY MEDICINE
The Department of Family Medicine will sponsor an award for Excellence in Family Medicine Research designated for the best oral or poster presentation by a medical student in family medicine research.

HUMAN PHYSIOLOGY
The Department of Human Physiology will sponsor the Carl V. Gisolfi Research Award for Excellence in Health and Human Physiology. The award will be designated for the best poster or oral presentation by a medical student in the discipline of human physiology.

INTERNAL MEDICINE
The Department of Internal Medicine will sponsor The John Stokes Award for Research in Internal Medicine, for three awards for outstanding student presentations. The awards will be open to student research in any department and in any project area.

MICROBIOLOGY
The Department of Microbiology will sponsor The William Johnson Award for Research in Microbiology and Immunology designated for the best oral or poster presentation by a medical student in microbiology research.

NEUROLOGY and NEUROSURGERY
The Departments of Neurosurgery and Neurology will sponsor three awards designated for the best poster or oral presentation by a medical student in the categories of basic neuroscience, translational neuroscience and clinical neuroscience research.
OBSTETRICS/GYNECOLOGY
The Department of Obstetrics and Gynecology will sponsor two awards for *Excellence in Clinical Research in Obstetrics & Gynecology* and *Excellence in Obstetrics & Gynecology Research* designated for the best poster or oral presentation by a medical student in Ob/Gyn research.

OPHTHALMOLOGY
The Department of Ophthalmology will sponsor three awards to honor William E. Scott, MD and Thomas A Weingeist, MD, PhD, and Hansjoerg E. Kolder, MD, PhD for the best oral or poster presentations by a medical student in eye research.

ORTHOPAEDICS
The Department of Orthopaedics will sponsor two awards; *The Ponseti Prize in Orthopaedic Research* and *Research Excellence in Orthopaedics*. The awards will be designated for the best poster or oral presentation by a medical student in the discipline of musculoskeletal/orthopaedic research basic, biomedical or clinical.

OTOLARYNGOLOGY
The Department of Otolaryngology will sponsor an award for *Excellence in Otolaryngology Research* designated for the best oral or poster presentation by a medical student in otolaryngology research.

PATHOLOGY
The Department of Pathology will sponsor two awards to honor Richard G. Lynch, MD, for the best poster or oral presentation by a medical student. The award will be open to student research in any project area.

PEDIATRICS
The Department of Pediatrics will sponsor two awards designated for the best oral or poster presentation by a medical student in the categories of *clinical and basic science pediatric research*.

PHARMACOLOGY
The Department of Pharmacology will sponsor the award in *Pharmacological and Toxicological Sciences*. The award will be designated for the best poster or oral presentation by a medical student in the discipline of pharmacology or toxicology, either basic science or clinical investigation.

PHYSIOLOGY
The Department of Physiology will sponsor the *Research Excellence in Molecular Physiology and Biophysics* award. The award will be designated for the best poster or oral presentation by a medical student in the discipline of physiology and biophysics.

PSYCHIATRY
The Department of Psychiatry will sponsor three awards, *The George Winokur Research Award*, *The Bob Robinson Research Award* and *The Lauretta Bender Research Award*. The awards will be designated for the best poster or oral presentations by a medical student for research in psychiatry.
RADIOLOGY
The Department of Radiology will sponsor The Jason Martin, MD, Medical Student Research Award. The award will be designated for the best poster or oral presentation by a medical student in image-based research. Dr. Martin graduated from the University of Iowa Carver College of Medicine and participated in medical research in the Radiology department as a medical student.

RADIATION ONCOLOGY
The Department of Radiation Oncology will sponsor The Larry W. Oberley Award. The award will be designated for the best poster or oral presentation by a medical student in the discipline of radiation oncology, for either basic science or clinical investigation.

SURGERY AND CARDIOThorACIC SURGERY
The Department of Surgery will sponsor two awards, The Nicholas P. Rossi Award for research in cardiothoracic surgery and The Dr. Kimberly Ephgrave Medical Student Award designated for the best poster or oral presentation by a medical student in the discipline of surgery.

UROLOGY
The Department of Urology will sponsor an award for Excellence in Urology Research designated for the best oral or poster presentation by a medical student in urology research.

A special thank you to:
The Medical Student Research Council-Dr. Robert Roghair, Director
Deanna Nielson, Gwen Hoffmann, CCOM Office of Student Affairs and Curriculum staff;
the Departments of Anesthesiology, Biochemistry, Dermatology, Emergency Medicine, Family Medicine, Human Physiology, Internal Medicine, Neurology and Neurosurgery, Obstetrics & Gynecology, Ophthalmology, Orthopaedics, Otolaryngology, Pathology, Pediatrics, Pharmacology, Physiology, Psychiatry, Radiology, Radiation Oncology, Surgery and Cardiothoracic Surgery, and Urology;
Institute for Clinical and Translational Science (REDCap)
ACKNOWLEDGEMENTS

Judges

Dr. Bryan Allen
Dr. Manish Bansal
Dr. Nidhi Bansal
Dr. Emine O. Bayman
Dr. David Bedell
Dr. Manju Bengaluru Jayanna
Dr. Elaine Binkley
Dr. Gail A. Bishop
Dr. Aaron Boes
Dr. Catherine Bradley
Ms. Ashley Brate
Dr. Juana Capizzano
Dr. Mark W. Chapleau
Dr. Anil Chauhan
Dr. James Choi
Dr. Christopher Cooper
Dr. Brandon Davies
Dr. Sarika Deshmukh
Dr. Arlene Drack
Dr. Martine Dunnwald
Dr. Eric Epping
Mr. Brett Faine
Ms. Charlotte Feddersen
Dr. Jess Fiedorowicz
Dr. Anthony Fischer
Dr. Muhammad Furqan
Dr. Duane Hall
Mr. Hugh Hansen
Dr. Charles Harata
Dr. Robert D. Harris
Dr. Kimberly Hart
Mr. Jeffrey Hord

Dr. Hans House
Dr. Jennifer Hrabe
Dr. M. Nedim Ince
Mr. Chandler Jensen-Cody
Dr. David Katz
Dr. Toshi Kitamoto
Dr. Vidya Kollu
Dr. Matthew Krasowski
Dr. Yuk Liu
Dr. Ashutosh Mangalam
Mr. Daniel Matasic
Dr. Anna Merrill
Dr. Kelly Messingham
Dr. Mohammed Milhem
Dr. Andrew Norris
Dr. Brian O'Neil
Ms. Lalita Oonthonpan
Ms. Robin Paetzold
Dr. Alejandro Pezzulo
Dr. Robert Roghair
Dr. Antonio Sanchez
Dr. Donna Santillan
Dr. Mariko Sato
Dr. Weam Shahin
Dr. Andrean Simons-Burnett
Dr. Patrick Sinn
Dr. Samuel Stephens
Dr. David Swanson
Dr. Tina Tootle
Dr. Aliye Uc
Dr. Michael Voigt
Oral Presentations

8:15 am – 10:00 am
Concurrently in Rooms 1117, 2117, 2123, 2135, 2155, 2165, 2189

Room 1117

8:15  Joseph Hudson, M3  
“Hemorrhage Associated With External Venticle Drain Placement In Aneurysmal SubArachnoid Hemorrhage Patients On Dual Anti Platelet Therapy: A Retrospective Analysis”  
David Hasan, MD - Neurosurgery

8:30  John Henstrom, M2  
“Does BESS Performance at Intake Predict Subsequent Injury Risk in Division 1 Football Players”  
Andrew Peterson, MD, MSPH - Pediatrics and Adolescent Medicine

8:45  Joseph Metzger, M2  
“Do Prostaglandins regulate non-muscle myosin II?”  
Tina Tootle, PhD - Anatomy & Cell Biology

9:00  Kalyn Campbell, M2  
“Telemedicine Improves Timeliness and Appropriateness of Antibiotics in Rural Emergency Departments”  
Nicholas Mohr, MD, MS - Emergency Medicine

9:15  Natalie Martin, M2  
“Normal Saline Versus Lactated Ringer’s: A Randomized Control Trial Evaluating Healthcare Utilization Following Discharge in Emergency Department Patients”  
Brett Faine, PharmD - College of Pharmacy

9:30  Jeffrey Daniels, M2  
“Role of CTLA4 Expression on Regulatory T Cells in Helminth-induced Suppression of T Helper 1 Inflammation”  
M. Nedim Ince, MD - Internal Medicine, Gastroenterology & Hepatology

Room 2117

8:15  James Kohler, M4  
“Might doctors really “know best”?: utilizing surgeon intuition to strengthen preoperative surgical risk assessment”  
Benjamin Miller, MD, MS - Orthopedics and Rehabilitation

8:30  Guillermo Romano Ibarra, M2G  
“Gene-modification of ferret airway epithelia allows interrogation of mucin-mediated pathology in cystic fibrosis”  
John Engelhardt, PhD - Anatomy & Cell Biology

8:45  Ruth Riedl, M2  
“Structurally-divergent ACE inhibitors differentially modify metabolism and weight gain”  
Justin Grobe, PhD - Pharmacology

9:00  Daniel Pape, M1G  
“Magnetogenetic modulation of pancreatic beta cell excitability and insulin secretion”  
Rajan Sah, MD, PhD - Internal Medicine, Cardiovascular Medicine
Room 2117 (cont.)

9:15  Elizabeth Shirazi, M2
      “Novel adenovirus serotypes for improved airway gene transfer”
      Patrick Sinn, PhD - Pediatrics - Allergy, Immunology, and Pulmonary

9:30  Kasra Zarei, M1G
      “Beyond the Bench: Translational Visual Biomarkers and Treatments in Multiple Sclerosis”
      Randy H. Kardon, MD, PhD - Ophthalmology

Room 2123

8:15  Andrew Goates, M4
      “Enhanced Salivary Stone Characterization through Utilization of a Novel Computed Tomography Analysis Protocol”
      Henry Hoffman, MD - Otolaryngology

8:30  Matthew Wilson, M2
      “Ambulatory Activity Surveillance in Postoperative Orthopedic Patients”
      Philip Polgreen, MD, MPH - Internal Medicine, Infectious Diseases

8:45  Danielle Pohl, M2
      “Patients with Croup: Epinephrine Treatment and ED Observation Time”
      Tameem Shoukih, MD - Emergency Medicine, Pediatrics

9:00  Nicholas Evans, M1
      “A scalable, low-cost, portable platform for assessing balance and predicting fall risk in older adults”
      Philip Polgreen, MD, MPH - Internal Medicine, Infectious Diseases

9:15  Collin Kramer, M2
      “Atrial Antitachycardia Pacing in Complex Congenital Heart Disease: A Case Series”
      Ian Law, MD - Pediatrics, Pediatric Cardiology

9:30  Mikenzy Fassel, M2
      “The Impact of Adverse Childhood Experiences (ACEs) on Burn Outcomes in Adult Burn Patients”
      Lucy Wibbenmeyer, MD - Surgery

9:45  Vaelan Molian, M1
      “Financial Cost Analysis of Combining Cardiac Catheterization and Electrophysiology Procedures in an Outpatient Setting”
      Ian Law, MD - Pediatrics, Pediatric Cardiology

Room 2135

8:15  Susannah Koch, M4
      “Surgical site infection (SSI) prevention bundle compliance monitoring for abdominal, laparoscopic, and robotic hysterectomies”
      Noelle Bowdler, MD - Obstetrics & Gynecology

8:30  Grant Riesberg, M4
      “Evaluation of Focal Neurologic Lesions in Refractory Epilepsy Utilizing 7T Magnetic Resonance Imaging”
      Vincent A. Magnotta, PhD - Radiology, Neuroradiology
Room 2135 (cont.)

8:45  Wade Gutierrez, M2G  
"The Role of Extracellular Histones in Cancer Metastasis“  
Paloma Giangrande, PhD - Internal Medicine, Hematology/Oncology

9:00  Sarah Bakir, M1  
"Planned Use of Long-Acting Reversible Postpartum Contraception in Low-Risk Women in Group versus Physician Prenatal Care“  
Abbey Hardy-Fairbanks, MD - Obstetrics & Gynecology

9:15  Alexander Garza, M2  
“A Prospective Cohort of Injuries in Youth Flag and Tackle Football“  
Andrew Peterson, MD, MSPH - Pediatrics and Adolescent Medicine

9:30  Nicole Nitschke, M2  
“Reversal of Antithrombotic Therapy Prior to Heart Transplant in Pediatric Patients“  
R. Erik Edens, MD, PhD - Pediatrics, Cardiology

9:45  Andrew Friederich, M2  
“Normal Saline Versus Lactated Ringer’s: A Randomized Control Trial Evaluating Quality of Recovery in Emergency Department Patients“  
Brett Faine, PharmD - College of Pharmacy

Room 2155

8:15  Tarun Kadaru, M2  
“Respiratory Inhibition Upon Electrical Stimulation of the Amygdala in Mice“  
Brian Dlouhy, MD - Neurosurgery

8:30  Allison Methenitis, M2  
“Validation of the Low Profile Modification of the Losee Pivot Shift Test in the Assessment of the ACL Deficient Knee“  
John Albright, MD - Orthopedics and Rehabilitation

8:45  Michael Slattery, M1  
“Effects of Axial Loading Delay on Post-traumatic Osteoarthritic Cartilage Regeneration“  
James A. Martin, PhD - Orthopedics and Rehabilitation

9:00  Mohamed Salih, M2  
“Neural Mechanisms of Delayed Auditory Feedback: Insights from fMRI“  
Greenlee, MD - Neurosurgery

9:15  Mitchell Edwards, M2  
“Effects of Patent Ductus Arteriosus Diagnosis on Nutritional Status and Growth of Preterm Infants“  
John Dagle, MD, PhD - Pediatrics, Neonatology

9:30  Samuel De Nooy, M2  
“Neither clinical judgment nor objective scoring systems can accurately predict the risk of alcohol relapse in patients with alcohol use disorder evaluated for liver transplant“  
Michael Voigt, MD - Internal Medicine, Gastroenterology & Hepatology

9:45  Irene Morcuende, M2  
“Pessary Treatment of Pelvic Organ Prolapse: Self Care vs. Office-based Care“  
Catherine Bradley, MD - Obstetrics & Gynecology, Reconstructive Pelvic Surgery
Room 2165

8:15 Perry Wu, M4
“CRISPRi Knockdown of BAG3 Interactors in iPS-CM to Elucidate Mechanisms of BAG3-Related Dilated Cardiomyopathy”
Robert Cornell, PhD - Anatomy & Cell Biology

8:30 Steven Ilko, M2
“Central line capability and critical care telemedicine reduce the odds of transferring a sepsis patient: A mixed methods study”
Azeemuddin Ahmed, MD, MBA - Emergency Medicine

8:45 Gabrielle Bui, M2
“Assessment of Risk Factors and Litigation on Rates of Subsequent Injury in Patients with Work and Non-Work Related Foot and Ankle Injuries”
Mentor: Phinit Phisitkul, MD - Orthopedics and Rehabilitation

9:00 Philip Huang, M2
“Role of Individual Motivation and Role on Team Identity in Assertive Community Treatment Teams”
Xi Zhu, PhD - Health Management & Policy, College of Public Health

9:15 Tarek Karam, M2
“Evaluation of Central Sensitization and Psychological Factors in Patients with Chronic Achilles Tendinopathy”
Kathleen Sluka, PT, PhD - Physical Therapy & Rehabilitation Science

9:30 Chandini Reddi, M2
“Thiol-Redox Imbalance Results in an ER-stress induced autophagy which creates a resistance to MAPK Pathway Inhibitors in Melanoma”
Michael Schultz, PhD - Radiology, Nuclear Medicine

9:45 Alexander Troester, M2
“Overlapping Surgery in Primary Total Knee Arthroplasty: Are Outcomes Worse Than Single Operating Room Scheduling?”
Nicolas Noiseux, MD, MS - Orthopedics and Rehabilitation

Room 2189

8:15 Laura Quast, M2
“Population-based Evaluation of Factors Associated with Use of Intravesical Bacillus Calmette-Guérin for High Grade Non-Muscle Invasive Bladder Cancer”
Kenneth Nepple, MD - Urology

8:30 Fillan Grady, M2G
“Brainstem projections to Anterior Insula may promote arousal”
Joel Geerling, MD, PhD - Neurology

8:45 Kristin Weeks, M2G
“Risk Factor Differences in Patients by Age and Stroke Type Over Time With a Focus on the Young (<45 years) In A Rural State, 2010-2017”
James Torner, PhD - Epidemiology, College of Public Health
9:00  Jenna Geick, M1
“Impact of Copy Number Variants and Genetic Defects on the Outcome of Neonates with Congenital Heart Disease”
Benjamin Reinking, MD - Pediatrics, Cardiology

9:15  Jonathan Birdsall, M2
“Vascular Correlates of Mood Change”
Jess Fiedorowicz, MD, PhD - Psychiatry

9:30  Tyler Abarca, M2
“Does Cancer Center Volume Effect Overall Survival in Soft Tissue Sarcoma? A review of the National Cancer Data Base”
Benjamin Miller, MD, MS - Orthopedics and Rehabilitation

9:45  Tyler Foley, M1
“Validation Studies of a Functional Genomic shRNA Screen Investigating Vemurafenib Resistance in BRAF V600E-Mutated Melanoma”
Michael Henry, PhD - Molecular Physiology & Biophysics
Poster Sessions
12:00 p.m. – 12:50 p.m.

Alphabetized by last name - Poster number to the left of name
Odd-numbered posters presented on Wednesday;
Even-numbered posters presented on Thursday

30 ----- Kelsey Adler, M2
“Novel Methodology to Visualize Mouse Choroidal Vessels”
Elliott Sohn, MD - Ophthalmology

15 ----- Lindsay Agostinelli, M2G
“LJA5: A Novel Population of Neurons in the Brainstem”
Polly Ferguson, MD - Pediatrics

26 ----- Heba Albazboz, M1
“Synaptic Phenotyping of the Amygdala—Pontine Projection”
John Freeman, PhD - Psychology

31 ----- Kyle Anderson, M2
“Correlation between Arterial Stiffness and Aortic-to-Radial Pressure Gradient after Cardiopulmonary Bypass”
Kenichi Ueda, MD - Anesthesia

22 ----- Gerard Baldie, M2
“Pediatric Pelvic Floor Dysfunction: Beyond Biofeedback”
Douglas Storm, MD - Urology

13 ----- Fili Bogdanic, M2
“Anatomical tracing of efferent projections from glutamatergic neurons surrounding the A5 nucleus in the ventrolateral pons”
Alexander Bassuk, MD, PhD - Pediatrics

5 ----- Nicholas Borcherding, MSTP
“Targeting mismatch repair in aggressive basal-like breast cancer”
Weizhou Zhang, PhD - Pathology

65 ----- Patrick Brau, M2
“Impact of IL-1 on Secondary Inflammation Following Traumatic Brain Injury in the Murine Model”
Elizabeth Newell, MD - Pediatrics

33 ----- Jane Buchanan, M2G
“RABL6A is Required for Glioblastoma Cell Growth and Survival”
Dawn Quelle, PhD - Pharmacology

24 ----- Sean Chen, M2
“Sex differences in the neuroanatomical correlates of trait personality in older adults: A structural MRI study”
Natalie Denburg, PhD - Neurology
62 ---- Joseph Chin, M1G
“Identification of a Putative Mutation in MSX1 as a Cause of Left Ventricular Noncompaction: Early Characterization of a Cardiac-Specific MSX1 Knockout Mouse Model”
Barry London, MD, PhD - Internal Medicine

48 ---- Colin Clark, M2G
“Probing the Identity of Central Chemosensitive Neurons Responsible for Hypercapnic Ventilatory Response”
George Richerson, MD, PhD - Neurology

36 ---- Lauren Coffey, M1
“Predictors of Successful Completion of Non-Sedated Neuroimaging in Young Children”
Eva Tsalikian, MD - Pediatrics

38 ---- Taylor Cox, M2
“Factors affecting beta-hCG levels in early pregnancy following In Vitro Fertilization”
Brad Van Voorhis, MD - Obstetrics & Gynecology

51 ---- Elijah Dahlstrom, M2
“Bispectral EEG as Alternative to CAM-ICU for Delirium Screening in Emergency Department”
Sangil Lee, MD, MS - Emergency Medicine

66 ---- Conor Dass, M2
“The Role of ATF4 in Protection Against Lipid-Induced Toxicity in Cultured Cardiomyocytes”
Vitor Lira, PhD - Health & Human Physiology

49 ---- Sayantan Deb, M2
“Contributions of MsrA Deficiency and Angiotensin II to Metabolic Syndrome Phenotypes”
Mark W. Chapleau, PhD - Internal Medicine

53 ---- Chandni Desai, M2
“CTGF Expression as a prognostic marker in sarcomas”
Munir Tanas, MD - Pathology

27 ---- Katelin Durham, M2
“Lack Of Aberrant Mucin Production In Cystic Fibrosis Pancreas”
Aliye Uc, MD - Pediatrics

47 ---- Demi Eble, M2
“Incidence and Risk Factors of Posterior Fossa Syndrome in Children with Posterior Fossa Tumors”
Mariko Sato, MD, PhD - Pediatrics

21 ---- Levi Endelman, M2
“Bovine Arch Anatomy is Not Associated with Flow-Mediated Aortic Arch Hypoplasia in Infants”
Joseph Turek, MD, PhD - Cardiothoracic Surgery

42 ---- Aron Evans, M2
“Parkinson’s disease and temporal control”
Nandakumar Narayanan, MD, PhD - Neurology
57 ----- Collin Foster, M2
“Investigation into insulin signaling and the regulation of mitochondrial metabolism in skeletal muscle”
Brian O'Neill, MD, PhD - Internal Medicine

61 ----- Caleb Fredrickson, M2
“Two-way interactions between the nervous system and gut microbiota in a fruit fly model of epilepsy”
Toshi Kitamoto, PhD - Anesthesia

67 ----- Kendra Frey, M2
“Mechanisms of Leptin-Angiotensin Cross-Talk for the Control of Resting Metabolism”
Justin Grobe, PhD - Pharmacology

23 ----- Julia Froud, M2
“Bovine Aortic Arch Shortens Available Clamping Distance for Extended End-to-End Repair of Infant Coarctation of the Aorta”
Joseph Turek, MD, PhD - Cardiothoracic Surgery

55 ----- Harsh Goel, M2
“Characterization of cardiac specific Transcription Factor EB overexpression in a murine model”
E. Dale Abel, MD, PhD - Internal Medicine

50 ----- Andrew Goldstein, M2
“Assessing the effects of ripasudil, a novel Rho kinase inhibitor, on human corneal endothelial cell health”
Mark Greiner, MD - Ophthalmology

4 ----- Pavane Gorrepati, M1
“In Vitro Analysis of Chemotactic Dendritic Cell Migration in 3D Environments”
Stephanie Eisenbarth, MD, PhD - Immunobiology, Yale School of Medicine

10 ----- Alexander Graves, M2
“Relationship Between Evaluation for Pulmonary Embolism and Provider Fatigue in the Emergency Department”
Jon Van Heukelom, MD - Emergency Medicine

34 ----- Victor Hatcher, M2
“Clinical Frailty Scores Predict Re-Admission with Fall Following Traumatic Injury”
Kathleen Romanowski, MD - Surgery

52 ----- Stijn Hentzen, M2
“King Devick Test to Monitor Anesthesia Recovery - A Validation Study”
Andrew Peterson, MD, MSPH - Pediatrics

32 ----- Joseph Hindman, M2
“Thalamic coma? The neuroanatomical correlates of impaired arousal following diencephalic lesions in humans”
Aaron Boes, MD, PhD - Pediatrics

71 ----- Ryan Horne, M2G
“Rapid Identification of Pseudomonas aeruginosa by Species-Specific Endonuclease Activity”
James McNamara, PhD - Internal Medicine
2 ---- Andrew Kalenkiewicz, M1G
“Amino Acid Solvation Energy Calculations Perform 20x Faster on GPUs Compared to CPUs”
Michael Schnieders, PhD - Biomedical Engineering

11 ---- Wahida Khan, M2
“T Cell Characterization in Yellow Fever, Zika Virus, and Mumps Infection”
Jack Stapleton, MD - Internal Medicine

12 ---- Tyler Klenske, M2
“Biomarkers of emphysema susceptibility and blood flow heterogeneity associated emphysema progression”
Eric A. Hoffman, PhD - Radiology

44 ---- Emily Larson, M2
“Perspectives of patients and parents on medical alert tattoos in the context of Type I Diabetes”
Andrew Peterson, MD, MSPH - Pediatrics

29 ---- Jonathan Lensing, M2
“Role of Early Splinting, Positioning, and Edema Control of Burn Effected Joints in the Prevention of Burn Scar Contracture”
Lucy Wibbenmeyer, MD - Surgery

43 ---- Thomas Locke, M2
“The role of nuclear TRAF3 as a regulator of B cell survival and activation”
Gail A. Bishop, PhD - Microbiology

60 ---- Maggie Long, M2
“Access to Technology and Interest in Telemedicine Among Home-Based Dialysis Patients”
Patrick Brophy, MD, MS - Pediatrics

54 ---- Elizabeth Mann, M2
“Evaluating the effectiveness of Shared Plans of Care (SPoC) for children and youth with special health care needs (CYSHCN) within the Iowa Pediatric Integrated Health (PIH) program”
Thomas D. Scholz, MD - Pediatrics

20 ---- Amanda Manorot, M2
“Impact of Primary Care Provider to Dermatology store-and-forward (SAF) Teledermatology on Outpatient Dermatologic Care: A Retrospective Review of eConsults in an Integrated Electronic Health Record System”
Karolyn Wanat, MD - Dermatology

28 ---- Kathryn Marcus, M2
“Teledermatology in Rural Tanzania: A Prototype for Dermatology Service in Underserved Areas”
Nkanyezi Ferguson, MD - Dermatology

70 ---- Jacob Melendrez, M4 and Aaron Lacy, M4
“Should Play Dough Be On Your Non-Toxic List? High Salt Content of Home-Made Play Dough Products”
Edward Bottei, MD - Internal Medicine; Iowa Poison Control Center, Sioux City, IA
25 ----- Adam Miller, M4
“Demographic Features Differentiating Bullous Pemphigoid Patients With and Without Neurologic Disease”
Janet Fairley, MD - Dermatology

35 ----- Matthew Miller, M2G
“Retinal ganglion cell-specific ER stress underlies optic atrophy in two siblings with Wolfram syndrome”
Budd Tucker, PhD - Ophthalmology

39 ----- Marshall Moyer, M2
“Determine the contribution of C3aR1 in regulating the insulinotropic effect of TLQP-21 on pancreatic islet β-cells”
Samuel Stephens, PhD - Internal Medicine

7 ----- Adokole Otanwa, M2
“Cullin3 Regulates eNOS Activity via Ubiquitination-Mediated PP2A Degradation in Primary Mouse Aortic Endothelial Cells”
Curt D. Sigmund, PhD - Pharmacology

68 ----- Connor Parker, M2
“MgrA Regulates Attachment of Staphylococcus aureus to Mucin”
Anthony Fischer, MD, PhD - Pediatrics

16 ----- Vivian Pham, M1
“Radiation Therapy Combined with Pharmacological Ascorbate Increases PD-L1 Expression in Lung Cancer Cells and Induces an Abscopal Effect in a Murine Lung Cancer Model”
Bryan Allen, MD, PhD - Radiation Oncology

63 ----- Olivia Pittman, M2
“ULK1 Regulates Recovery from Skeletal Muscle Damage”
Vitor Lira, PhD - Health & Human Physiology

14 ----- Aubrey Reese, M2
“Digital Screening Mammograms vs. Tomosynthesis Outcomes”
Barcey Levy, MD, PhD - Family Medicine

64 ----- Isaiah Reeves, M2
“Cognitive Workload in Single Pilots Using Human-Autonomy Teaming”
Thomas Schnell, PhD - Occupational & Environmental Health

37 ----- Shakoora Sabree, M2G
“Elucidating The Role of TRAF3 in B Cell Metabolism in the context of GSK-3, A Metabolic Regulator”
Gail A. Bishop, PhD - Microbiology

9 ----- Vivian Sardone, M2
“A Single Cytoplasmic Lysine Residue is Sufficient for ENaC Regulation by the E3 Ubiquitin Ligase Nedd4-2”
Peter Snyder, MD - Internal Medicine

1 ----- Issac Schwantes, M2
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8 ---- Adam Vesole, M2
“DNA Methylation Patterns of Brain and Peripheral Tissue in Drug-Resistant Epilepsy”
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3 ---- Drew Voigt, M2G
“A Forward Genetic Screen to Investigate Vemurafenib Resistance in BRAFV600E Melanoma”
Adam Dupuy, PhD - Anatomy & Cell Biology

19 ---- Ryan Wendt, M2
“Are Rural Sarcoma Patients at Risk for Worse Outcomes?”
Benjamin Miller, MD, MS - Orthopaedics and Rehabilitation
"A Comparison of Histologic and Radiographic Methods in Novel Sheep Model for Hearing Preservation Cochlear Implant Surgery"

Marlan R. Hansen, MD - Otolaryngology - Head & Neck Surgery