
From: LeDuc, James W. [REDACTED] (b) (6)
Sent: 1/24/2020 1:01:19 PM
To: Kadlec, Robert (OS/ASPR/IO) [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7f23b72e23e047e98fb6f136e865d60a-Robert.Kadl]; Auchincloss, Hugh (NIH/NIAID) [E] [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9304c753bb9e422c977dddab54da924b-auchincloss]
CC: Pei yong. Shi [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3cf21b1e8f4f4251801f0da03f3261b6-peshi.UTMB.]
Subject: Fwd: No Snakes?

See text at bottom for more on sequence analysis.

Also I just learned that Wuhan leadership is requesting we raise our request for the isolates to higher political level. Can we get our ambassador involved? Scientists are eager to share. This is a political decision now.

Thanks. Jim

Sent from my iPhone

Begin forwarded message:

From: "Ksiazek, Thomas G." <[REDACTED] (b) (6)>
Date: January 24, 2020 at 2:33:14 AM EST
To: "LeDuc, James W." <[REDACTED] (b) (6)> "Tseng, Chien-Te K." <[REDACTED] (b) (6)> "Menachery, Vineet" <[REDACTED] (b) (6)> Tesh Robert <[REDACTED] (b) (6)> "Holubar, Connie J." <[REDACTED] (b) (6)>
Subject: Fwd: No Snakes?

Tom Ksiazek

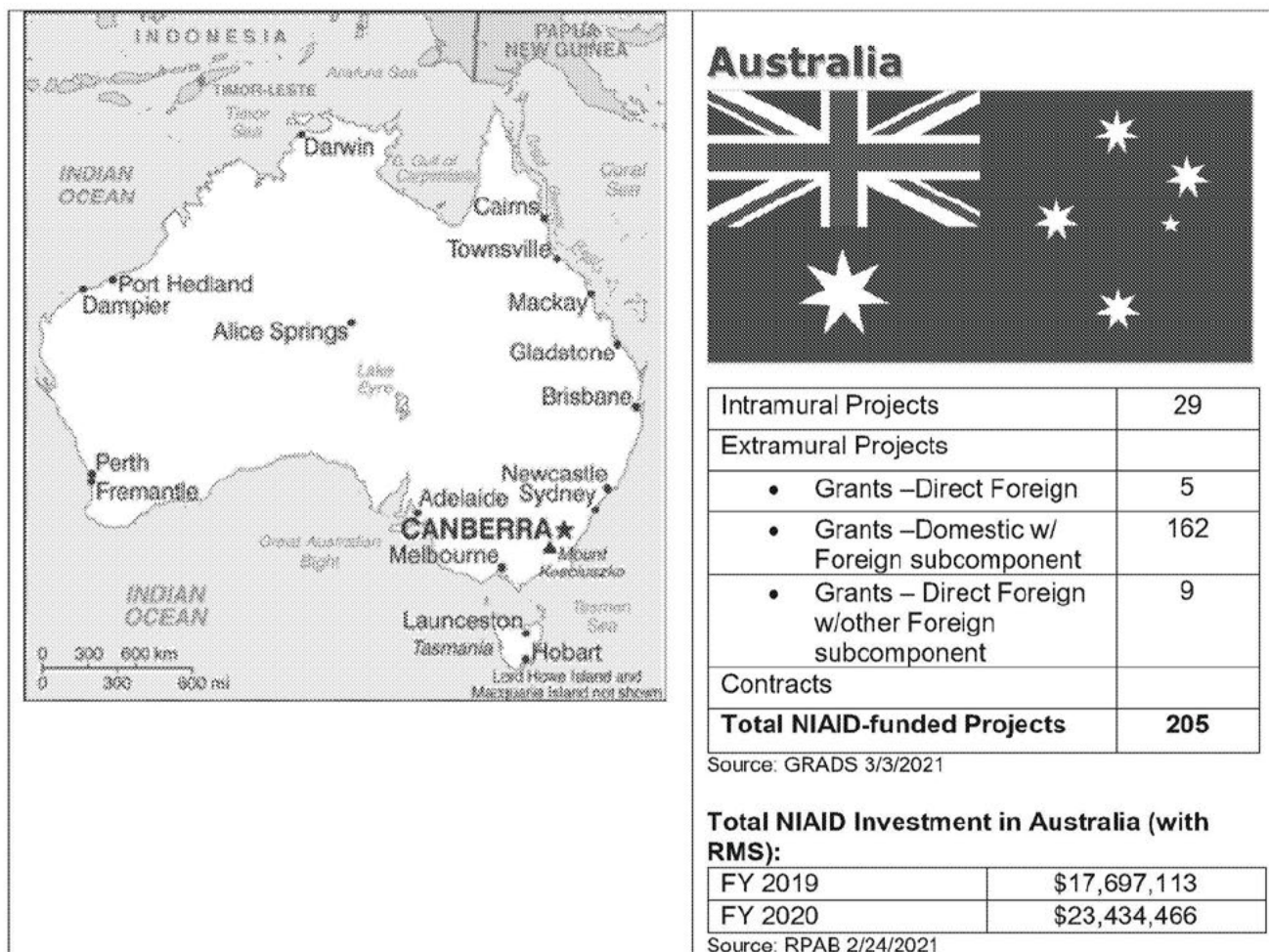
Sent from a portable device

Begin forwarded message:

From: Dean Erdman <[REDACTED] (b) (6)>
Date: January 23, 2020 at 22:29:42 CST
To: "Ksiazek, Thomas G." <[REDACTED] (b) (6)>
Subject: No Snakes?

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**nCoV's relationship to bat coronaviruses
& recombination signals (no snakes)**



Australia is a country bordered by the Indian Ocean and the South Pacific Ocean. The country is home to 10% of the world's biodiversity. Australia is a federal parliamentary democracy and a Commonwealth realm. Australia has a robust economy, which continues to grow due to its location and the policy reforms in the 1980s. The country has a GDP of \$1.39 trillion (The World Factbook, 3/3/2021).

General Health Information on Australia

Australia has a population of approximately 25.8 million people, a life expectancy of 82.9 (80.7/85.2 m/f), and a median age of 37.5. Maternal mortality in Australia is 6 deaths per 100,000 live births, and the under-five mortality rate is 3.6 per 1,000 live births (The World Factbook and UNICEF, 3/3/2021). Australia spends 9.3% of its GDP on health and \$ 5,425 total annually on health per capita (The World Factbook and World Bank, 3/3/2021). Australia has a mixed public and private healthcare system (Australian Institute of Health and Welfare [AIHW], 3/3/2021).

The leading causes of death in Australia are ischemic heart disease, stroke, Alzheimer's disease, lung cancer, COPD, colorectal cancer, chronic kidney disease, prostate cancer, lower respiratory infection, and diabetes (IHME, 3/3/2021). Sexually transmitted infections and foodborne illnesses are among the most common infectious diseases in Australia (AIHW). The estimated prevalence of HIV among adults (15-49 years old) is 0.1% (World Factbook, 3/3/2021).

Summary of NIAID Activities

Australia has five grants directly awarded to Australian investigators/institutions. These are to study HIV, influenza, antimicrobial drug resistance, immunology, and vector biology. Extramural and intramural research collaborations between U.S. and Australian investigators continue to be robust and prolific, without the need for a formal program or agreement. Australia participates in several NIAID-supported networks including the Center for AIDS Research, IeDEA, and INSIGHT. The Kirby Institute, University of New South Wales, is one of the international coordinating centers for INSIGHT and ACTIV-3.

NIAID Considerations

- Regional collaboration: The National Health and Medical Research Council (NHMRC) is a member organization of e-ASIA.
- NHMRC of the Australian government provides funding to support research across the full biomedical research, including basic science and clinical, public health and health services research.

U.S. – Australia Science and Technology Agreements

- An umbrella agreement between the U.S. Government and the Commonwealth of Australia relating to Scientific and Technical Cooperation.

Delegation Visits

- Australia's Foreign Minister Marise Payne visited NIAID on March 12, 2020 and met with Dr. Auchincloss and others to be briefed on COVID-19.
- Prof. Vasan, lead of the CSIRO Dangerous Pathogens team at the Australian Animal Health Laboratory, visited NIAID on September 19, 2019.
- A delegation from the Indo-Pacific Health Security (telecon) and a group from the University of Melbourne visited NIH on March 7, 2018
- Minister Counsellor Anthony Murfett, Australian Embassy, visited NIAID on November 7, 2016. He was interested in asthma and allergy research and learning more about NIAID.

Key Australian Research Institutions of interest to NIAID (with multiple current NIAID collaboration/support, source: GRADS)

- Burnett Institute
- Commonwealth Scientific and Industrial Research Organization
- Monash University
- The Alfred Hospital
- The Australian National University
- The University of Queensland
- The University of Sydney
- University of Melbourne
- University of New South Wales
- University of Western Australia
- Walter and Eliza Hall Institute of Medical Research

Key Australian Funding Agencies

- Medical Research Future Fund
- National Health and Medical Research Council

NIAID Awards

NIAID currently supports 205 projects (five direct awards) that involve Australian scientists focused on: antimicrobial resistance, HIV/AIDS, immunology, influenza, malaria, SARS-CoV-2/COVID-19, and other emerging infectious diseases.

ALLERGY, IMMUNOLOGY, AND TRANSPLANTATION (43)

Direct Foreign

INVESTIGATING THE BASIS OF MAIT CELL ANTIGEN POTENCY (AI148407)

PI: JAMES MCCLUSKEY; UNIVERSITY OF MELBOURNE; AUSTRALIA

Collaborators:

DAVID FAIRLIE; THE UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

JAMES MCCLUSKEY; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

JAMIE ROSSJOHN; MONASH UNIVERSITY; CLAYTON, AUSTRALIA

Domestic with Foreign Subcomponent

SEVERE CHRONIC NEUTROPENIA INTERNATIONAL REGISTRY (AI049393)

PI: DAVID DALE; UNIVERSITY OF WASHINGTON; UNITED STATES

Collaborators:

FRANK FIRKIN; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

HEMATOPOIETIC STEM CELL AND CORD BLOOD TRANSPLANTATION (AI069197)

PI: EFFIE PETERSDORF; FRED HUTCHINSON CANCER RESEARCH CENTER; UNITED STATES

Collaborators:

DAVID GOTTLIEB; AUSTRALASIAN BONE MARROW TRANSPLANT RECIPIENT REGISTRY;

DARLINGHURST, AUSTRALIA

JEFF PROF. SZER, MB, BS; THE ROYAL MELBOURNE HOSPITAL; PORT VICTORIA, AUSTRALIA

JEREMY CHAPMAN; AUSTRALIAN BONE MARROW DONOR REGISTRY; ALEXANDRIA, AUSTRALIA

AIRWAY INFLAMMATION AND AIRWAY REMODELING (AI070535)

PI: DAVID BROIDE; UNIVERSITY OF CALIFORNIA, SAN DIEGO; UNITED STATES

Collaborators:

BRIAN OLIVER; WOOLCOCK INSTITUTE OF MEDICAL RESEARCH; SYDNEY, AUSTRALIA

VASCULAR-STROMAL FUNCTION AND REGULATION IN IMMUNITY (AI079178)

PI: THERESA LU; HOSPITAL FOR SPECIAL SURGERY; UNITED STATES

Collaborators:

DAVID TARLINTON; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

INBORN ERRORS OF IMMUNITY IN CHILDREN WITH HERPES SIMPLEX ENCEPHALITIS (AI088364)

PI: JEAN-LAURENT CASANOVA; ROCKEFELLER UNIVERSITY; UNITED STATES

Collaborators:

JOHN CHRISTODOULOU; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

STUART TANGYE; GARVAN INSTITUTE OF MEDICAL RESEARCH; SYDNEY, AUSTRALIA

INSIGHTS INTO IMMUNE-RELATED DISEASES BORN FROM POPULATION GENOMICS (AI090905)

PI: PAUL NORMAN; UNIVERSITY OF COLORADO DENVER; UNITED STATES

Collaborators:

STEPHEN LESLIE; THE UNIVERSITY OF MELBOURNE; VICTORIA PARK, AUSTRALIA

SYSTEMS IMMUNOGENETICS OF BIODEFENSE AND EMERGING PATHOGENS IN THE COLLABORATIVE CROSS (AI100625)

PI: RALPH BARIC; UNIV OF NORTH CAROLINA CHAPEL HILL; UNITED STATES

Collaborators:

BENJAMIN TANG; UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

MECHANISMS LIMITING NEONATAL IMMUNITY (AI105265)

PI: BRIAN RUDD; CORNELL UNIVERSITY; UNITED STATES

Collaborators:

MILES DAVENPORT; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

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REGULATORY INKT CELLS SUPPRESS INFLAMMATION AND DRIVE THERMOGENESIS (AI113046)

PI: MICHAEL BRENNER; BRIGHAM AND WOMEN'S HOSPITAL; UNITED STATES

Collaborators:

DANIEL PELLICCI; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

SYSTEMS BIOLOGY TO IDENTIFY BIOMARKERS OF NEONATAL VACCINE IMMUNOGENICITY (AI118608)

PI: OFER LEVY; BOSTON CHILDREN'S HOSPITAL; UNITED STATES

Collaborators:

ANITA VAN DEN BIGGELAAR; UNIVERSITY OF WESTERN AUSTRALIA; SUBIACO, AUSTRALIA

MICRORNAS AND NKT CELL DEVELOPMENT AND FUNCTION (AI119041)

PI: QING-SHENG MI; HENRY FORD HEALTH SYSTEM; UNITED STATES

Collaborators:

DALE GODFREY; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

MHC AND KIR REGION GENOMICS IN PSORIASIS (AI119125)

PI: WILSON LIAO; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO; UNITED STATES

Collaborators:

STEPHEN LESLIE; MURDOCH CHILDREN'S RESEARCH INSTITUTE; MELBOURNE, AUSTRALIA

STEPHEN LESLIE; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

IMMUNOPROTECTIVE PROPERTIES OF TISSUE-RESIDENT MEMORY T CELLS IN MICE AND HUMANS WITHIN MUCOSAL SITES (AI121129)

PI: JOSHUA SCHIFFER; FRED HUTCHINSON CANCER RESEARCH CENTER; UNITED STATES

Collaborators:

FRANCIS CARBONE; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

PRENATAL, INTRAPARTUM AND INFANT ANTIBIOTIC USE AND ATOPIC DISEASES IN CHILDHOOD (AI122266)

PI: LYNDSEY DARROW; UNIVERSITY OF NEVADA RENO; UNITED STATES

Collaborators:

CRAIG HANSEN; SOUTH AUSTRALIAN HEALTH/MEDICAL RES/INST; ADELAIDE, AUSTRALIA

MECHANISTIC ELUCIDATION OF INFLAMMASOME ASSEMBLY AND REGULATION (AI124491)

PI: HAO WU; BOSTON CHILDREN'S HOSPITAL; UNITED STATES

Collaborators:

KATRYN STACEY; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

GENOME-WIDE SEARCH FOR INBORN ERRORS OF IL-17 IMMUNITY UNDERLYING CHRONIC MUCOCUTANEOUS CANDIDIASIS (AI127564)

PI: JEAN-LAURENT CASANOVA; ROCKEFELLER UNIVERSITY; UNITED STATES

Collaborators:

STUART TANGYE; GARVAN INSTITUTE OF MEDICAL RESEARCH; DARLINGHURST, AUSTRALIA

MECHANISMS OF SUCCESSFUL VACCINE ADJUVANTS (AI127970)

PI: THOMAS MITCHELL; UNIVERSITY OF LOUISVILLE; UNITED STATES

Collaborators:

AVRIL ROBERTSON; THE UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

TCR SIGNAL STRENGTH AND INKT CELL SUBSET DEVELOPMENT (AI130198)

PI: LAURENT GAPIN; UNIVERSITY OF COLORADO DENVER; UNITED STATES

Collaborators:

JAMIE ROSSJOHN; MONASH UNIVERSITY; CLAYTON, AUSTRALIA

THE ROLE OF IL-II IN THE DEVELOPMENT OF AUTOIMMUNE RESPONSE IN MULTIPLE SCLEROSIS (AI131238)

PI: SILVA MARKOVIC-PLESE; THOMAS JEFFERSON UNIVERSITY; UNITED STATES

Collaborators:

TRACY PUTOCZKI; WALTER AND ELIZA HALL INST MEDICAL RES; PARKVILLE, AUSTRALIA

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MOLECULAR DETERMINANTS OF TISSUE-RESIDENT MEMORY T CELL FATE IN ACUTE AND CHRONIC INFECTION (AI132122)

PI: ANANDA GOLDRATH; UNIVERSITY OF CALIFORNIA, SAN DIEGO; UNITED STATES

Collaborators:

FRANCIS CARNONE; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

LYSOSOME DEFECTS AND THE ACCUMULATION OF IMMUNE COMPLEXES IN HUMAN LUPUS (AI132421)

PI: BARBARA VILEN; UNIV OF NORTH CAROLINA CHAPEL HILL; UNITED STATES

Collaborators:

HOGARTH P MARK; MACFARLANE BURNET INST FOR RES/PUB HLTH; MELBOURNE, AUSTRALIA

CELL DECISION UNDERLYING B-CELL IMMUNE RESPONSES (AI132731)

PI: ALEXANDER HOFFMANN; UNIVERSITY OF CALIFORNIA LOS ANGELES; UNITED STATES

Collaborators:

STEPHEN NUTT; THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH; PARKVILLE, AUSTRALIA

DETERMINING THE ACCURACY OF CEPHALOSPORIN ALLERGY TESTING (AI134569)

PI: DAVID KHAN; UT SOUTHWESTERN MEDICAL CENTER; UNITED STATES

Collaborators:

JASON TRUBIANO; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

LJI EPITOPE VALIDATION CENTER: CHARACTERIZATION OF EPITOPE-SPECIFIC T CELLS RESPONDING TO FOOD, FUNGAL AND INNER CITY ALLERGENS (AI135731)

PI: ALESSANDRO SETTE; LA JOLLA INSTITUTE FOR IMMUNOLOGY; UNITED STATES

Collaborators:

SIMON MALLAL; MURDOCH UNIVERSITY; PERTH, AUSTRALIA

ALLERGEN T CELL EPITOPES AND PHENOTYPES IN PEANUT ALLERGY AND IMMUNOTHERAPY (AI135817)

PI: WILLIAM KWOK; BENAROYA RESEARCH INST AT VIRGINIA MASON; UNITED STATES

Collaborators:

PASCAL HICKEY; ARAVAX PTY LTD; MELBOURNE, AUSTRALIA

FUNCTION OF CD1A ON LANGERHANS CELLS IN SKIN INFLAMMATION (AI136939)

PI: FLORIAN WINAU; BOSTON CHILDREN'S HOSPITAL; UNITED STATES

Collaborators:

JAMIE ROSSJOHN; MONASH UNIVERSITY; CLAYTON, AUSTRALIA

IMMUNE MECHANISMS REGULATING ALLERGY (AI136942)

PI: STEPHANIE EISENBARTH; YALE UNIVERSITY; UNITED STATES

Collaborators:

STUART TANGYE; GARVAN INSTITUTE OF MEDICAL RESEARCH; SYDNEY, AUSTRALIA

SINGLE CELL DEFINITION OF PATHOGENIC T CELLS IN DRUG-INDUCED STEVENS-JOHNSON-SYNDROME/TOXIC EPIDERMAL NECROLYSIS (AI139021)

PI: ELIZABETH PHILLIPS; VANDERBILT UNIVERSITY MEDICAL CENTER; UNITED STATES

Collaborators:

JASON TRUBIANO; AUSTIN AND REPATRIATION MEDICAL CENTRE; MELBOURNE, AUSTRALIA

IAN JAMES; MURDOCH UNIVERSITY; PERTH, AUSTRALIA

MOLECULAR AND CELLULAR BASIS OF EPIDERMODYPLASIA VERRUCIFORMIS (AI143810)

PI: JEAN-LAURENT CASANOVA; ROCKEFELLER UNIVERSITY; UNITED STATES

Collaborators:

STUART TANGYE; GARVAN INSTITUTE OF MEDICAL RESEARCH; SYDNEY, AUSTRALIA

LIPID ANTIGENS FOR INKT CELLS IN THE GUT MICROENVIRONMENT (AI143855)

PI: PATRICK BRENNAN; BRIGHAM AND WOMEN'S HOSPITAL; UNITED STATES

Collaborators:

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DANIEL PELLICCI; ROYAL CHILDREN'S HOSPITAL; MELBOURNE, AUSTRALIA

TRANSCRIPTION FACTOR REGULATION OF CD4 AND CD8 T CELL EFFECTOR AND MEMORY DIFFERENTIATION AND FUNCTION (AI145815)

PI: SHANE CROTTY; LA JOLLA INSTITUTE FOR IMMUNOLOGY; UNITED STATES

Collaborators:

STEPHEN TURNER; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

CONTROL OF CD8+ T CELL EXHAUSTION BY NOVEL CHECKPOINT MOLECULES (AI153736)

PI: WILLIAM HUDSON; EMORY UNIVERSITY; UNITED STATES

Collaborators:

IAN PARISH; PETER MACCALLUM CANCER CENTRE; MELBOURNE, AUSTRALIA

Intramural

Gene Regulatory Events in Establishing Mature T Cell Tolerance (AI000566)

Site Collaborator: C Goodnow (Australian National University) Emily Edwards (Garvan Institute of Medical Research) Stuart Tangye (Garvan Institute of Medical Research) , Australia ,Canberra Australia ,Darlinghurst Australia

Lab: LISB, Intramural Investigator: Michael Lenardo

Molecular Mechanisms and Treatment Of Autoimmunity In Man And Animal Models (AI000717)

Site Collaborator: Anne Voss (Walter and Eliza Hall Institute of Medical Research) Edwin Hawkins (Walter and Eliza Hall Institute of Medical Research) John Silke (Walter and Eliza Hall Institute of Medical Research) Kate Lawlor (Hudson Institute of Medical Research) Seth Masters (Walter and Eliza Hall Institute of Medical Research), Clayton Australia ,Melbourne Australia ,Parkville Australia

Lab: LISB

Functions and Mechanisms of NF- κ B Factors and their Regulators (AI000722)

Site Collaborator: S Gerondakis (Monash University Central Clinical School) S Gerondakis (WEHI), Melbourne, Victoria Australia, Victoria Australia

Lab: LMI, Intramural Investigator: Ulrich Siebenlist

Signal Transduction In B Lymphocytes: Identification Of Key Signaling Molecules (AI000739)

Site Collaborator: C Goodnow (Australian National University) J Harris (Monash University), Australia, Canberra Australia

Lab: LIR, Intramural Investigator: John Kehrl

Inflammation and Therapy for Respiratory Virus Infection (AI000943)

Site Collaborator: Klaus Matthaei (John Curtin School of Medicine) Paul Foster (Australian National University) Paul Foster (University of Newcastle) Rakesh Kumar (University of New South Wales) Simon Phipps (University of Newcastle), Australia, Canberra Australia ,NSW Australia ,Sydney Australia

Lab: LAD, Intramural Investigator: Helene Rosenberg

Regulation of CTCF Functions and Target Sites by Cancer/Testis-specific CTCF Like BORIS Factor (AI001021)

Site Collaborator: J Rasko (Cell and Molecular Therapies, RPA Hospital & Centenary Institute) J Rasko (Centenary Institute of Cancer Medicine and Cell Biology), Australia

Lab: LIG

Innate Determinants of Microbial Immunity (AI001044)

Site Collaborator: Carl Feng (University of Sydney) Jonathon Sprent (Garvin Institute) Sebastien Stifter (University of Sydney), Sidney Australia, Sydney Australia

Lab: LPD, Intramural Investigator: Alan Sher

Defining New Human Immunodeficiency and Immunodysregulation Disorders (AI001059)

Site Collaborator: C Goodnow (Australian National University) Stuart Tangye (Garvan Institute of Medical Research), Australia, Canberra Australia

Lab: LCIM

Pathogenesis of Food Allergy (AI001202)

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Site Collaborator: Katrina Allen (Murdoch Children's Research Institute) Kristin Perrett (Murdoch Children's Research Institute), Australia, Melbourne Australia
Lab: LAD

Characterization of the cellular and molecular bases of combined immunodeficiencies (AI001222)
Site Collaborator: Stuart Tangye (Garvan Institute of Medical Research), Australia
Lab: LCIM

ARBOVIRAL DISEASES (4)

Domestic with Foreign Subcomponent

WOLBACHIA-INDUCED ENHANCEMENT OF HUMAN ARBOVIRAL PATHOGENS (AI116636)
PI: JASON RASGON; PENNSYLVANIA STATE UNIVERSITY-UNIV PARK; UNITED STATES
Collaborators:
PETER COOK; MONASH UNIVERSITY; CLAYTON, AUSTRALIA

WORLD REFERENCE CENTER FOR EMERGING VIRUSES AND ARBOVIRUSES (WRCEVA) (AI120942)
PI: SCOTT WEAVER; UNIVERSITY OF TEXAS MED BR GALVESTON; UNITED STATES
Collaborators:
PETER WALKER; COMMONWEALTH SCIENTIFIC & INDUST RES ORG; GEELONG, AUSTRALIA

EXPERIMENTAL EVOLUTION OF WOLBACHIA-MEDIATED DENGUE VIRUS BLOCKING IN THE MOSQUITO, Aedes Aegypti (AI143758)
PI: ELIZABETH MCGRAW; PENNSYLVANIA STATE UNIVERSITY-UNIV PARK; UNITED STATES
Collaborators:
STEVE CHENOWETH; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

EMERGING METHODS AND APPLICATIONS FOR TEST-NEGATIVE STUDIES OF INFECTIOUS DISEASE INTERVENTIONS (AI148127)
PI: NICHOLAS JEWELL; UNIVERSITY OF CALIFORNIA BERKELEY; UNITED STATES
Collaborators:
CAMERON SIMMONS; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

CORONAVIRUSES (2)

Domestic with Foreign Subcomponent

UNDERSTANDING RISK OF ZOO NOTIC VIRUS EMERGENCE IN EID HOTSPOTS OF SOUTHEAST ASIA (AI151797)
PI: PETER DASZAK; ECOHEALTH ALLIANCE, INC.; UNITED STATES
Collaborators:
HUME FIELD; JEPPESEN FIELD CONSULTING AUSTRALIA; BRISBANE, AUSTRALIA

RAPID PRODUCTION OF SARS-COV-2 MOLECULAR CLONES USING CRISPR-BASED YEAST RECOMBINEERING (AI100272)
PI: MADHANI, HITEN,
Collaborators:
Carter, Dee, The University of Sydney, AUSTRALIA; Djordjevic, Julie, The Westmead Institute, AUSTRALIA; Idnurm, Alexander, The University of Melbourne, AUSTRALIA

FILOVIRAL DISEASES (1)

Domestic with Foreign Subcomponent

INTERSECTION BETWEEN VIRAL TRANSLATION AND INNATE IMMUNITY IN THE CONTEXT OF FILOVIRUS INFECTION (AI148663)
PI: CHRISTOPHER BASLER; GEORGIA STATE UNIVERSITY; UNITED STATES
Collaborators:

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CARL WALKLEY; ST. VINCENT'S INSTITUTE OF MEDICAL RES; FITZROY, AUSTRALIA

FUNGAL DISEASES (8)

Domestic with Foreign Subcomponent

EVOLUTION OF CRYPTOCOCCUS NEOFORMANS STRAINS FROM PATIENTS WITH HIV/AIDS (AI093257)

PI: JOHN PERFECT; DUKE UNIVERSITY; UNITED STATES

Collaborators:

DEE CARTER; UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

CRYPTOCOCCUS KNOCKOUT AND TAG RESOURCE (AI100272)

PI: HITEN MADHANI; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO; UNITED STATES

Collaborators:

ALEXANDER IDNURM; THE UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

DEE CARTER; THE UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

JULIE DJORDJEVIC; THE WESTMEAD INSTITUTE; SYDNEY, AUSTRALIA

IMPACT OF CRYPTOCOCCUS TITAN CELLS ON PATHOGENESIS. (AI134636)

PI: KIRSTEN NIELSEN; UNIVERSITY OF MINNESOTA; UNITED STATES

Collaborators:

JAMES FRASER; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

CRYPTOCOCCAL GLYCAN SYNTHESIS (AI135012)

PI: TAMARA DOERING; WASHINGTON UNIVERSITY; UNITED STATES

Collaborators:

JOSHUA HEAZLEWOOD; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

ANTIBODIES, B CELLS AND RESISTANCE TO HUMAN CRYPTOCOCCOSIS (AI143453)

PI: LIISE-ANNE PIROFSKI; ALBERT EINSTEIN COLLEGE OF MEDICINE, INC; UNITED STATES

Collaborators:

MARTYN FRENCH; UNIVERSITY OF WESTERN SYDNEY; PERTH, AUSTRALIA

REGULATION OF INNATE IMMUNE SYSTEM SENSING OF C. ALBICANS INFECTION (AI123253)

PI: ZHANG, JIAN, UNIVERSITY OF IOWA,

Collaborators:

Langdon, Wallace, The University of Western Australia, AUSTRALIA

Intramural

Molecular Pathobiology of Cryptococcus neoformans (AI001123)

Site Collaborator: J Djordjevic (University of Sydney) J Djordjevic (University of Sydney),
Sydney Australia

Lab: LCIM

Translational Research: Host-Pathogen Interactions in Patient Fungal Diseases (AI001124)

Site Collaborator: J Djordjevic (University of Sydney) J Djordjevic (University of Sydney),
Sydney Australia

Lab: LCID

GASTROINTESTINAL INFECTIOUS DISEASES (6)

Domestic with Foreign Subcomponent

VIBRIO CHOLERAЕ C-DIGMP SIGNALING: MOTILE TO BIOFILM TRANSITION AND TRANSMISSION (AI102584)

PI: HAVVA YILDIZ; UNIVERSITY OF CALIFORNIA SANTA CRUZ; UNITED STATES

Collaborators:

VICTORIA KOROLIK; GRIFFITH UNIVERSITY; SOUTHPORT, AUSTRALIA

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VIBRIO CHOLERAEE BIOFILMS: STRUCTURE, FUNCTION, REGULATION AND ROLE IN INFECTION (AI114261)

PI: HAVVA YILDIZ; UNIVERSITY OF CALIFORNIA SANTA CRUZ; UNITED STATES

Collaborators:

VICTORIA KOROLIK; GRIFFITH UNIVERSITY; SOUTHPORT, AUSTRALIA

THE FUNCTION OF CHEMOTACTIC SIGNAL TRANSDUCTION DURING COLONIZATION AND DISEASE (AI116946)

PI: KAREN OTTEMANN; UNIVERSITY OF CALIFORNIA SANTA CRUZ; UNITED STATES

Collaborators:

VICTORIA KOROLIK; GRIFFITH UNIVERSITY; SOUTHPORT, AUSTRALIA

HUMAN GENETIC VARIATION REGULATING SALMONELLA HOST-PATHOGEN INTERACTIONS AND DISEASE SUSCEPTIBILITY (AI118903)

PI: DENNIS KO; DUKE UNIVERSITY; UNITED STATES

Collaborators:

SARAH DUNSTAN; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

ROLE OF EOSINOPHILS IN INNATE PROTECTION FROM C. DIFFICILE (AI124214)

PI: WILLIAM PETRI; UNIVERSITY OF VIRGINIA; UNITED STATES

Collaborators:

DENA LYRAS; MONASH UNIVERSITY; VICTORIA PARK, AUSTRALIA

ACTIVE VACCINATION AND PASSIVE ANTIBODY STRATEGIES TO PREVENT DISEASE CAUSED BY MULTIDRUG-RESISTANT BACTERIAL PATHOGENS (AI142725)

PI: MYRON LEVINE; UNIVERSITY OF MARYLAND BALTIMORE; UNITED STATES

Collaborators:

ROY ROBINS-BROWNE; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

HEPATITIS (1)

Domestic with Foreign Subcomponent

PROFILING THE PROTECTIVE B CELL RESPONSE TO HCV (AI123862)

PI: STEVEN FOUNG; STANFORD UNIVERSITY; UNITED STATES

Collaborators:

ANDREW LLOYD; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

HIV/AIDS (24)

Direct Foreign

ACCURATELY DEFINING THE DISTRIBUTION OF THE GENETICALLY INTACT AND POTENTIALLY REPLICATION-COMPETENT HIV-1 RESERVOIR DURING THE FIRST 3 YEARS OF INTEGRASE INHIBITOR CONTAINING ANTIRETROVIRAL THERAPY (AI150331)

PI: ANTHONY KELLEHER; UNIVERSITY OF NEW SOUTH WALES; AUSTRALIA

Collaborators:

ANTHONY KELLEHER; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

MILES DAVENPORT; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

SARAH PALMER; UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

Domestic with Foreign Subcomponent

EVOLVING UNDERSTANDING OF HIV-1 REVERSE TRANSCRIPTASE STRUCTURE, FUNCTION, AND INHIBITION. (AI027690)

PI: EDWARD ARNOLD; RUTGERS, THE STATE UNIV OF N.J.; UNITED STATES

Collaborators:

GILDA TACHEDJIAN; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

IMMUNE SYSTEM MODELING/HIV (AI028433)

PI: ALAN PERELSON; TRIAD NATIONAL SECURITY, LLC; UNITED STATES

Collaborators:

Last updated 3/3/2021

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SHARON LEWIN; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

IEDEA ASIA-PACIFIC RESEARCH COLLABORATION (AI069907)

PI: ANNETTE SOHN; FOUNDATION FOR AIDS RESEARCH; UNITED STATES

Collaborators:

CAROLINE THNG; SYDNEY HOSPITAL SEXUAL HEALTH CENTRE; SYDNEY, AUSTRALIA
DARREN RUSSELL; CAIRNS SEXUAL HEALTH SERVICE; CAIRNS, AUSTRALIA
DAVID BAKER; EAST SYDNEY DOCTORS; SYDNEY, AUSTRALIA
DAVID COOPER; ST. VINCENT'S HOSPITAL APPLIED MEDICAL RESEARCH CENTER;
DARLINGHURST, AUSTRALIA
DAVID ELLIS; DA ELLIS PTY LTD; COFFS HARBOUR, AUSTRALIA
DAVID NOLAN; ROYAL PERTH HOSPITAL; PERTH, AUSTRALIA
DAVID ORTH; GLADSTONE ROAD MEDICAL CENTRE; BRISBANE, AUSTRALIA
DAVID SMITH; LISMORE SEXUAL HEALTH AND AIDS SERVICES; LISMORE, AUSTRALIA
DAVID SOWDEN; SUNSHINE COAST AND COOLOOLA HIV SEXUAL HEALTH CLINIC 87;
NAMBOUR, AUSTRALIA
DAVID TEMPLETON; ROYAL PRINCE ALFRED HOSPITAL SEXUAL HEALTH; SYDNEY,
AUSTRALIA
DEBORAH COULDWELL; PARRAMATTA SEXUAL HEALTH CLINIC; SYDNEY, AUSTRALIA
DIANNE ROWLING; SEXUAL HEALTH AND HIV SERVICE IN METRO NORTH; BRISBANE,
AUSTRALIA
DON SMITH; ALBION STREET CENTRE; SURREY HILLS, AUSTRALIA
EVA JACKSON; BLUE MOUNTAINS HOSPITAL SEXUAL HEALTH AND HIV CLINIC;
KATOOMBA, AUSTRALIA
IAN WOOLLEY; MONASH MEDICAL CENTRE; CLAYTON, AUSTRALIA
JENNIFER HOY; THE ALFRED HOSPITAL, ALFRED HEALTH; MELBOURNE, AUSTRALIA
KATHERINE BROWN; ILLAWARRA SEXUAL HEALTH; PORT KEMBLA, AUSTRALIA
MANOJI GUNATHILAKE; ROYAL DARWIN HOSPITAL, CLINIC 34; DARWIN, AUSTRALIA
MAREE O'SULLIVAN; GOLD COAST SEXUAL HEALTH CLINIC; GOLD COAST, AUSTRALIA
MARK BLOCH; HOLDSWORTH HOUSE MEDICAL PRACTICE; DARLINGHURST, AUSTRALIA
MATTHEW LAW; THE KIRBY INSTITUTE, UNIVERSITY OF NEW SOUTH WALES; COOGEE,
AUSTRALIA
NATHAN RYDER; TAMWORTH SEXUAL HEALTH SERVICE; TAMWORTH, AUSTRALIA
NORMAN ROTH; PRAHRAN MARKET CLINIC; MELBOURNE, AUSTRALIA
RAJESH (RICK) VARMA; NEPEAN HOSPITAL SEXUAL HEALTH CLINIC; PENRITH, AUSTRALIA
RICHARD MOORE; NORTHSIDE CLINIC; MELBOURNE, AUSTRALIA
ROBERT FINLAYSON; TAYLOR SQUARE PRIVATE CLINIC; SURREY HILLS, AUSTRALIA
TIMOTHY READ; MELBOURNE SEXUAL HEALTH CENTRE; MELBOURNE, AUSTRALIA
WILLIAM DONOHUE; O'BRIEN STREET GENERAL PRACTICE; ADELAIDE, AUSTRALIA

THE JOHNS HOPKINS CENTER FOR AIDS RESEARCH (JHU CFAR) (AI094189)

PI: RICHARD CHAISSON; JOHNS HOPKINS UNIVERSITY; UNITED STATES

Collaborators:

GAIL MATTHEWS; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

THIRD COAST CENTER FOR AIDS RESEARCH (AI117943)

PI: D'AQUILA, RICHARD, NORTHWESTERN UNIVERSITY AT CHICAGO,

Collaborators:

Turville, Stuart, Kirby Institute, AUSTRALIA

TIMING OF ART AND HOMEOSTASIS OF THE PERSISTENT HIV RESERVOIR IN THE ADULT
(AI116368)

PI: HUNT, PETER, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO,

Collaborators:

Cameron, Paul, Monash University, AUSTRALIA; Lewin, Sharon, Monash University,
AUSTRALIA; Lewin, Sharon, University of Melbourne, AUSTRALIA

THE LATENT HIV RESERVOIR IN EARLY-TREATED THAI CHILDREN (AI114236)

PI: MERLIN ROBB; HENRY M. JACKSON FDN FOR THE ADV MIL/MED; UNITED STATES

Collaborators:

SARAH PALMER; UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

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AN ULTRASENSITIVE IN VIVO LATENT HIV VIRAL OUTGROWTH ASSAY USING HUMANIZED MICE (AI120021)

PI: RAMESH AKKINA; COLORADO STATE UNIVERSITY; UNITED STATES

Collaborators:

SHARON LEWIN; ALFRED HOSPITAL; MELBOURNE, AUSTRALIA

HARMONIST: A SCALABLE TOOLKIT FOR STANDARDIZING AND COORDINATING DATA SHARING ACROSS INTERNATIONAL RESEARCH NETWORKS (AI124872)

PI: STEPHANY DUDA; VANDERBILT UNIVERSITY MEDICAL CENTER; UNITED STATES

Collaborators:

MATTHEW LAW; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

DELANEY AIDS RESEARCH ENTERPRISE TO CURE HIV (AI126611)

PI: STEVEN DEEKS; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO; UNITED STATES

Collaborators:

SARAH PALMER; UNIVERSITY OF SYDNEY, WESTMEAD MILLENNIUM INSTITUTE; SYDNEY, AUSTRALIA

SHARON LEWIN; THE UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

IMMUNOLOGICAL STRATEGIES TO MODULATE SIV REBOUND FOLLOWING ART INTERRUPTION (AI131338)

PI: MICHAEL BETTS; UNIVERSITY OF PENNSYLVANIA; UNITED STATES

Collaborators:

MILES DAVENPORT; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

UNDERSTANDING HIV LATENCY REVERSAL AND CLEARANCE OF INFECTED CELLS IN VIVO (AI132128)

PI: STEVEN YUKL; NORTHERN CALIFORNIA INSTITUTE/RES/EDU; UNITED STATES

Collaborators:

SHARON LEWIN; UNIVERSITY OF MELBOURNE AND PETER DOHERTY INSTITUTE; MELBOURNE, AUSTRALIA

EXTENDED FOLLOW-UP OF RANDOMIZED PARTICIPANTS IN THE INSIGHT START TRIAL (AI136780)

PI: JAMES NEATON; UNIVERSITY OF MINNESOTA; UNITED STATES

Collaborators:

ANTHONY KELLEHER; ST. VINCENT'S HOSPITAL; DARLINGHURST, AUSTRALIA

BAN KIEM TEE; CENTRE CLINIC; SAINT KILDA, AUSTRALIA

CATHERINE PELL; TAYLOR SQUARE PRIVATE CLINIC; DARLINGHURST, AUSTRALIA

DAVID BAKER; EAST SYDNEY DOCTORS; DARLINGHURST, AUSTRALIA

DAVID SHAW; ROYAL ADELAIDE HOSPITAL; ADELAIDE, AUSTRALIA

DIANE ROWLING; SEXUAL HEALTH AND HIV SERVICE - CLINIC 2; BRISBANE, AUSTRALIA

DOMINIC DWYER; WESTMEAD HOSPITAL; SYDNEY, AUSTRALIA

JENNY HOY; THE ALFRED HOSPITAL; MELBOURNE, AUSTRALIA

MARK BLOCH; HOLDSWORTH HOUSE MEDICAL PRACTICE; SYDNEY, AUSTRALIA

MARK POLIZZOTTO; UNIVERSITY OF NEW SOUTH WALES - THE KIRBY INSTITUTE; SYDNEY, AUSTRALIA

SYDNEY, AUSTRALIA

MINA JOHN; ROYAL PERTH HOSPITAL; PERTH, AUSTRALIA

NICHOLAS DOONG; DR. DOONG'S SURGERY; ENFIELD, AUSTRALIA

NORMAN ROTH; PRAHRAN MARKET CLINIC; MELBOURNE, AUSTRALIA

RICHARD TEAGUE; MELBOURNE SEXUAL HEALTH CENTRE; MELBOURNE, AUSTRALIA

TIM READ; MELBOURNE SEXUAL HEALTH CENTRE; MELBOURNE, AUSTRALIA

EPIMODEL 2.0: INTEGRATED NETWORK MODELS FOR HIV/STI PREVENTION SCIENCE (AI138783)

PI: SAMUEL JENNESS; EMORY UNIVERSITY; UNITED STATES

Collaborators:

PAVEL KRIVITSKY; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

PAVEL KRIVITSKY; UNIVERSITY OF WOLLONGONG; WOLLONGONG, AUSTRALIA

NETWORK DYNAMICS OF SYPHILLIS COINFECTION WITHIN BIOMEDICAL PREVENTION (AI139480)

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PI: KAYO FUJIMOTO; UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON; UNITED STATES
Collaborators:
PENG WANG; SWINBURNE UNIVERSITY OF TECHNOLOGY; MELBOURNE, AUSTRALIA

EFFECTS OF HIV SIV ON UNCONVENTIONAL T CELLS IN IMMUNITY TO M. TUBERCULOSIS IN
PRE ADOLESCENTS (AI142662)

PI: CHARLES SCANGA; UNIVERSITY OF PITTSBURGH AT PITTSBURGH; UNITED STATES
Collaborators:
AMY CHUNG; UNIVERSITY OF MELBOURNE; PARKVILLE, AUSTRALIA
DANIEL PELLICCI; MELBOURNE CHILDREN'S RESEARCH INSTITUTE; PARKVILLE,
AUSTRALIA

HIVACUTE: RAPID SAMPLE-TO-RESULT SELF-TESTING FOR HIV RNA (AI147354)

PI: PAUL YAGER; UNIVERSITY OF WASHINGTON; UNITED STATES
Collaborators:
JOHN KELLY; ATOMO DIAGNOSTICS; LEICHHARDT, AUSTRALIA

OPTIMIZING HIV PREVENTION PORTFOLIOS TARGETING PEOPLE WHO INJECT DRUGS USING
DYNAMIC ECONOMIC MODELING (AI147490)

PI: NATASHA MARTIN; UNIVERSITY OF CALIFORNIA, SAN DIEGO; UNITED STATES
Collaborators:
LUISA JANE DEGENHARDT; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

TARGETING THE HIV/SIV RESERVOIR AT TIME OF ART INITIATION (AI147749)

PI: AFAMEFUNA OKOYE; OREGON HEALTH & SCIENCE UNIVERSITY; UNITED STATES
Collaborators:
MILES DAVENPORT; THE KIRBY INSTITUTE; KENSINGTON, AUSTRALIA

PHENOTYPIC AND MECHANISTIC ANALYSIS OF THE IN VIVO HIV LATENT RESERVOIR BY
SINGLE-CELL TECHNOLOGIES (AI147777)

PI: NADIA ROAN; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO; UNITED STATES
Collaborators:
SARAH PALMER; THE WESTMEAD INSTITUTE FOR MEDICAL RESEARCH; SYDNEY,
AUSTRALIA

CHARACTERIZING HIV-1 ENV CONFORMATIONS SUSCEPTIBLE TO ATTACK BY NON-
NEUTRALIZING ANTIBODIES (AI150322)

PI: JAMES MUNRO; UNIV OF MASSACHUSETTS MED SCH WORCESTER; UNITED STATES
Collaborators:
ISABELLE ROUILLER; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

PITTSBURGH CENTER FOR HIV PROTEIN INTERACTIONS (PCHPI) (AI150481)

PI: ANGELA GRONENBORN; UNIVERSITY OF PITTSBURGH AT PITTSBURGH; UNITED STATES
Collaborators:
TILL BOECKING; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

Intramural

Quantitative Immunological Assays to Assess HIV Antibodies and Vaccines (AI005010)
Site Collaborator: Andy Poubourios (Burnet Institute), Melbourne Australia
Lab: VL

INFLUENZA (10)

Direct Foreign

DOES REPEATED INFLUENZA VACCINATION CONSTRAIN INFLUENZA IMMUNE RESPONSES AND
PROTECTION? (AI141534)

PI: SHEENA SULLIVAN; UNIVERSITY OF MELBOURNE; AUSTRALIA
Collaborators:
ALLEN CHENG; ALFRED HOSPITAL; MELBOURNE, AUSTRALIA
CHRISTOPHER BLYTH; UNIVERSITY OF WESTERN AUSTRALIA; CRAWLEY, AUSTRALIA

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HELEN MARSHALL; UNIVERSITY OF ADELAIDE; NORTH ADELAIDE, AUSTRALIA
JULIA CLARK; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA
KRISTINE MACARTNEY; SYDNEY CHILDREN'S HOSPITALS NETWORK; SYDNEY, AUSTRALIA
PETER WARK; UNIVERSITY OF NEWCASTLE; NEWCASTLE, AUSTRALIA
SHEENA SULLIVAN; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

Domestic with Foreign Subcomponent

IMPACT OF VERSICAN DEFICIENCY ON THE INNATE IMMUNE RESPONSE TO INFLUENZA VIRUS (AI136468)

PI: CHARLES FREVERT; UNIVERSITY OF WASHINGTON; UNITED STATES

Collaborators:

JOHN WHITELOCK; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA
MEGAN LORD; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

PREDICTORS OF INFLUENZA-ASSOCIATED ABSENTEEISM AND IMPACT OF VACCINATION IN A COHORT OF GUATEMALAN AGRICULTURAL WORKERS (AI143967)

PI: DANIEL OLSON; UNIVERSITY OF COLORADO DENVER; UNITED STATES

Collaborators:

RICHARD OSBORNE; MEASURED SOLUTIONS; CASTLE HILL, AUSTRALIA

DIVINCI: DISSECTION OF INFLUENZA VACCINATION AND INFECTION FOR CHILDHOOD IMMUNITY (AI144616)

PI: PAUL THOMAS; ST. JUDE CHILDREN'S RESEARCH HOSPITAL; UNITED STATES

Collaborators:

KATHERINE KEDZIERKA; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

GENETICALLY HUMANIZED MICE FOR MODELING HUMAN FC-RECEPTOR INTERACTION DURING INFLUENZA INFECTION (AI151231)

PI: BEVERLY KOLLER; UNIV OF NORTH CAROLINA CHAPEL HILL; UNITED STATES

Collaborators:

HOGARTH MARK; MACFARLANE BURNET INST FOR RES/PUB HLTH; MELBOURNE, AUSTRALIA

INFLUENZA D VIRUS ENTRY AND TISSUE TROPISM (AI141889)

PI: LI, FENG, UNIVERSITY OF KENTUCKY,

Collaborators:

Druce, Julian, Doherty Institute, AUSTRALIA

Intramural

Influenza and Emerging Infectious Diseases (AI000984)

Site Collaborator: Dominic Dwyer (Westmead Hospital), Sydney Australia

Lab: LIR, Intramural Investigator: Richard Davey

Clinical Studies of Vaccines for Pandemic Influenza (AI000997)

Site Collaborator: K Subbarao (Peter Doherty Institute) K Subbarao (WHO Collaborating Centre for Reference and Research on Influenza The Peter Doherty Institute), Melbourne Australia

Lab: LID, Intramural Investigator: Jeffrey Cohen

Biology, Evolution and Pathogenesis of Influenza A Virus (AI001014)

Site Collaborator: Weisan Chen (La Trobe University), Melbourne Australia

Lab: DIR, Intramural Investigator: Jack Bennink

Influenza Vaccine Development (AI005003)

Site Collaborator: Adam Wheatley (University of Melbourne), Melbourne Australia

Lab: VPL

MALARIA (25)

Domestic with Foreign Subcomponent

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CENTER FOR THE STUDY OF COMPLEX MALARIA IN INDIA (AI089676)
PI: JANE CARLTON; NEW YORK UNIVERSITY; UNITED STATES
Collaborators:
CHRIS ENGWERDA; QUEENSLAND INSTITUTE OF MEDICAL RESEARCH; HERSTON, AUSTRALIA

MALARIA TOPOISOMERASE INHIBITORS (AI093380)
PI: PRADIPSINH RATHOD; UNIVERSITY OF WASHINGTON; UNITED STATES
Collaborators:
SUSAN CHARMAN; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

FOSMIDOMYCIN RESISTANCE IN PLASMODIUM FALCIPARUM (AI103280)
PI: AUDREY ODOM JOHN; CHILDREN'S HOSP OF PHILADELPHIA; UNITED STATES
Collaborators:
MALCOLM MCCONVILLE; UNIVERSITY OF MELBOURNE; PARKVILLE, AUSTRALIA

LEAD OPTIMIZATION OF DHODH INHIBITORS FOR MALARIA (AI103947)
PI: MARGARET PHILLIPS; UT SOUTHWESTERN MEDICAL CENTER; UNITED STATES
Collaborators:
SUSAN CHARMAN; MONASH UNIVERSITY; PARKVILLE, AUSTRALIA

A BIODEGRADABLE NANO-MICROPARTICLE PRIME-BOOST VACCINE STRATEGY (AI114609)
PI: RHOEL DAVID DINGLASAN; UNIVERSITY OF FLORIDA; UNITED STATES
Collaborators:
MAGDALENA PLEBANSKI; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

NOVEL SEROLOGIC ASSAYS OF P. FALCIPARUM EXPOSURE FOR IMPROVED SURVEILLANCE IN CONTROL AND ELIMINATION. (AI119019)
PI: BRYAN GREENHOUSE; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO; UNITED STATES
Collaborators:
IVO MUELLER; WALTER & ELIZA HALL INSTITUTE; MELBOURNE, AUSTRALIA

A CYTOMEGALOVIRUS-BASED VACCINE TARGETING THE PRE-ERYTHROCYTIC STAGE OF MALARIA (AI123182)
PI: KLAUS FRUH; OREGON HEALTH & SCIENCE UNIVERSITY; UNITED STATES
Collaborators:
DENISE DOOLAN; INSTITUTE OF TROPICAL HEALTH AND MEDICINE (AITHM); SMITHFIELD, AUSTRALIA

DEVELOPMENT AND FUNCTION OF CD4+ MEMORY T CELLS DURING MALARIA (AI125446)
PI: NOAH BUTLER; UNIVERSITY OF IOWA; UNITED STATES
Collaborators:
CHRIS ENGWERDA; QUEENSLAND INSTITUTE FOR MEDICAL RESEARCH; BRISBANE, AUSTRALIA
MICHELLE BOYLE; MACFARLANE BURNET INST FOR RES/PUB HLTH; MELBOURNE, AUSTRALIA

REGULATION OF PLASMODIUM-SPECIFIC CD4+ T CELLS (AI127481)
PI: NOAH BUTLER; UNIVERSITY OF IOWA; UNITED STATES
Collaborators:
CHRIS ENGWERDA; QUEENSLAND INSTITUTE OF MEDICAL RESEARCH; HERSTON, AUSTRALIA
WILLIAM HEATH; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

COMBINATION VACCINES TO INTERRUPT MALARIA TRANSMISSION (AI127544)
PI: NIRBHAY KUMAR; GEORGE WASHINGTON UNIVERSITY; UNITED STATES
Collaborators:
ISTVAN TOTH; UNIVERSITY OF QUEENSLAND; ST LUCIA, AUSTRALIA

ENVIRONMENTAL MODIFICATIONS IN SUB-SAHARAN AFRICA: CHANGING EPIDEMIOLOGY, TRANSMISSION AND PATHOGENESIS OF PLASMODIUM FALCIPARUM AND P. VIVAX MALARIA (AI129326)
PI: GUIYUN YAN; UNIVERSITY OF CALIFORNIA-IRVINE; UNITED STATES

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Collaborators:

JAMES BEESON; BURNET INSTITUTE; MELBOURNE, AUSTRALIA

DEFINING TARGETS OF PROTECTIVE IMMUNITY TO VIVAX MALARIA USING HUMAN MONOCLONAL ANTIBODIES (AI143694)

PI: CHRISTOPHER KING; CASE WESTERN RESERVE UNIVERSITY; UNITED STATES

Collaborators:

JAMES BEESON; MACFARLANE BURNET INSTITUTE; MELBOURNE, AUSTRALIA

WAI-HONG THAM; WALTER & ELIZA HALL INSTITUTE OF MR; PARKVILLE, AUSTRALIA

TOWARDS NONINVASIVE DIAGNOSIS OF MALARIA (AI144472)

PI: AUDREY ODOM JOHN; CHILDREN'S HOSP OF PHILADELPHIA; UNITED STATES

Collaborators:

ROSALIND WANG; COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH

ORGANISATION; CANBERRA, AUSTRALIA

RIGOROUS ASSESSMENT OF P. VIVAX RELAPSES AND PRIMAQUINE EFFICACY FOR RADICAL CURE (AI146590)

PI: DAVID SERRE; UNIVERSITY OF MARYLAND BALTIMORE; UNITED STATES

Collaborators:

RIC PRICE; MENZIES SCHOOL OF HEALTH RESEARCH; DARWIN, AUSTRALIA

PRIMAQUINE METABOLISM AND TREATMENT OF P. VIVAX IN MADAGASCAR (AI148469)

PI: PETER ZIMMERMAN; CASE WESTERN RESERVE UNIVERSITY; UNITED STATES

Collaborators:

JAMES MCCARTHY; QIMR BERGHOFFER MEDICAL RESEARCH INSTITUTE; HERSTON, AUSTRALIA

RICHARD PRICE; MENZIES SCHOOL OF HEALTH RESEARCH, DARWIN; DARWIN, AUSTRALIA

ELUCIDATING THE ROLE OF TSR GLYCOSYLATION IN PLASMODIUM PARASITES (AI148489)

PI: KRISTIAN SWEARINGEN; INSTITUTE FOR SYSTEMS BIOLOGY; UNITED STATES

Collaborators:

JUSTIN BODDEY; WALTER AND ELIZA HALL INST MEDICAL RES; PARKVILLE, AUSTRALIA

TEMPORAL STRAIN STRUCTURE AND RESPONSE TO INTERVENTIONS IN A HIGH ENDEMICITY REGION OF PLASMODIUM FALCIPARUM (AI149779)

PI: MERCEDES PASCUAL; UNIVERSITY OF CHICAGO; UNITED STATES

Collaborators:

KAREN DAY; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

Foreign with Foreign Subcomponent

COMPARATIVE INCIDENCE AND CLINICAL SPECTRUM OF PLASMODIUM KNOWLESI MALARIA, A LONGITUDINAL STUDY IN SABAH, MALAYSIA (AI116472)

PI: TIMOTHY WILLIAM; INFECTIOUS DISEASE SOCIETY KOTA KINABALU; MALAYSIA

Collaborators:

TSIN YEO; MENZIES SCHOOL OF HEALTH RESEARCH; DARWIN, AUSTRALIA

ICEMR-MALI: MULTIDISCIPLINARY RESEARCH FOR MALARIA CONTROL AND PREVENTION IN WEST AFRICA (AI129387)

PI: SEYDOU DOUMBIA; UNIV OF SCIENCES, TECH & TECH OF BAMAKO; MALI

Collaborators:

ALYSSA BARRY; DEAKIN UNIVERSITY; MELBOURNE, AUSTRALIA; WALTER & ELISA HALL INSTITUTE OF MED RES; MELBOURNE, AUSTRALIA

UNDERSTANDING, TRACKING AND ELIMINATING MALARIA TRANSMISSION IN THE ASIA - PACIFIC REGION (AI129392)

PI: IVO MUELLER; INSTITUT PASTEUR; FRANCE

Collaborators:

ALYSSA BARRY; WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH (WEHI); PARKVILLE, AUSTRALIA

JAMES BEESON; BURNET INSTITUTE; MELBOURNE, AUSTRALIA

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EXPLOITING CROSS-REACTIVE, CONSERVED EPITOPES IN PLASMODIUM VIVAX TO DEVELOP A VACCINE AGAINST FALCIPARUM PLACENTAL MALARIA. (AI150944)

PI: STEPHANIE YANOW; UNIVERSITY OF ALBERTA; CANADA

Collaborators:

MICHAEL GOODS; GRIFFITH UNIVERSITY; GOLD COAST, AUSTRALIA

Intramural

Host Immune Responses to Antigens of Malaria Parasites (AI001020)

Site Collaborator: Alan Cowman (Walter and Eliza Hall Institute) James Beeson (Burnet institute) James Beeson (Walter and Eliza Hall Institute) Julie Healer (Walter and Eliza Hall Institute) Nicholas Hunt (University of Sydney) Robin Anders (LaTrobe University) Ross Coppel (Monash University), Australia, Melbourne Australia

Lab: LMVR

Nitric Oxide and Endothelial Function in Patients with Malaria (AI001150)

Site Collaborator: Nicholas Anstey (Menzies School of Health Research), Darwin Australia

Lab: LMVR

Mechanisms of naturally-acquired immunity to malaria (AI001155)

Site Collaborator: Denise Doolan (James Cook University) Martin Davey (Monash University), Melbourne Australia, Townsville Australia

Lab: LIG

Development of Pre-Erythrocytic Malaria Vaccines (AI005107)

Site Collaborator: Ian Cockburn (Australian National University) Ian Cockburn (John Curtin School of Medical Research), Australia

Lab: IL, Intramural Investigator: Robert Seder

OTHER (17)

Domestic with Foreign Subcomponent

IMPACT OF RNAI AND UNISEXUAL REPRODUCTION ON CRYPTOCOCCUS EVOLUTION, DRUG RESISTANCE, AND PATHOGENESIS (AI039115)

PI: JOSEPH HEITMAN; DUKE UNIVERSITY; UNITED STATES

Collaborators:

DEE CARTER; UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

RIP PROTEINS IN INNATE IMMUNE SIGNALING (AI075118)

PI: MICHELLE KELLIHER; UNIV OF MASSACHUSETTS MED SCH WORCESTER; UNITED STATES

Collaborators:

WARREN ALEXANDER; WALTER AND ELIZA HALL INST MEDICAL RES; PARKVILLE, AUSTRALIA

RESISTANCE TESTING VERSUS ADHERENCE SUPPORT FOR MANAGEMENT OF PATIENTS WITH VIROLOGIC FAILURE ON FIRST-LINE ANTIRETROVIRAL THERAPY IN SUB-SAHARAN AFRICA: AN OPEN-LABEL RANDOMIZED CONTROLLED TRIAL (AI124718)

PI: MARK SIEDNER; MASSACHUSETTS GENERAL HOSPITAL; UNITED STATES

Collaborators:

TAMLYN RAUTENBERG; GRIFFITH UNIVERSITY; BRISBANE, AUSTRALIA

UNIVERSAL T CELL TARGETED INFLUENZA VACCINE (AI130190)

PI: DANIEL HOFT; SAINT LOUIS UNIVERSITY; UNITED STATES

Collaborators:

NIKOLAI PETROVSKY; VAXINE PTY LTD; BEDFORD PARK, AUSTRALIA

IMPROVED CLEANING TECHNOLOGY FOR REDUCING RISK OF TRANSMITTING INFECTION IN ENDOSCOPY. (AI132040)

PI: SEO YEAN SOHN; ADVANCED BIODEVICES, LLC; UNITED STATES

Collaborators:

DI JONES; LOGAN BAYSIDE NETWORK-LOGAN HOSPITAL; LOGAN CITY, AUSTRALIA

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MECHANISTIC ASSESSMENT OF HEMOLYTIC RISK MITIGATION FOR A NOVEL 8-AMINOQUINOLINE (AI143511)

PI: LARRY WALKER; UNIVERSITY OF MISSISSIPPI; UNITED STATES

Collaborators:

G. DENNIS SHANKS; AUSTRALIAN ARMY MALARIA INSTITUTE; BRISBANE, AUSTRALIA

UNDERSTANDING MOSQUITO MOVEMENT AND ITS RELEVANCE TO CONTROL THROUGH GENETIC ANALYSIS (AI143698)

PI: JOHN MARSHALL; UNIVERSITY OF CALIFORNIA BERKELEY; UNITED STATES

Collaborators:

GORDANA RASIC; QUEENSLAND INSTITUTE OF MEDICAL RESEARCH; HERSTON, AUSTRALIA

INTRAEPITHELIAL LYMPHOCYTE REGULATION OF EPITHELIAL CELL SHEDDING (AI143892)

PI: KAREN EDELBLUM; RBHS-NEW JERSEY MEDICAL SCHOOL; UNITED STATES

Collaborators:

SIMON KEELY; UNIVERSITY OF NEWCASTLE; NEW LAMBTON, AUSTRALIA

VACCINE AND TREATMENT EVALUATION UNIT AT SAINT LOUIS UNIVERSITY (AI148685)

PI: DANIEL HOFT; SAINT LOUIS UNIVERSITY; UNITED STATES

Collaborators:

NIK PETROVSKY; VAXINE PTY LTD; BEDFORD PARK, AUSTRALIA

[COVID-19 SUPPLEMENT #3 MODERNA TRIAL (AI148685)

PI: HOFT, DANIEL, SAINT LOUIS UNIVERSITY,

Collaborators: Petrovsky, Nik, VAXINE PTY LTD, AUSTRALIA]

QUANTIFYING RENAL INJURY AMONG THE MOST COMMONLY USED CLINICAL ANTIBIOTIC COMBINATIONS (AI149026)

PI: MARC SCHEETZ; MIDWESTERN UNIVERSITY; UNITED STATES

Collaborators:

JOSH DAVIS; UNIVERSITY OF NEWCASTLE; CALLINGTON, AUSTRALIA

STEVEN TONG; THE ROYAL MELBOURNE HOSPITAL; MELBOURNE, AUSTRALIA

IDENTIFYING SPECIFIC ANTIGENIC TARGETS OF KAWASAKI DISEASE (AI150719)

PI: ANNE ROWLEY; LURIE CHILDREN'S HOSPITAL OF CHICAGO; UNITED STATES

Collaborators:

DAVID BURGNER; MURDOCH CHILDREN'S RESEARCH INSTITUTE; MELBOURNE, AUSTRALIA

LONGITUDINAL ANTIBODY PROFILES CORRELATED WITH PROTECTION FROM MALARIA IN MALAWI (AI151459)

PI: CLARISSA VALIM; BOSTON UNIVERSITY MEDICAL CAMPUS; UNITED STATES

Collaborators:

JAMES BEESON; BURNET INSTITUTE; MELBOURNE, AUSTRALIA

DEFINING CONSERVED EPITOPES ON POLYMORPHIC MALARIA ANTIGENS (AI153425)

PI: EVELIEN BUNNIK; UNIVERSITY OF TEXAS HLTH SCIENCE CENTER; UNITED STATES

Collaborators:

JAMES BEESON; MACFARLANE BURNET INST FOR RES/PUB HLTH; MELBOURNE, AUSTRALIA

ROLE OF MIRNAS ON THE REGULATION OF JUVENILE HORMONE SYNTHESIS IN MOSQUITOES (AI153689)

PI: MARCELA NOUZOVA; FLORIDA INTERNATIONAL UNIVERSITY; UNITED STATES

Collaborators:

SASSAN ASGARI; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

INTEGRATIVE MODELING OF STUDY DESIGN AND TRANSMISSION DYNAMICS TO INFER EPIDEMIC DRIVERS AND INFORM DECISION-MAKING: APPLICATIONS TO HIV AND OTHER EMERGING PATHOGENS (AI125830)

PI: BELLAN, STEVEN, UNIVERSITY OF GEORGIA,

Collaborators:

Gambhir, Manoj, Moash University, AUSTRALIA

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Intramural

Prion protein function in redox homeostasis and associated failure in prion disease (AI001219)
Site Collaborator: Victoria Lawson (University of Melbourne), Victoria Australia
Lab: LPVD

Integrated Research Facility at Fort Detrick (AI009006)
Site Collaborator: Chris Morrissy (Commonwealth Scientific and Industrial Research Organisation), Canberra Australia
Lab: OCSI

OTHER BACTERIAL DISEASES (28)

Direct Foreign

TARGETING THE URGENT NEED FOR NEW ANTIBIOTICS AGAINST GRAM-NEGATIVE 'SUPERBUGS' (AI132154)
PI: JIAN LI; MONASH UNIVERSITY; AUSTRALIA
Collaborators:
JIAN LI; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA
TONY VELKOV; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

Domestic with Foreign Subcomponent

BIOSYNTHESIS OF MARINE POLYKETIDE ANTIBIOTICS (AI047818)
PI: BRADLEY MOORE; UNIVERSITY OF CALIFORNIA, SAN DIEGO; UNITED STATES
Collaborators:
JONATHAN GEORGE; UNIVERSITY OF ADELAIDE; ADELAIDE, AUSTRALIA

THE MOLECULAR BASIS OF THE CARBAPENEM RESISTANCE EPIDEMIC (AI090155)
PI: BARRY KREISWIRTH; HACKENSACK UNIVERSITY MEDICAL CENTER; UNITED STATES
Collaborators:
DAVID PATERSON; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

SECRETED ANTIMICROBIAL PROTEINS OF THE INTESTINAL BACTERIODALES (AI093771)
PI: LAURIE COMSTOCK; BRIGHAM AND WOMEN'S HOSPITAL; UNITED STATES
Collaborators:
MICHAEL PARKER; UNIVERSITY OF MELBOURNE; PARKVILLE, AUSTRALIA

MECHANISTIC STUDIES OF THE STAPHYLOCOCCUS AUREUS LUKAB CYTOTOXIN (AI099394)
PI: VICTOR TORRES; NEW YORK UNIVERSITY SCHOOL OF MEDICINE; UNITED STATES
Collaborators:
MICHAEL JENNINGS; GRIFFITH UNIVERSITY; BRISBANE, AUSTRALIA

HOST-MEDIATED ZINC SEQUESTRATION DURING ACINETOBACTER BAUMANNII INFECTION (AI101171)
PI: ERIC SKAAR; VANDERBILT UNIVERSITY MEDICAL CENTER; UNITED STATES
Collaborators:
BLAINE ROBERTS; FLOREY INSTITUTE OF NEURSCIENCE AND MENTAL HEALTH; PARKVILLE, AUSTRALIA

ANTIBACTERIAL RESISTANCE LEADERSHIP GROUP (ARLG) (AI104681)
PI: VANCE FOWLER; DUKE UNIVERSITY; UNITED STATES
Collaborators:
MARY WATERS; ST. VINCENT'S HOSPITAL; MELBOURNE, AUSTRALIA
PAUL MAINWARING; XING TECHNOLOGIES; BRISBANE, AUSTRALIA
ANDREW HENDERSON; PRINCESS ALEXANDRA HOSPITAL; BRISBANE, AUSTRALIA
ANTON PELEG; ALFRED HOSPITAL; MELBOURNE, AUSTRALIA
DAVID PATERSON; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA
DEBORAH WILLIAMSON; ROYAL MELBOURNE HOSPITAL; MELBOURNE, AUSTRALIA
EUGENE ATHAN; BARWON HEALTH; GEELONG, AUSTRALIA
MARCEL LEROI; THE AUSTIN HOSPITAL; MELBOURNE, AUSTRALIA

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CONTRIBUTION OF LUKED TO STAPHYLOCOCCUS AUREUS PATHOBIOLOGY (AI105129)
PI: VICTOR TORRES; NEW YORK UNIVERSITY SCHOOL OF MEDICINE; UNITED STATES
Collaborators:

MICHAEL JENNINGS; GRIFFITH UNIVERSITY; SOUTHPORT, AUSTRALIA

OVERCOMING NUTRITIONAL IMMUNITY: STAPHYLOCOCCAL ADAPTATION TO HOST-IMPOSED
MANGANESE AND ZINC STARVATION (AI118880)

PI: THOMAS KEHL-FIE; UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN; UNITED STATES
Collaborators:

CHRISTOPHER MCDEVITT; UNIVERSITY OF ADELAIDE; ADELAIDE, AUSTRALIA

OPTIMIZING CLINICAL USE OF POLYMYXIN B: TEACHING AN OLD DRUG TO TREAT SUPERBUGS
(AI119446)

PI: KEITH KAYE; UNIVERSITY OF MICHIGAN AT ANN ARBOR; UNITED STATES

Collaborators:

JIAN LI; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

IDENTIFICATION OF GENES REQUIRED BY LEPTOSPIRA INTERROGANS FOR MAMMALIAN HOST
ADAPTATION AND/OR PERSISTENCE IN THE RAT MODEL (AI128379)

PI: MELISSA CAIMANO; UNIVERSITY OF CONNECTICUT SCH OF MED/DNT; UNITED STATES

Collaborators:

BEN ADDLER; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

VIRULENCE PROTEINS OF PATHOGENIC LEPTOSPIRA SPECIES (AI128560)

PI: DAVID HAAKE; BRENTWOOD BIOMEDICAL RESEARCH INSTITUTE; UNITED STATES

Collaborators:

BEN ADLER; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

NEXT-GENERATION COMBINATION DOSING STRATEGIES TO COMBAT RESISTANT
ACINETOBACTER BAUMANNII (AI130185)

PI: JURGEN BULITTA; UNIVERSITY OF FLORIDA; UNITED STATES

Collaborators:

JOHN BOYCE; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

TOWARDS A NEW GENERATION OF GLYCOENGINEERED PNEUMOCOCCAL BIOCONJUGATE
VACCINES (AI131742)

PI: CHRISTIAN HARDING; VAXNEWMO, LLC; UNITED STATES

Collaborators:

NICHOLLAS SCOTT; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

COMBATING DEADLY GRAM-NEGATIVE LUNG INFECTIONS: AN INHALATION AND SYSTEMS
APPROACH (AI132681)

PI: QI ZHOU; PURDUE UNIVERSITY; UNITED STATES

Collaborators:

JIAN LI; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

STUDY NETWORK OF ACINETOBACTER AS A CARBAPENEM-RESISTANT PATHOGEN (SNAP)
(AI135522)

PI: YOHEI DOI; UNIVERSITY OF PITTSBURGH AT PITTSBURGH; UNITED STATES

Collaborators:

DAVID PATERSON; UNIVERSITY OF QUEENSLAND; HERSTON, AUSTRALIA

ENTEROTOXIGENIC B. FRAGILIS ACQUISITION IN DISEASE SUSCEPTIBILITY (AI138565)

PI: JULIANE BUBECK WARDENBURG; WASHINGTON UNIVERSITY; UNITED STATES

Collaborators:

NICHOLLAS SCOTT; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

THE MECHANISM OF CYTOPLASMIC INCOMPATIBILITY (AI143725)

PI: SETH BORDENSTEIN; VANDERBILT UNIVERSITY; UNITED STATES

Collaborators:

SCOTT O'NEILL; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

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MOLECULAR INSIGHTS INTO THE UROPATHOGENESIS OF MDR ACINETOBACTER BAUMANNII (AI144120)

PI: MARIO FELDMAN; WASHINGTON UNIVERSITY; UNITED STATES

Collaborators:

NICHOLLAS SCOTT; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

ROLE OF T6SS IN PLASMID-MEDIATED MDR DISSEMINATION IN ACINETOBACTER (AI144220)

PI: MARIO FELDMAN; WASHINGTON UNIVERSITY; UNITED STATES

Collaborators:

RUTH HALL; UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

ADVANCING INNOVATIVE THERAPIES AGAINST PANDRUG-RESISTANT GRAM-NEGATIVE SUPERBUGS (AI146160)

PI: QI ZHOU; PURDUE UNIVERSITY; UNITED STATES

Collaborators:

JIAN LI; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

TONY VELKOV; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

PHARMACOLOGY OF INTRATHECAL/INTRAVENTRICULAR POLYMYXINS: A SYSTEMS-BASED APPROACH (AI146241)

PI: GAURI RAO; UNIV OF NORTH CAROLINA CHAPEL HILL; UNITED STATES

Collaborators:

JIAN LI; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

TONY VELKOV; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

PILIN GENOTYPING FOR GROUP A STREPTOCOCCI (AI148983)

PI: DEBRA BESSEN; NEW YORK MEDICAL COLLEGE; UNITED STATES

Collaborators:

MARK DAVIES; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

TARGETING PNEUMOCOCCAL TRANSMISSION (AI150893)

PI: JEFFREY WEISER; NEW YORK UNIVERSITY SCHOOL OF MEDICINE; UNITED STATES

Collaborators:

MICHAEL JENNINGS; GRIFFITH UNIVERSITY; GOLD COAST, AUSTRALIA

TARGETING A UBIQUITOUS SPIROCHETE BACTERIOPHAGE TO PREVENT LYME DISEASE (AI151597)

PI: PATRICK SECOR; UNIVERSITY OF MONTANA; UNITED STATES

Collaborators:

JEREMY BARR; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

OUTER MEMBRANE VESICLES IN HUMAN GUT BACTERIA (AI151873)

PI: MARIO FELDMAN; WASHINGTON UNIVERSITY; UNITED STATES

Collaborators:

NICHOLLAS SCOTT; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

Foreign with Foreign Subcomponent

ENZYME THERAPEUTICS FOR BIOFILM PREVENTION AND DISRUPTION (AI119116)

PI: PATRICIA HOWELL; HOSPITAL FOR SICK CHILDRN (TORONTO); CANADA

Collaborators:

NICKY THOMAS; UNIVERSITY OF SOUTH AUSTRALIA; ADELAIDE, AUSTRALIA

Intramural

Pathophysiological Actions of Anthrax Virulence Determinants (AI001032)

Site Collaborator: Si Man (Australian National University) Si Man (The John Curtin School of Medical Research), Canberra Australia

Lab: LPD, Intramural Investigator: Stephen Leppla

OTHER PARASITIC DISEASES (14)

Last updated 3/3/2021

Domestic with Foreign Subcomponent

THE DEVELOPMENT OF A RECOMBINANT VACCINE AGAINST HUMAN ONCHOCERCIASIS (AI078314)

PI: SARA LUSTIGMAN; NEW YORK BLOOD CENTER; UNITED STATES

Collaborators:

NIKOLAI PETROVSKY; VAXINE PTY LTD; BEDFORD PARK, AUSTRALIA

OPTIMIZATION OF ANTISCHISTOSOMAL CHEMOTYPES (AI116723)

PI: JONATHAN VENNERSTROM; UNIVERSITY OF NEBRASKA MEDICAL CENTER; UNITED STATES

Collaborators:

SUSAN CHARMAN; MONASH UNIVERSITY; PARKVILLE, AUSTRALIA

PHYSIOLOGICAL ROLES OF SCHISTOSOME TRP ION CHANNELS WITH ATYPICAL PHARMACOLOGY (AI123173)

PI: ROBERT GREENBERG; UNIVERSITY OF PENNSYLVANIA; UNITED STATES

Collaborators:

MALCOLM JONES; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

TARGETING TRYPANOSOMATID DEOXYHYPUSINE SYNTHASE (AI127503)

PI: MARGARET PHILLIPS; UT SOUTHWESTERN MEDICAL CENTER; UNITED STATES

Collaborators:

SUSAN CHARMAN; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

POINT-OF-CARE DIAGNOSTIC TEST FOR T. CRUZI (CHAGAS) INFECTION (AI136172)

PI: ANDREW LEVIN; KEPHERA DIAGNOSTICS, LLC; UNITED STATES

Collaborators:

SACHA DOPHEIDE; PLANET INNOVATION; BOX HILL, AUSTRALIA

POPULATION GENOMICS AND NEW TOOLS FOR THE ENDGAME OF ONCHOCERCIASIS ELIMINATION IN AFRICA (AI144161)

PI: MAKEDONKA MITREVA; WASHINGTON UNIVERSITY; UNITED STATES

Collaborators:

GRANT WARWICK; LA TROBE UNIVERSITY; BUNDEENA, AUSTRALIA

MARK SULLIVAN; MEDECINES DEVELOPMENT FOR GLOBAL HEALTH; SOUTHBANK, AUSTRALIA

QUANTITATIVE APPROACHES FOR DRUG TESTING IN CHRONIC TOXOPLASMOSIS: LEVERAGING NEW INSIGHTS INTO BRADYZOITE BIOLOGY WITHIN TISSUE CYSTS IN VIVO (AI145335)

PI: ANTHONY SINAI; UNIVERSITY OF KENTUCKY; UNITED STATES

Collaborators:

GIEL VAN DOOREN; AUSTRALIAN NATIONAL UNIVERSITY; CANBERRA, AUSTRALIA

CAPTURING THE GENOMIC VARIATION PRESENT IN CRYPTOSPORIDIUM AND CRYPTOSPORIDIOSIS (AI148667)

PI: JESSICA KISSINGER; UNIVERSITY OF GEORGIA; UNITED STATES

Collaborators:

MICHELLE POWER; MACQUARIE UNIVERSITY; SYDNEY, AUSTRALIA

UNA RYAN; MURDOCH UNIVERSITY; PERTH, AUSTRALIA

MECHANISMS OF PROTEIN PRODUCTION IN THE PARASITE GIARDIA IAMBLIA (AI149210)

PI: OLIVIA RISSLAND; UNIVERSITY OF COLORADO DENVER; UNITED STATES

Collaborators:

AARON JEX; WALTER AND ELIZA HALL INST MEDICAL RES; PARKVILLE, AUSTRALIA

Foreign with Foreign Subcomponent

VISCERAL LEISHMANIASIS IN BIHAR STATE, INDIA (AI074321)

PI: SHYAM SUNDAR; BANARAS HINDU UNIVERSITY; INDIA

Collaborators:

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CHRISTIAN ENGWERDA; QUEENSLAND INSTITUTE OF MEDICAL RESEARCH (QIMR); HERSTON, AUSTRALIA

JENEFER BLACKWELL; UNIVERSITY OF WESTERN AUSTRALIA; PERTH, AUSTRALIA

ANTIBODY-SECRETING CELLS IN THE REGULATION OF T CELL RESPONSE TO TRYPAOSOMA CRUZI (AI116432)

PI: ADRIANA GRUPPI; NATIONAL RESEARCH COUNCIL OF ARGENTINA; ARGENTINA

Collaborators:

CAROLA VINUESA; AUSTRALIAN NATIONAL UNIVERSITY; CANBERRA, AUSTRALIA

Intramural

Studies of neurocysticercosis and animal cestode infections (AI000846)

Site Collaborator: S Mahanty (University of Melbourne), Melbourne Australia

Lab: LPD, Intramural Investigator: Theodore Nash

Toxoplasma Surface Antigens and Immunity (AI001017)

Site Collaborator: Nicholas Smith (James Cook University), Cairns Australia

Lab: LPD

Protozoan Population Genetics and Inflammation (AI001018)

Site Collaborator: A Thompson (Murdoch University) N Smith (University of Technology)

Nicholas Smith (James Cook University), Cairns Australia, Perth Australia, Sydney Australia

Lab: LPD

OTHER VIRAL DISEASES (4)

Domestic with Foreign Subcomponent

MODELING THE IMPACT AND COST-EFFECTIVENESS OF NEXT-GENERATION ROTAVIRUS VACCINE STRATEGIES IN LOW- AND MIDDLE-INCOME COUNTRIES (AI112970)

PI: VIRGINIA PITZER; YALE UNIVERSITY; UNITED STATES

Collaborators:

JULIE BINES; MURDOCH CHILDREN'S RESEARCH INSTITUTE; MELBOURNE, AUSTRALIA

AN ADJUVANT FOR AN RSV PREFUSION F VACCINE THAT SAFELY PROTECTS INFANTS VIA MATERNAL VACCINATION (AI140941)

PI: MARK YONDOLA; CALDER BIOSCIENCES, INC.; UNITED STATES

Collaborators:

NIKOLAI PETROVSKY; FLINDERS UNIVERSITY; BEDFORD PARK, AUSTRALIA

STRUCTURAL BASIS FOR HENIPAVIRUS MATRIX PROTEIN NUCLEO-CYTOPLASMIC TRAFFICKING (AI144880)

PI: CHRISTOPHER BASLER; GEORGIA STATE UNIVERSITY; UNITED STATES

Collaborators:

JADE FORWOOD; CHARLES STURT UNIVERSITY; WAGGA WAGGA, AUSTRALIA

DETECTION AND CHARACTERIZATION OF FLAVIVIRUS AND ALPHAVIRUS INFECTIONS IN ACUTE SUSPECTED ARBOVIRAL CASES OR NEUROLOGICAL DISEASE, CENTRAL DEPARTMENT, PARAGUAY (AI146443)

PI: WAGGONER, JESSE, EMORY UNIVERSITY,

Collaborators:

Millar, Doug, Genetic Signatures, AUSTRALIA

Intramural

Cellular Immune Responses to RSV infection in Mice (AI005027)

Site Collaborator: A Redwood (University of Western Australia), Crawley Australia

Lab: VPL

SEXUALLY TRANSMITTED INFECTIONS EXCLUDING HIV (7)

Domestic with Foreign Subcomponent

GENETICS OF HSV DNA REPLICATION (AI021747)

PI: SANDRA WELLER; UNIVERSITY OF CONNECTICUT SCH OF MED/DNT; UNITED STATES

Collaborators:

GÖKHAN TOLUN; UNIVERSITY OF WOLLONGONG; WOLLONGONG, AUSTRALIA

ECOPATHOGENOMICS OF SEXUALLY TRANSMITTED INFECTIONS (EPSTI) (AI084044)

PI: PATRIK BAVOIL; UNIVERSITY OF MARYLAND BALTIMORE; UNITED STATES

Collaborators:

DAVID PETER WILSON; UNIVERSITY OF NEW SOUTH WALES; KENSINGTON, AUSTRALIA

FORWARD GENETIC PREDICTION AND TESTING OF VIRULENCE LOCI IN HERPES SIMPLEX VIRUS 1 (AI132692)

PI: MORIAH SZPARA; PENNSYLVANIA STATE UNIVERSITY-UNIV PARK; UNITED STATES

Collaborators:

DAVID TSCHARKE; AUSTRALIAN NATIONAL UNIVERSITY; CANBERRA, AUSTRALIA

NOVEL CARBOHYDRATE BINDING FUNCTIONS OF THE CR3 I-DOMAIN MODULATE GONOCOCCAL-CERVICAL CELL INTERACTIONS (AI134848)

PI: JENNIFER EDWARDS; RESEARCH INST NATIONWIDE CHILDREN'S HOSP; UNITED STATES

Collaborators:

MICHAEL JENNINGS; GRIFFITH UNIVERSITY; SOUTHPORT, AUSTRALIA

UNIVERSITY OF WASHINGTON (UW) SEXUALLY TRANSMITTED INFECTIONS (STI) COOPERATIVE RESEARCH CENTER (CRC) - SYPHILIS VACCINE TO PROTECT AGAINST LOCAL AND DISSEMINATED T. PALLIDUM INFECTION (AI144133)

PI: ANNA WALD; UNIVERSITY OF WASHINGTON; UNITED STATES

Collaborators:

DAVID LEWIS; UNIVERSITY OF SYDNEY; SYDNEY, AUSTRALIA

UNIVERSITY OF NORTH CAROLINA - CHLAMYDIA VACCINE INITIATIVE (UNC-CVI) (AI144181)

PI: TONI DARVILLE; UNIV OF NORTH CAROLINA CHAPEL HILL; UNITED STATES

Collaborators:

KENNETH BEAGIEY; QUEENSLAND UNIVERSITY OF TECHNOLOGY; BRISBANE, AUSTRALIA

STARVE AND KILL: ENGINEERED ANTIGENS TARGETING NUTRIENT ACQUISITION PATHWAYS ESSENTIAL FOR GONOCOCCAL INFECTION AND DISEASE (AI144182)

PI: CYNTHIA CORNELISSEN; GEORGIA STATE UNIVERSITY; UNITED STATES

Collaborators:

DAVID WILSON; BURNET INSTITUTE; MELBOURNE, AUSTRALIA

KATE SEIB; GRIFFITH UNIVERSITY; SOUTHPORT, AUSTRALIA
RICHARD GRAY; UNIVERSITY OF NEW SOUTH WALES; SYDNEY, AUSTRALIA

TUBERCULOSIS (9)

Domestic with Foreign Subcomponent

T CELL RESPONSES TO CD1-RESTRICTED LIPIDS IN TUBERCULOSIS (AI049313)

PI: DAVID MOODY; BRIGHAM AND WOMEN'S HOSPITAL; UNITED STATES

Collaborators:

JAMIE ROSSJOHN; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

METABOLIC FACTORS THAT CONTROL THE SPECTRUM OF HUMAN TUBERCULOSIS (AI111224)

PI: DAVID MOODY; BRIGHAM AND WOMEN'S HOSPITAL; UNITED STATES

Collaborators:

JAMIE ROSSJOHN; SCHOOL OF BIOMEDICAL SCIENCES, MONASH UNIVERSITY; CLAYTON, AUSTRALIA

SYSTEMS GENETICS OF TUBERCULOSIS (AI132130)

PI: CHRISTOPHER SASSETTI; UNIV OF MASSACHUSETTS MED SCH WORCESTER; UNITED STATES

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Collaborators:

SARAH DUNSTAN; THE UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

CYTOMEGALOVIRUS AS A RISK FACTOR FOR EXACERBATION OF MYCOBACTERIUM TUBERCULOSIS INFECTION (AI146442)

PI: ANGELO IZZO; COLORADO STATE UNIVERSITY; UNITED STATES

Collaborators:

HELLE BIELEFELDT-OHMANN; THE UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

IMMUNOGENETIC PREDICTORS OF ACTIVE AND INCIPIENT TB IN HIV-NEGATIVE AND - POSITIVE CLOSE TB CONTACTS (AI147765)

PI: TIMOTHY STERLING; VANDERBILT UNIVERSITY MEDICAL CENTER; UNITED STATES

Collaborators:

SARAH DUNSTAN; THE PETER DOHERTY INSTITUTE FOR INFECTION AND IMMUNITY; MELBOURNE, AUSTRALIA

METABOLIC ALDEHYDES AS IMMUNE EFFECTORS AGAINST TUBERCULOSIS (AI153197)

PI: KATERINA DARWIN; NEW YORK UNIVERSITY SCHOOL OF MEDICINE; UNITED STATES

Collaborators:

SARAH DUNSTON; UNIVERSITY OF MELBOURNE; MELBOURNE, AUSTRALIA

Foreign with Foreign Subcomponent

ALTERED IMMUNE-ENDOCRINE AXIS IN TYPE 2 DIABETES AND TUBERCULOSIS RISK (AI116039)

PI: KATHARINA RONACHER; STELLENBOSCH UNIVERSITY TYGERBERG CAMPUS; SOUTH AFRICA

Collaborators:

KATHARINA RONACHER; THE UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

HLA-E RESTRICTED T-CELL IMMUNITY IN MYCOBACTERIUM TUBERCULOSIS INFECTION (AI141315)

PI: TOM OTTENHOFF; LEIDEN UNIVERSITY MEDICAL CENTER; NETHERLANDS

Collaborators:

JAMIE ROSSJOHN; MONASH UNIVERSITY; MELBOURNE, AUSTRALIA

Intramural

Development Of New Chemotherapeutics For Tuberculosis (AI000693)

Site Collaborator: Luke Henderson (Deakin University), Burwood Australia

Lab: LCID, Intramural Investigator: Clifton Barry

VECTOR BIOLOGY (2)

Direct Foreign

EXPLORING THE EFFECT OF HUMAN BLOOD MICRORNAS ON MOSQUITO BIOLOGY (AI147020)

PI: SASSAN ASGARI; UNIVERSITY OF QUEENSLAND; AUSTRALIA

Domestic with Foreign Subcomponent

POPULATION GENOMICS OF A GLOBALLY DISTRIBUTED ARBOVIRUS VECTOR, AEDES ALBOPICTUS (AI132409)

PI: ADALGISA CACCONI; YALE UNIVERSITY; UNITED STATES

Collaborators:

NIGEL BEEBE; UNIVERSITY OF QUEENSLAND; BRISBANE, AUSTRALIA

Publications Related to NIAID Grants

Australia had several NIAID grant related publications in 2020. Several reported on HIV/AIDS, antimicrobial resistance, immunology, vector biology, and other emerging infectious diseases, including SARS-CoV-2/COVID-19.

Select Publications

- Bastard, P., et al. (2020). Autoantibodies against type I IFNs in patients with life-threatening COVID-19. *Science*, 370(6515). doi: 10.1126/science.abd4585.
- Beaudoin-Bussi eres, G., et al. (2020). Elicitation of Cluster A and Co-Receptor Binding Site Antibodies Are Required to Eliminate HIV-1 Infected Cells. *Microorganisms*, 8(5), 710. doi: 10.3390/microorganisms8050710.
- Jiang, X., et al. (2020). Molecular dynamics simulations informed by membrane lipidomics reveal the structure–interaction relationship of polymyxins with the lipid A-based outer membrane of *Acinetobacter baumannii*. *Journal of Antimicrobial Chemotherapy*, 75(12), 3534-3543. doi: 10.1093/jac/dkaa376.
- Lin, Y. W., Chang, R. Y., Rao, G. G., Jermain, B., Han, M. L., Zhao, J. X., ... & Li, J. (2020). Pharmacokinetics/pharmacodynamics of antipseudomonal bacteriophage therapy in rats: a proof-of-concept study. *Clinical Microbiology and Infection*, 26(9), 1229-1235. doi: 10.1016/j.cmi.2020.04.039.
- Souter, M. N., McCluskey, J., & Corbett, A. J. (2020). When it's good to have MAITs. *Immunology and Cell Biology*, 98(10), 798-801. doi: 10.1111/imcb.12402.

Talking Points

- There is a robust collaboration with several Australian institutions, without the need for a formal agreement or bilateral program.
- There are special opportunities for the U.S. and Australia to work together on collaborative research activities in the Asia-Pacific Region, including on antimicrobial resistance, SARS-CoV-2/COVID-19, and other emerging infectious diseases.

Links to Other Information on Australia

- WHO Information on Australia: [[HYPERLINK](http://www.who.int/countries/aus/en/) "http://www.who.int/countries/aus/en/"]
- U.S. State Department Information on Australia: [[HYPERLINK](http://www.state.gov/p/cap/ci/as/) "http://www.state.gov/p/cap/ci/as/"]
- CIA World Fact Book – Australia: [[HYPERLINK](https://www.cia.gov/cia/publications/factbook/geos/pc.html) "https://www.cia.gov/cia/publications/factbook/geos/pc.html"] [[HYPERLINK](https://www.cia.gov/the-world-factbook/countries/australia/) "https://www.cia.gov/the-world-factbook/countries/australia/"]
- World Bank Country Classification: [[HYPERLINK](https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups) "https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups"]
- World Bank Control of Corruption Index: [[HYPERLINK](http://info.worldbank.org/governance/wgi/index.aspx) "http://info.worldbank.org/governance/wgi/index.aspx" \l "reports"]