Japanese Initiative for Progress of Research on Infectious Disease for Global Epidemic (J-PRIDE)

Issues such as the spread of Ebola hemorrhagic fever in East Africa, Zika virus infectious disease, which is related with microcephaly in children mainly in Latin America, and increasing drug resistance have shocked and concerned the international community and has forced to take prompt measures.

“The Basic Plans for Strengthening Measures on Emerging Infectious Diseases (2016.2)”, “the National Action Plan on Antimicrobial Resistance (AMR) (2016.4)” and “the involvement of the nation regarding the consolidation of the BSL4 facility of Nagasaki University (2016.11)” determined at The Ministerial Meeting on Measures on Emerging Infectious Diseases pointed out the necessity of reinforcement of the research function by consolidating infectious disease research centers and development of researchers in the field of infectious diseases.

Based on these highlighted issues, J-PRIDE supports research directed to search for potential drug targets against highly pathogenic infectious diseases and also research and human resource development involved in BSL4 facility for creation of innovative drugs against infectious diseases.

Establishment of network constituted by researchers in diverse fields

Researchers in medicine, pharmacy, veterinary medicine and agriculture, as well as those in other fields (structural biology, imaging, bioinformatics, etc.) collaborate to promote cross-disciplinary research to deliver breakthrough findings.

Research area

Research on highly pathogenic infectious diseases such as Ebola hemorrhagic fever
To promote studies on the structure and function of viral proteins, structure and function of the viral genome, viral life cycle, and productive infection for highly pathogenic infectious diseases such as Ebola hemorrhagic fever that could lead to creation of novel drugs:
• The program supports studies that focus on basic research in infectious diseases in Japan at the infectious disease research center centering on BSL4 facility.
• The program promotes studies that expand the range of research regarding highly pathogenic infectious diseases.

Research on interaction between viral-host factors and infection control mechanism
Promotion of studies focused on process involved in an establishment of infection such as viral replication within the cells or on elucidation of host infection control.

Research to elucidate the pathology of infectious diseases that cause congenital abnormalities in fetuses or serious symptoms in children
Promotion of studies that elucidate the molecular mechanism of how various infection defense mechanism is evaded for establishment of infection.

Human resources development

Development of researchers who study highly pathogenic pathogens
Development of researchers with the knowledge and experience necessary to conduct research in BSL4 facilities through training at overseas BSL4 facilities.
Promotion of the development of researchers through collaboration and cooperation with research institutions in Japan and overseas BSL4 facilities.

・Overall enhancement on basic research against infectious diseases in Japan
・Develop innovative drugs of Japanese origin
・Strengthen infection crisis-management system
・Continuous contribution to international community