



Pathology and Microbiology

Current Federal Awards

Kenneth Bayles, PhD. NIH/NIAID P01 AI083211. Staphylococcal Biofilm and Disease.

Sub-Project: Paul Fey, PhD. 5291. Catabolism of Peptides and Amino Acids by *S. Aureus*.

Sub-Project: Tammy Kielian, PhD. 5293. Innate Immune Response to *S. Aureus* Biofilm.

Sub-Project: Tammy Kielian, PhD. 5292. Contribution of Extracellular Enzymes to *Staphylococcus Aureus* Biofilm

Sub-Project: Vinai C. Thomas, PhD. 5288. Metabolic Core

Kenneth Bayles, PhD. DHHS/NIH/NIAID. R01 AI125589. The molecular control of bacterial programmed cell death.

M. Jana Broadhurst, MD, PhD, DDTM&H. (Mount Sinai Hospital) WMD ECHO Detector.

Rey Carabeo, PhD. DHHS, NIH/NIAID R01 AI065545. Chlamydial invasion of non-phagocytic cells.

Rey Carabeo, PhD, Scot Ouellette, PhD and Elizabeth Rucks, PhD. DHHS/NIH/NIAID R01 AI132406. Regulatory role of tandem tryptophan condons in chlamydial persistence.

Steve Carson, PhD. DHHS/NIH/NIAID R03 AI130174. Receptor-mediated steps in enterovirus infection involve allostery.

Leah Cook, PhD. American Cancer Society. 134073-RSG-19-127-01-CSM. Reprogramming the Immune-BME for Improving Outcomes of Bone Metastatic PCa.

Leah Cook, PhD. American Cancer Society. TLC Pilot Grant. Exploring the role of CPT1A in Neutrophil-mediated immune response and BM-PCa progression.

Kurt Fisher, MD, PhD. NIH/NCI K08 CA222887. The role of PGC1beta and ERRalpha as novel targets for therapy in colorectal cancer.

Stacey Gilk, PhD. NIH/NIAID R01 AI139176. Coxiella manipulation of cholesterol in the intracellular niche.

Stacey Gilk, PhD. NIH/NIAID R21 AI149723. Intracellular IL-17 signaling during coxiella burnetii infection.

Javeed Iqbal, PhD. NIH/NCI UH3 CA206127. Molecular diagnostic and prognostic signatures for PTCL.



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

Tammy Kielian, PhD. NIH/NINDS. R01 NS107369. Immune Mechanisms that Promote *S. Aureus* Persistence during Craniotomy-Associated Biofilm Infection.

Caroline Ng, PhD. 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.

Scot Ouellette, PhD. NIH/NIAID. R21 AI141933. Development of tools for conditional knockouts in *Chlamydia*.

Scot Ouellette, PhD. NSF/Career. 1810599. Effects of reductive evolution on amino acid stress responses in bacteria.

Scot Ouellette, PhD. NIH/NIGMS. R35 GM124798. Polarized chlamydial cell division in the absence of FtsZ.

Scot Ouellette, PhD. NSF/Collaborative Research. 1817583. Mechanism of polarized budding in *Chlamydia*.

Scot Ouellette, PhD. NIH/NIAID R56 AI146062. Role of the CLP Protease systems in the growth and pathogenesis of *Chlamydia*.

St. Patrick Reid, PhD. NIH/NIAID. R21 AI140026. Modeling Chikungunya virus infection in a vascularized bone model.

Josh Santarpia, PhD (PI), Marilyn Larson PhD (Co-I). DHHS/ASPR. Investigation of novel materials to rapidly decontaminate SARS-Co-V-2 virus from PPE and clinical surfaces.

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

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

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

Gus Wang, PhD (Multi PI). NIH/NIGMS R01 GM138552. Novel Janus-type antimicrobial dressings for the treatment of biofilms in chronic wounds.