2016 Research and Innovation Month
8th Annual National Capital Region
Research Competition Finalists

**Poster Display Week: Oral Poster Presentations (11 May 2016)**

**Case Reports Fellow and Staff**

Elizabeth Husson: The Effectiveness of Real Time Biofeedback Training in Reducing Vertical Impact Peaks During Running in a Service member with Unilateral Trans-tibial Limb Loss

LaGuinn Sherlock: Extended-Wear Hearing Aid Use in Operational Environments: Experiences from Two Deployments by a Combat Arms Commander

LT Sebastian Lara, MC: Desmoid Type Fibromatosis (DTF) in a Patient with Very Long-Chain-Acyl-CoA Dehydrogenase Deficiency (VLCADD)

Joshua Bernstein, Ph.D.: Optimizing the Frequency Map for a Cochlear-Implant Patient with Normal-Hearing in the Other Ear

**Case Reports Intern and Resident**

CPT Michael A Donohue, MC: Extensor Carpi Radialis Brevis Avulsion Fracture: A Novel Fixation Technique Using a Modified Hook Plate

CPT Christopher Lowe, MC: Primary Cutaneous Zygomycosis in an Extremely Preterm Infant Successfully Treated With Liposomal Amphotericin B

CPT Jennifer Windsor, MC: Radiofrequency Ablation of Amputation Related Neuromas

LT Samantha Mikals, MC: Hypoglossal Nerve Stimulator Use for Obstructive Sleep Apnea in the Military


CPT Shane Sweeney, MC: Spontaneous Regression of a Primary Clear Cell Renal Cell Carcinoma

CPT Timothy Blood, MC: Trans-nasal Endoscopic Eustachian Tube Closure for Recalcitrant CSF Leak Following Translabyrinthine Acoustic Neuroma Resection

LT Alana Connell, MC: Cardiac MRI for Noninvasive Differentiation of AL and ATTR Amyloidosis
CAPT Lisa Osborne, NC: Implementation and Evaluation of the Patient Safety Obstetric Hemorrhage Bundle

CDR Darren J. Couture, NC: Measuring Competency in the Provision of Ultrasound Guided Regional Anesthesia

QUALITY IMPROVEMENT (QI)

Traci Carter, R.N.: Written Insulin Pump Backup Plans for Pediatric Patients with Type 1 Diabetes Are Associated With Decreased Admissions for Diabetic Ketoacidosis

CPT Matthew Holtkamp, MC: Implementation of the Neurology Resident Handbook Application Improves Patient Care

Jeannie Williams, R.N.: Using Performance Improvement (PI) methods to Standardize and Improve Nursing Documentation in an Outpatient Hematology Oncology Setting

Travis Combest: An Exercise and Nutrition Digital Message and Appointment Reminder In Relay Health on Preventive Health Measures

MAJ Heather Mascio, MC: A QI project: Improvement in Interdialytic Weight Gain in the Walter Reed Hemodialysis Unit with Individualized Adjustment of Dialysate Sodium Concentrations

MAJ Todd Simon, MC: A Quality Improvement Project to Improve IVC Filter Retrieval

LT Philip Rothberg, MC: Analysis Of Pelvic Binder Placement Among Casualties in Afghanistan: A Process-Improvement Initiative

Capt. Patrick Saas, MC: Ages and Stages Questionnaire Quality Improvement
MAJ Luis Lozada, MC: Omega 3 PUFA Deficient Diet during Pregnancy and Lactation Has Long Term Effects on Learning and Memory in Mice

Charles Xavier, Ph.D.: Identification of the ERGi-USU, A Novel Inhibitor for the ERG Oncogene Positive Cancers

Anshu Rastogi, Ph.D.: Immunobiomarkers Novel Autoantibody Panel Containing Oncogenic ERG, C-Myc, AMACR and HERV-K Gag for the Detection of Prostate Cancer from Patient Sera

MAJ Kristen Bunch, MC: Upregulation of the Extrinsic Apoptosis Pathway by Docetaxel, Panobinostat, and Volasertib May Potentiate Synergy with Birinapant in High-Risk Serous Ovarian Cancer

Robert A. Phillips (RAP) Resident Laboratory Finalists

LCDR Jonathan Seavey, MC: Vancomycin Powder Decreases Persistent Infection and Significantly Attenuates Ectopic Bone Formation in a Rat Model of Trauma-induced Heterotopic Ossification

CPT John Andersen, MC: Development of a Novel Cell-Line-Based Immunohistochemical tp53 Expression Control Panel at Walter Reed National Military Medical Center

LT Daniel Griffin, MC: Epigenetic Control and Fibrosis in Combat Blast-Related Heterotopic Ossification

LT Daniel Griffin, MC: Genetic Markers Correlating With Reoperation for Combat Blast-Related Heterotopic Ossification

Bailey K. Ashford (BKA) Laboratory Finalists

CPT Eric Scofield, MC: Up Regulation and Targeting Of Cancer Testis Antigens in Leukemic Blasts Using Epigenetic Therapy


LTC Greene Donald Royster, MC: Rapamycin Expands T-Regulatory Cells and Improves Implantation and Live Birth Rates in A Murine Model

Bethany Cunningham, M.D.: Elucidating the Mechanism of 6-Mercaptopurine Induced Hepatotoxicity and How Combination with Allopurinol Eliminates the Hepatotoxicity
RESEARCH SYMPOSIUM II: CLINICAL PRESENTATIONS (19 MAY 2016)
ROBERT A. PHILLIPS (RAP) FELLOW AND STAFF CLINICAL FINALISTS

Benjamin M. Sheffield: Evaluating the Operational Impact of Hearing Impairment on Dismounted Combat Using the Home Station Instrumentation Training System (HITS)

JoManete Nousak, Ph.D.: Aural Rehabilitation Outcomes Measures from Service Members (SMs) With Mild Traumatic Brain Injury (mTBI) and Psychological Health (PH) Conditions

MAJ Elizabeth M Polfer, MC: The Effect of Skin Pigmentation on Clinical Exam for Determination of Limb Ischemia in Healthy Controls

Marie Onakomaiya, Ph.D.: Multitasking in the Computer-Assisted Rehabilitation Environment (CAREN) Distinguishes Service Members with Mild Traumatic Brain Injury Alone From Those with Comorbid Post-Traumatic Stress Disorder

ROBERT A. PHILLIPS (RAP) RESIDENT CLINICAL FINALISTS

Capt Katrina Fernandez, MC: Suspected or Known Neonatal Sepsis and Neurodevelopmental Outcomes at Five Years

CPT Stephanie Berdy, MC: Neonatal Hypoglycemia and Developmental Outcomes in the First Five Years: A Retrospective Cohort Study

LT Theodora Dworak, MC: Epidemiology of Symptomatic Dorsal Wrist Ganglia in Active Duty Military and Civilian Populations


BAILEY K. ASHFORD (BKA) CLINICAL FINALISTS

MAJ Elizabeth Polfer, MC: The Effect of Skin Pigmentation on Clinical Exam for Determination of Limb Ischemia in Healthy Controls

MAJ Ruth Faircloth, MC: Talking about Childhood Obesity: What Parents Want

MAJ Torie Plowden, MC: Subclinical Hypothyroidism and Thyroid Autoimmunity Are Not Associated With Adverse Pregnancy Outcomes or Live Birth Rates

LT Scott Wagner, MC: Distal Ulnar Hounsfield Units Accurately Predict Forearm Bone Mineral Density and Future Fragility Fracture Risk