Pathology and Microbiology

Current Federal Awards


Kai Fu, M.D., Ph.D. DoD/USAMRAA. Targeting PLK-1 for treating MYC-driven lymphomas.
Kenneth Bayles, Ph.D. NIH/NIAID P01 AI083211. S. aureus biofilm lifestyle.

Kenneth Bayles, Ph.D. NIH/NIAID R01 AI25589. The molecular control of bacterial programmed cell death.

Paul Fey, Ph.D., NIH/NIAID P01 AI083211. Catabolism of Peptides and Amino Acids by S. aureus.

Javeed Iqbal, Ph.D. NIH/NCI R41 CA221466 Development of a novel clinical diagnostic assay for peripheral T-cell lymphoma (PTCL)

Tammy Kielian, Ph.D., NIH/NIAID P01 AI083211. Contribution of Extracellular Enzymes to Staphylococcus aureus Biofilm Development.

Tammy Kielian, Ph.D., NIH/NIAID P01 AI083211. Innate Immune Response to S. aureus Biofilm.

Keer Sun, Ph.D., NIH/NIAID R56 AI137161. T-cell-alveolar macrophage crosstalk during Influenza and streptococcus pneumoniae co-infection.

Vinai C. Thomas, Ph.D., NIH/NIAID P01 AI083211. Metabolomics Core.


Vinai C. Thomas, Ph.D., NIH/NIAID R01 AI125588. The role of arginine catabolic pathways in modulating staphylococcal fitness.

Kurt Fisher, M.D., Ph.D. NIH/NCI K08 CA222887. The role of PGC1beta and erralpha as novel targets for therapy in colorectal cancer.

Scott Campbell, MBA, Ph.D. DHHS/NIH/National Human Genome Research Institute U01-HG009455-03S1. Alzheimer’s Disease biorepository and knowledge discovery toolset. Administrative Supplement.
Scott Campbell, MBA, Ph.D. DHHS/NIH/National Human Genome Research Institute U01-HG009455. Deploying ONC national standards in support of metadata for big data research warehouse management of repurposed laboratory, pathology & patient findings data from the HER.

Gus Wang, Ph.D. NIH/NIAID R01 AI105147. Database designed novel anti-MRSA peptides.

Steven Carson, Ph.D. NIH/NIAID. R03 AI130174. Receptor-Mediated Steps in Enterovirus Infection Involve Allostery.

Javeed Iqbal, Ph.D. (project leader-Mayo Clinic parent) NIH/NIAID P01 CA229100. Molecular Pathogenesis of two newly defined major subgroups of PTCL.

Tammy Kielian, Ph.D. NIH/NINDS. R01 NS107369. Immune Mechanisms that Promote S. Aureus Persistence During Craniotomy-Associated Biofilm Infection.

Caroline Ng, Ph.D. NIH/NIAID. R21 AI137900. Leveraging Insights into the Plasmodium Falciparum Ubiquitin-Proteasome System and the Unfolded Protein Response to Combat Artemisinin Resistance through Synergistic Combinations.


Rey Carabeo, Ph.D., Scot Ouellette, Ph.D., Elizabeth (Lisa) Rucks, Ph.D. NIH/NIAID. R01 AI132406. Regulatory Role of Tandem Tryptophan Codons in Chlamydia Persistence.


St. Patrick Reid, Ph.D. NIH/NIAID. R21 AI140026. Modeling Chikungunya Virus Infection in a Vascularized Bone Model.

Keer Sun, Ph.D. NIH/NIAID. R21 AI128527. SOCS1 regulations of Influenza infection.

Rakesh Singh, Ph.D. NIH/NCI. R01 CA228524. Targeting CXCR2 Axis in Pancreatic Cancer.

Keer Sun, Ph.D. NIH/NIAID. R01 HL118408. Oxidative burst in Influenza and MRSA co-infection.

Learn more about the above-mentioned awarded grants by visiting our department’s Pathways page.