15TH ANNUAL
MEDICAL STUDENT RESEARCH FORUM

Health Sciences Learning Center

Monday, November 21, 2016
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The Student Research Forum is an annual event showcasing the research accomplishments of second year SMPH students who conducted summer research under the mentorship of UW faculty members. This year, more than 100 students will present their work through podium and poster presentations.

Noon- 1:00 PM
Poster Session

1:00 PM
Welcome and Opening Remarks
Elizabeth Petty, MD
Professor of Pediatrics and Senior Associate Dean for Academic Affairs

1:15 - 2:00 PM
SHAPIRO GUEST LECTURE

The Impact of Medical Student Research in Shaping Clinical Care

Rebecca Sippel, MD
Associate Professor of Surgery
UW School of Medicine and Public Health

Dr. Sippel is an Associate Professor of Surgery and Chief of the Division of Endocrine Surgery at the University of Wisconsin School of Medicine and Public Health. She leads a highly productive clinical research program, and over the past eight years has served as a mentor and role model for more than 20 medical students, many of whom have graduated with research honors. She is an active trainer in the Department of Surgery’s NIH-funded Summer Research Experience, with six of her students selected to be recipients of this award over the past seven years. Dr. Sippel obtained her MD from Washington University School of Medicine and completed general surgery training and an endocrine surgery research fellowship at the University of Wisconsin Carbone Cancer Center. She is the recipient of the 2015 Dean’s Award for Excellence in Medical Student Research Mentorship.

2:15-3:45 PM
Podium Presentations (Concurrent Sessions)

3:45-5:00 PM
Poster Session and Reception for Students, Mentors and Guests

Support for the 15th Annual Medical Student Research Forum is provided by the SMPH Office of Academic Affairs, the Herman and Gwendolyn Shapiro Foundation, and the Wisconsin Medical Alumni Association.

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SESSION A ......................... Room 1335 HSLC
Facilitator: Michael Kim, MD
Residents’ Response to Bleeding During a Simulated Robotic Surgery Experience
Jessica L. Hammes
Texture Analysis of the Liver at MDCT for Assessing Hepatic Fibrosis
Daniel Jones
Test-Retest Reliability, Predictive Validity, and Group Level Sensitivity of Immediate Post-Concussion Assessment and Cognitive Testing
Adam Pfaller
Feasibility of an Image-Based Mobile Health Protocol for Postoperative Wound Monitoring
Shahrose Rahman
Radiofrequency Ablation of Pericranial Nerves for Treating Headache Conditions: A Promising Hope for Headache Patients
Laura Krueger

SESSION B ......................... Room 1345 HSLC
Facilitator: Elizabeth Jacobs, MD, MAPP
Effects of Intralipid on Serum Partitioning of Cancer-Targeting Alkylphosphocholine Analogs
Jonathan A. Lubin
The Impact of Pre-Simulation Orientation on Anxiety and Performance during a Surgery Intern Preparatory Boot Camp
Cassidy Bommer
The Efficacy and Safety of Image-Guided Percutaneous Microwave Ablation in Treating Metastatic Tumors
Jeanette R. Comstock
Patient-Reported Quality of Life after Bariatric Surgery: A Single Institution Analysis
Andrew J. Vegel
Patterns of Care and Clinical Outcomes for Breast Cancer with Micrometastasis
Claire Brickson

SESSION C ......................... Room 1309 HSLC
Facilitator: Pamela Kling, MD
Effects of Local Radiation and Immunocytokine on Endogenous Anti-Tumor Antibody Quantity and Diversity
Claire Baniel
Location, Location, Location...Site of Rib Fracture Predicts Utility of the 10 Hounsfield Unit Threshold for Identifying Adrenal Adenomas: Can We Improve?
Miranda Kohli

SESSION D ......................... Room 1306 HSLC
Facilitator: Patrick McBride, MD, MPH
Impact of Complications after Pancreatectomy in the ACS-NSQIP Procedure-Targeted Database
Jennifer A Mirrielees
Intermediate Term Outcomes after Primary Total Hip Arthroplasty: A Comparison of Metal on Metal Vs Highly Cross-Linked Polyethylene Bearing Surfaces
Dylan Lawrence
Factors Predicting Radiation Therapy in Early Stage Breast Cancer in Patients Age 70 and Over
Sarah Larson
Trends in Pediatric Patients Presenting to the Emergency Department with Mental Health Complaints
Anna Culhane
Meniscus T2 Relaxation Time at Various Stages of Knee Joint Degeneration
Ben Beduhn
Texture Analysis of Renal Cell Carcinomas at MDCT for Predicting Pathology
Jered Nystrom

SESSION E ......................... Room 1325 HSLC
Facilitator: Elizabeth Petty, MD
Assessing Documentation Provided for Interhospital Transfers of Emergency General Surgery Patients
Felicity Harl
Active Case Finding of Tuberculosis among Tibetan Refugees in India
Aref Senno
The Molecular Genetics of Primary Congenital Glaucoma
Weeden Bauman
Spine MRI and ACR Appropriateness Guidelines: Utilization Trends from an Academic Emergency Department
Spencer Klein
Papillary Thyroid Microcarcinoma: Decision-Making, Extent of Surgery, and Outcomes
Amanda Price

Abstracts are posted at http://med.wisc.edu/student-research
1. Evaluating the Benefits and Harms of Risk-Based Versus Age-Based Mammography Screening in Women Aged < 50 Years
   Elizabeth Adams

2. Building Human Embryonic Stem Cells with Inducible Notch Activation
   Sekani Allen

3. The Use of Traditional and Complementary Medicine for Diabetes in Rural Guatemala
   Colleen Andrews

4. Identification of High-Risk Glaucoma Characteristics in Older Women
   Minbo Bai

5. Novel Kcnj13 Mutation and Loss of Kir7.1 Channel Function Causes Leber Congenital Amaurosis
   Samuel Bauer

6. Inactionable' Mutations in Long-Term Survivors with Metastatic Breast Cancer, a Descriptive and Genomic Analysis Study
   Jordan Bauman

7. Prevalence of Preservatives Across all Product Types in the Contact Allergen Management Program
   Kevin Beene

8. An Analysis of Ambulation in Trauma Patients
   Ashok Bhattarai

   Casey Birschbach

10. Personalizing Iron Deficiency Screening in Pediatric Primary Care
    Nicholas Bohrer

11. Evidence of Cognitive Impairment among Continence-Promotion Workshop Participants
    Jenny Christl

12. Evaluating the Effects of Ethnicity and Legal Status on Childhood Vaccinations in Chiang Mai Province, Thailand
    Jessica Chung

13. Spectral Domain-Optical Coherence Tomography (SD-OCT) in Tracking Progression of Geographic Atrophy in Individuals with Late-Stage Dry AMD
    Spencer Cleland

14. Ethical Considerations Surrounding Minor Kidney Donation and Conception for Solid Organ Donation: A Case Study
    John Davis

15. The Effect of Sport Specialization On Lower Extremity Injury Rates in High School Athletes
    Abbey E. DeBruin

16. Anatomy of Family Physicians’ Clinical Care Work Days Through Direct Observation
    Michelle Deneen

17. Best Practice for Tobacco Cessation in MEDiC Clinics
    Kathryn Eszes

18. Evaluation of Injury Prevention Programs at American Family Children’s Hospital
    Emma Fenner

19. Morcellation During Hysterectomy or Myomectomy at the University of Wisconsin Hospital and Clinics and Meriter Hospital
    Nicole Fennimore

20. Relationship of Atherosclerotic Risk with Alzheimer’s Disease Cerebrospinal Fluid Biomarkers of Inflammation in At-Risk Adults
    Matthew Folstad

21. High-Resolution Manometry of Pharyngeal Swallowing Pressure Events and Related Hyoid Movements in Normal Swallowing
    Kofi Fosu

22. Identifying Independent Risk Factors for Injury in Female Youth Athletes
    Michael Franczak

23. A Clinical Approach to Assessing High Risk Herbal-Drug Interactions
    Julie Friedman

24. Alternative Providers’ Contribution to the Rise of Antibiotic Resistance in Rural India
    Youhi Ghouse

25. Identifying Barriers to MRI and Ultrasound Use in the Emergency Department
    Kevin Gliemann

26. Are Hospitalizations Among Children with Medical Complexity Sensitive to Ambulatory Care?
    Evan Goyette

27. Evaluating A Scalable, Online, Multidisciplinary SBIRT Training Program
    Matt Guerrieri

28. Review of Anti-VEGF Injections and Sustained Intraocular Pressure Increase In Multiple Clinical Trials at the University Of Wisconsin
    Mia Heiligenstein

29. The Survey of the Health of the Wausau Area Hmong Population Pilot Study
    Rachel Her

30. Detection and Neurological Impact of Cerebrovascular Events in Non-Cardiac Surgery Patients
    Brandon Hernandez

31. Unplanned Reintubation and Delayed Extubation Following Multilevel Subcervical Spine Surgery
    Jennifer Huynh

32. Investigation of Patients’ Perceptions Regarding Antibiotic Use and Resistance in Gurgaon, Haryana, India
    Athavi Jeevananthan

33. Patient Satisfaction with Emergency Physicians: A Comparison Study
    Jordan Johnson

34. Development of an Instrumented Clubfoot Model
    Matthew Kaili

35. Investigating the Relationship Between Usual Diet and Prevalence of Infection with Multidrug-Resistant Organisms in Haryana, India
    Shilpa Kalluru

36. Development of an Algorithmic Aid to Assist Community Health Workers (CHWS) in Rural Guatemala with Diabetes Treatment
    Mark Kelly

37. Inappropriate Antibiotic Prescribing for Long Term Care Facility Residents in Outpatient Settings
    Michael Kern

38. Resultant Histone Degradation from Rapamycin Treatment
    Qateeb Khan

39. Effectiveness of Emergency Department Care Plans
    Ryan Kilian

40. Distribution of Microparticles in Immature Bone
    Brian Kroll

Abstracts are posted at http://med.wisc.edu/student-research
POSTER PRESENTATION SESSIONS
Noon - 1:00 pm and 3:45 - 5:00 pm  Numbers correspond to display boards in the HSLC Atrium

41. Prolotherapy for Symptomatic Knee Osteoarthritis: Functional Outcomes in a Quality Improvement Project
   Stephanie Lakritz
42. Predicting Second-Look Transurethral Resection Utilization and its Impact on Recurrence of Non-Muscle Invasive Bladder Cancer
   Bruce Lee
43. Improved Cookstove Effects on Personal Carbon Monoxide Exposure in San Lucas Tolimán, Guatemala
   Katie Lucarelli
44. Effects of Stroke and Head and Neck Cancer on Proximal Esophageal Contraction Using High Resolution Manometry
   Dylan Lukato
45. The Relationship Between Caregiver Burden, Patient Behavioral Symptoms, and Memory Clinic Services
   Rachael Lyerla
46. Prostatic Fibrosis Contributes to Bladder Outlet Obstruction In Men with Small Prostates
   Will Lyon
47. The Impact of Direction of Displacement, Pin Configuration, and Surgeon Training on Clinical and Radiographic Outcomes in Type Iii Pediatric Supracondylar Humerus Fractures
   Maxwell Machurick
48. Efficacy of Transversus Abdominis Plane Steroid Injection for Treating Chronic Abdominal Pain
   David Malyuk
49. Healthcare Worker Perspectives of Motivation to Reduce Hospital-Acquired Infections
   Laura McClung
50. Long-Term Outcomes Following Mesh-Augmented Vaginal Prolapse Repair
   Elizabeth Meller
51. How Motion Tracking Relates to End Product Quality in Laparoscopic Procedures
   Colin Millar
52. Evaluation of a ‘Flipped Classroom’ Pilot of the Advanced Life Support in Obstetrics (ALSO) Curriculum
   Jacquelyn Mirr
53. Has The Affordable Care Act Altered Socioeconomic Disparities in Patient Outcomes after Traumatic Brain Injury?
   Eric Moffet
54. Prediction of Stress Fracture Based on DXA Derived Indices of Strength
   Arezu Monawer
55. Effects Of Inhaled Fluticasone on Upper Airway collapsibility in Patients with Asthma
   Nadia Nashi
56. Tagging CAR T Cells Targeting GD2+ Pediatric Neuroblastoma Using CRISPR Cas9
   Brady Olson
57. Effect Of Galectin-3 on Neuronal Cell Survival in Response to Oxygen Glucose Deprivation
   Allan Phan
58. Surgical Start Time As a Factor Influencing Hospital LOS after Shoulder Arthroplasty
   Drew Porter
59. Race and Insurance Status as Predictors of Outcomes and Care in Severe Thoracic Trauma
   Ryan Rauh
60. Predictors and Comorbidities of Food Insecurity
   Rachel Rongstad
61. Pre-Surgical Renal Mass Biopsy Reduces Upfront Treatment Costs for Small Renal Masses
   Maria Rozo
62. Dysmenorrhea in Women With Ulcerative Colitis
   Haley Schoenberger
63. Opiate Prescriptions at Emergency Department Discharge for Back Pain are Associated with Lower Revisit Rates At 3, 9, And 30 Days
   Christopher Scott
64. Effects of Prolotherapy for Treatment of Symptomatic Osteoarthritis: A Retrospective Chart Review
   Margaret Smith
65. The Impact of a Clinical Pathway on the Emergency Department Length of Stay in Children with Appendicitis
   Joohoe Son
66. Clinical Characteristics Can Differentiate Peritonsillar from Intratonsillar Abscesses: A Retrospective Imaging Study
   William Stewart
67. Tumor Treating Fields are Effective in Temozolomide Resistant Glioblastoma Cancer-Like Stem Cells
   Joslyn Strebe
68. Implementation of Best Practices in Contraceptive Care
   Renee Sullender
69. Screening in Trauma for Opioid Misuse Prevention
   Lisa Szela
70. A Retrospective DTI Study on the Effect of Distance Between Brain Tumor and Superior Longitudinal Fasciculus and Cingulum on Perioperative Language Outcomes
   Michael Turek
71. Assessing Childhood Fitness in Wisconsin Schools: A Qualitative Study
   Donna Ugboaja
72. Assessment of the Diurnal Variability of Liver Fat Concentration in Human Subjects
   Andrew Van Pay
73. Comparative Outcomes for Patients with Early Onset Renal Cell Carcinoma Following Surgery
   Jason Van Roo
74. Hospitalist Co-Management of Pediatric Patients: A Systematic Review and Meta Analysis
   Rebecca Veele
75. Use of Ultrasound for Distinguishing Non-Perforated from Perforated Appendicitis in Children
   Blake Weber
76. Platelet-Rich Plasma Improves Long Term Outcomes in Treatment of Chronic Tendinopathy
   Logan Wilz
77. Disconcordance Between Histologic and Visual Assessment of Tissue Viability in Excised Burn Wound Tissue
   Amy Yan
78. Correlation Between Lipoprotein(A) Levels and Age of Onset of Cardiovascular Disease in Family Members of a Pediatric Familial Hypercholesterolemia Population
   Amy Zawacki

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