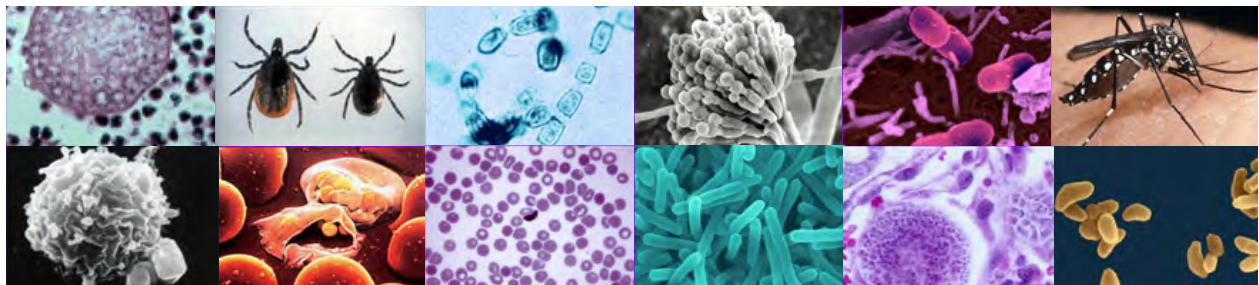


The National Institute of Allergy and Infectious Diseases (NIAID) Genomic Sequencing Centers

NIAID seeks projects for its Genomic Sequencing Centers for Infectious Diseases

These centers provide high-throughput sequencing, genotyping, annotation and associated analysis as resources to support transformative research in biodefense, emerging and re-emerging infectious diseases. The centers, located at the Broad Institute, the J. Craig Venter Institute, and the Institute for Genome Sciences at the University of Maryland School of Medicine, have the capacity to work with a wide variety of microorganisms, including viruses, bacteria, protozoan parasites and fungi, as well as insect vectors. Investigators with candidate organisms are invited to propose projects by submitting white papers to NIAID as individuals or groups.

Species and strains are selected for sequencing and genotyping to illuminate the genetics, physiology and evolution of pathogenesis, host responses to infection and disease spread, and to facilitate the identification of novel diagnostics, methods of surveillance, vaccines, antimicrobials and other drugs. Projects may include multiple strains and/or isolates for comparative purposes. Additional information on the white paper process can be found at www3.niaid.nih.gov/LabsAndResources/resources/gsc.



Examples of completed sequencing projects

Bacterial pathogens

Bacillus anthracis
Burkholderia spp.
Campylobacter spp.
Coxiella burnetii
Escherichia coli/Shigella
Francisella spp.
Listeria monocytogenes
Vibrio spp.
Yersinia pestis
Mycobacterium tuberculosis
Staphylococcus aureus

Viral pathogens

Influenza A
Coronavirus
Hepatitis C
Dengue
Rhinovirus

Insect vectors

Aedes aegypti
Culex pipiens
Ixodes scapularis

Parasitic pathogens

Entamoeba spp.
Plasmodium spp.
Toxoplasma gondii

Fungal pathogens

Aspergillus spp.
Coccidioides spp.