disparities in navigation to health research among Floridians

Linda B. Cottler1,3, Deepthi S. Varma1,2, Krishna Vaddiparti1,3 and Catherine Strely1,2
1 Department of Epidemiology, University of Florida; 2 Clinical and Translational Science Institute, University of Florida

OBJECTIVES/SPECIFIC AIMS: The analyses explore socio-demographic characteristics of community members who are navigated and enrolled in health research through HealthStreet—the CTSA community engagement initiative at University of Florida. METHODS/STUDY POPULATION: HealthStreet utilizes the Community Health Worker model to reach the community, conduct health assessments, provide referrals to medical/social services and link people to health research. We compared never navigated, navigated and not enrolled, navigated and enrolled on demographics, access to care, common health conditions and drug use among this community dwelling population. RESULTS/ANTICIPATED RESULTS: Among the 9581 community members, 51% were never navigated to a study; 41% were screened eligible and enrolled (n = 2024) for an overall enrollment yield of 21%. Disparities were found for all variables; never navigated and gaps. Cross-institute opportunities for M.D.-Ph.D. research mentoring requests and 1 regulatory review. Curriculum reviews noted overlap and gaps. DDC assisted with 15 grant applications (outcomes pending), 10 industry-related new drug development requests and 1 regulatory review. Does maternal schistosomiasis affect the humoral and cellular vaccine responses of infants?

Deborah Blach1, Taryn McLaughlin1, Cheryl Day1, W. Evan Secor2, Govert van Dam3, Paul Corstjens1, Heather B. Jaspan4, Grace John-Stewart5, Saad B. Omer1 and Lisa Cramer1
1 Emory University; 2 United States Centers for Disease Control and Prevention (CDC); 3 Leiden University Medical Centre; 4 University of Washington

OBJECTIVES/SPECIFIC AIMS: The aims of this study are 2-fold: (1) to determine if maternal schistosomiasis affects maternal immunity to tetanus and/or transferal transfer of antibiotic toxoid (TT) immunoglobulin G (IgG) and (2) to determine the influence of maternal schistosomiasis on infant BCG vaccine immunogenicity. METHODS/STUDY POPULATION: The study will utilize blood samples from a historic cohort of 100 mother-infant pairs from Kisumu, Kenya, a schistosomiasis-endemic area. For the first aim, we will evaluate maternal schistosomal circulating anodic antigen, which has improved sensitivity and specificity to detect active schistosomiasis from serum, and antisalubil egg antigen IgG positivity compared with quantitative maternal anti-TT IgG at delivery and anti-TT IgG cord blood to maternal blood ratio (cord:maternal). For the second aim, we will evaluate association between maternal schistosomiasis as detected by circulating anodic antigen and antisalubil egg antigen IgG at delivery and infant BCG-specific T-helper-cytokine positive CD4+ cells at 10 weeks following BCG vaccination at birth. RESULTS/ANTICIPATED RESULTS: We hypothesize that active maternal schistosomiasis will be associated with decreased maternal anti-TT IgG and reduced efficiency of transferal transfer, as measured by infant cord blood to maternal blood ratio of anti-TT IgG. We also expect that maternal schistosomiasis will be associated with decreased infant immunogenicity to BCG vaccine. DISCUSSION/SIGNIFICANCE OF IMPACT: This formative study on infant vaccine immunity using laboratory methodology not previously applied. Understanding infant immunity in the setting of maternal schistosomiasis will inform vaccination strategies and tailor vaccine development in schistosome-endemic areas such as Kenya, where neither TB nor neonatal tetanus have been eradicated. Additionally, our results will inform public health policies to consider integration of antisalubil agents in antenatal care.

Drug development core facilitates institutional collaboration and translational science innovation

Gene Morse1, Igor Puzanov1, Andrei Gutkov2, Robin DiFrancesco3, William Jusko1, Marc Ernstoff1, James Mohler2, Timothy Murphy2 and Robert Bies1
1 University at Buffalo, State University of New York; 2 Roswell Park Cancer Institute

OBJECTIVES/SPECIFIC AIMS: Drug development is a common research pursuit for basic and clinical scientists that interfaces diagnostic/therapeutic challenges with funding agencies, pharmaceutical industry, regulatory systems, and education. The University at Buffalo Clinical and Translational Science Institute (CTSI) has implemented a Drug Development Core (DDC) with goals that foster team science and collaboration, optimize laboratory use, and networks investigators. Our goals are to foster collaborations within the region and with other CTSA’s. METHODS/STUDY POPULATION: The DDC met with 300 potential investigators from 14 departments and several local companies. There were 35 portal requests from 15 departments and 7 companies; 8 were from training programs. For 28 requests, a reviewer provided consultation, while 7 required discussions and review of data. DDC assisted with 15 grant applications (outcomes pending), 10 industry-related new drug development requests and 1 regulatory review. Curriculum reviews noted overlap and gaps. Cross-institute opportunities...