



Enterovirus



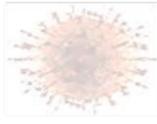
SARS-CoV



MERS-CoV



SARS-CoV-2



Swine flu virus



Avian flu virus



Dengue virus



Monkeypox virus

Core Facilities and Innovative Instrument Project

Academia Sinica Core Facilities

Page 57

Infectious Disease Core Facility (ID Core)

Wen-Chun Liu,
Associate Research Scientist
Director
+886-2-7750-5815
wenchun0617@as.edu.tw

Dr. Yi-An Ko
Manager
+886-2-7750-5857
koyian@as.edu.tw

Biomedical Translation Research Center (BioTReC)

In response to global prevalence of emerging infectious diseases in recent years, Academia Sinica established Infectious Diseases Core Facility (ID Core) at National Biotechnology Research Park. With nation-level P2 (BSL-2/ ABSL-2) and P3 (BSL-3/ABSL-3) laboratories, we provide both research and technical services to support both academia and biotechnology industries for prevention and treatment of infectious diseases that are related to public health/one health. Currently our research team focuses on critical RG2/RG3 pathogens, such as seasonal influenza virus, high-pathogenic avian influenza virus (HPAI), seasonal human coronavirus (hCoV), SARS-CoV-2, Mpox, respiratory syncytial virus (RSV), enterovirus, dengue virus, measles, and other common zoonotic or human pathogens. These emerging/re-emerging infectious diseases result in the illness of gastrointestinal tract, respiratory tract, skin, nervous system, or genitourinary tract, and may cause mild-to-severe human (and animal) health threats. Our goal is to develop an 『ONE STOP』 preclinical research and service platforms to support the development of novel vaccines, drugs, therapeutic antibodies, rapid test, screening reagents, to assist government in prevention and control of infectious disease.

Services:

1. Development and testing of RG2/RG3 pathogen diagnostic reagents/rapid tests
2. RG2/RG3 pathogens culturing and titer determination
3. Screening and efficacy evaluations of vaccines and drugs
4. Preclinical animal (mouse, hamster, ferret) studies for vaccine and drug development
5. Whole blood phenotyping/blood biochemistry/multiplex cytokines and chemokines immune analysis
6. Anti-viral/bacteria drugs/antibodies/vaccines/disinfectant efficacy testing
 - a. Antibody binding capacity (ELISA)
 - b. Neutralizing antibody detection (authentic or pseudovirus neutralization test)
 - c. Cellular immune response analyses (flow cytometry /Luminex multiplex/ADCC)
7. BSL-2/ABSL-2 laboratories (inclusive of important operating equipment and instruments) are available for short/long-term rental by domestic and foreign industrial or academic institutions

More Info: <https://biotrec.sinica.edu.tw/posts/135925>



BSL-2



ABSL-2



BSL-3



ABSL-3