DESCRIPTION

Biosecurity and Health is an open access, peer-reviewed journal sponsored by the Chinese Medical Association, managed by National Institute for Viral Disease Control and Prevention, Chinese Center for Disease Control and Prevention (China CDC). This journal aims to publish original research findings and thoughts in any aspect connected with public health and biosafety. Topics include but are not limited to: Identification and characterization of biological threats; Origin, transmission, and evolution of biological agents; Surveillance, risk assessment, and early-warning; Prevention, diagnosis, and therapeutics; Synthetic biotechnology, genome editing, and other new biotechniques; Policies and standards.

Biosecurity and Health is published quarterly in English language. Article types include Original Research, Reviews, Perspectives, Correspondence, Case Report, News and Views, Highlights, Comments and policy forum, etc.

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The innate immune response acts as the first line of host defense against viral infection.

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Biorisk management, risk assessment and infectious substance shipping

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Analyzing the process of disease emergence, research on the bat origins of emerging viruses, studies of wildlife disease ecology to understand emerging zoonoses.

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The prevalence mechanism of viral diarrhea and emerging infectious diseases

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Disinfection and decontamination, emergency response, planning of containment facilities
Mark Huza, AAF Flanders, Washington, North Carolina, United States
All aspects of the design of risk mitigation systems for the control of CBRNE and other airborne contaminants of high consequence when used as primary and/or secondary containment devices in BSL-3 and BSL-4 facilities
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Animal model, infectious disease/virology, immunology
Gary P. Kobinger, Laval University, Quebec, Quebec, Canada
In vivo evaluation of vaccine candidates and immunotherapeutics in a biosafety level 4 facility for protection against high biocontainment viruses (Ebola, Nipah, Rift Valley and CCHF)
Jay Krishnan, National Microbiology Laboratory, Saint-Hyacinthe, Quebec, Canada
Biosafety and biorisk
Prasad Narasimha Kuduvalli, Health Security Partners, Washington, District of Columbia, United States
Development and implementation of biorisk standards, guidelines, and tools; National level development and implementation of BS&S regulatory frameworks; Innovation to advance biosafety and biosecurity in the context of quality management and public health; One health and other novel multi-sector collaborative approaches to advancing BS&S
Chook Mee Lan, Temasek Life Sciences Laboratory Ltd, Singapore
Operations of a life sciences biomedical research institution, safety and quality management, laboratory experience in pharmaceutical chemistry.
Yixue Li, Shanghai Center for Bioinformation Technology, Shanghai, China
Genomics, bioinformatics, database, evolutionary biology, and cancer Genomics.
Zhenjun Li, Chinese Center for Disease Control and Prevention, Beijing, China
Laboratory biosafety management, epidemiology and pathogenesis of Nocardia.
Mifang Liang, National Institute for Viral Disease Control and Prevention, Beijing, China
Hemorrhagic fever (VHF) viruses, including hantavirus, Dengue virus, Chikungunya virus, CCHF virus, SFTS virus and the Ebola virus.
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Molecular mechanism in the regulation of innate immunity and the impact of viral infection on host transcription control, viral pathogenesis and oncogenesis.
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Mathematical models, metagenomics sequencing and routine etiological/serological testing to study emerging and zoonotic infectious diseases; One health practice against EIDs crisis in China
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Mosquito-borne Flavivirus, virus engineering, emerging infectious diseases.
Di Qu, Fudan University, Shanghai, China
Regulatory mechanism of PhoQ/PhoP in Shigella; Regulation of persister formation in S epidermidis biofilms; Animal models for TB vaccine evaluation; Evaluation of BSL-3 contamination and prevention Laboratory acquired infection

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Currently conducting independent, original research aimed at elucidating the pathogenesis of high consequence viruses using in vitro and in vivo models and applying these findings to the development of appropriate medical countermeasures.

Heather Sheeley, Public Health England Workplace Health and Safety Lead, Salisbury, United Kingdom
Biosafety, biocontainment, laboratory biosecurity, biorisk, sustainable laboratories for developing countries, laboratory acquired infection, risk assessment, competency in biosafety.

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Molecular mechanism of pathogen infection and regulation by the host, and the interaction between receptors and ligands during immune response.

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Biological safety, and health disparities.

Philippe Stroot, Xibios Biosafety Consulting, Tournai, Belgium
Applied Biosafety and connected fields and topics

T.S. Saraswathy Subramaniam, National Institutes of Health, Shah Alam, Malaysia
Research on HIV, polio, and measles.

Wenjie Tan, MOH Key Laboratory of Medical Virology, National Institute for Viral Disease Control and Prevention, Chinese Center for Disease Control and Prevention, Beijing, China
Diagnosis and surveillance of HCoVs and other emerging viral diseases in China, R&D of vaccines against viral diseases (Influenza, HBV, Poxvirus and HCoVs).

Hao Anh Vu, Centers for Disease Control and Prevention, Atlanta, Georgia, United States
Improving the sciences in the field of biosafety and biocontainment practices for all biosafety levels; Evaluating decontamination and inactivation methods in applied applications; Integration of novel technological system into laboratory and health care environments to augment quality and safety outcomes; Improving the science of applied risk assessments

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Research on the virology and hepatology.

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The antigenicity, genetic characteristics and drug resistance of human seasonal influenza virus and human infection with zoonotic influenza viruses

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Development and application of genome engineering technologies

Hualei Wang, Academy of Military Medical Sciences, Beijing, China
Molecular pathogenesis of neurotropic virus; Development of anti-viral vaccines and agents; Molecular epidemiology and virus evolution

Yumei Wang, National Institute for Viral Disease Control and Prevention, Beijing, China
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Zhaoxi Wang, Harvard Medical School, Boston, Massachusetts, United States
Multidisciplinary research, especially in molecular epidemiology, genomics, functional genomics (omics), and environmental health; Research on applying new genomic/omics technologies to population-based studies of complex diseases.

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Microorganism laboratory acquired-infection control, protection and application on biological resources

Gary Wong, Laval University, Quebec, Canada
Surveillance and isolation of highly pathogenic viruses from remote regions of China and Canada, the establishment of rapid, sensitive and specific methods for on-site diagnostics, the development of animal models, vaccines and therapeutics, as well as research into mechanisms of pathogenicity for viruses requiring BSL-3 or -4 containment.

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HIV/AIDS Epidemiology, HIV/AIDS prevention in key populations, and drug abuse.

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Monoclonal antibody for infection disease and tumor therapy; Subunit vaccine development of viruses.

Hongliang Yang, Houston Methodist Research Institute, Houston, Texas, United States
Biosafety; Recombinant proteins using bioreactor for Emerging Infectious Research Resources Repository

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Quality & safety management of laboratories includes management system, quality control, safety & ethics, validation of methods, verification of performance, measurement traceability, uncertainty etc.

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Public health, epidemiology, pharmaco-epidemiology, biostatistics, data management and quality control, cardiovascular epidemiology of non-communicable diseases.

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The application research and basic research related to the prevention and control of human enterovirus diseases (hand-foot-mouth disease, poliomyelitis, aseptic meningitis, etc.).

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Risk assessment, laboratory safety, and laboratory quality.

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Pediatrics, pediatric infectious diseases, pediatric viral infectious diseases, clinical virology, certain molecular biology techniques, such as small interfering ribonucleic acid (siRNA) technology

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