Glossary of Laboratory Biosafety Terms of Academia Sinica Institutional Biosafety Committee

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No.	Term	Description
1	Animal Biosafety Level 1 (ABSL-1) laboratory	Refers to laboratories that use experimental animals to conduct experimental operations with RG1 pathogens or non-pathogenic biological materials.
2	Animal Biosafety Level 2 (ABSL-2) laboratory	Refers to laboratories that use experimental animals to experimental conduct operations with RG2 pathogens, biotoxins, or potentially pathogenic biological materials.
3	Animal Biosafety Level 3 (ABSL-3) laboratory	Refers to laboratories that use experimental animals to conduct experimental operations with RG3 pathogens.
4	Biological safety level laboratory	Refers to biological laboratories where experimental operations such as infectious biological materials or genetic recombination are conducted.
5	Biological laboratory / biological material bank manager	Refers to the management personnel who assists the PI of the Lab/BMB in the daily management, supervision, and coordination of the Lab/BMB.
6	Biological laboratory / biological material bank supervisor	Refers to the management level responsible for overseeing the Lab/BMB, including developing and implementing biosafety documents and procedures, and ensuring staff compliance with relevant biosafety regulations and requirements.
7	Biological material	Refers to all types of biological materials used in experimental research in the life sciences, including microorganisms (e.g., bacteria, viruses, fungi, and parasites), microbial derivatives (e.g., nucleic acids, proteins, and biotoxins), prions, various cell lines, vaccine strains, recombinants, human specimens, animals, plants and their specimens, as well as environmental samples.
8	Biological material bank	Refers to a Lab or space used to store biological materials.
9	Biomedical waste	Refers to infectious waste generated in the laboratories/BMBs of the I&RCs at AS.
10	Biosafety competency assessment	Refers to infectious waste generated in the laboratories/BMBs of the I&RCs at AS.
11	Biosafety document	Refers to documents, such as biosafety manuals, plans, standard operating procedures, developed by the Lab/BMB. Refers to the biosafety manual, plan, standard operating procedures and other documents established by the Lab/BMB.
12	Biosafety Level 1 (BSL-1) laboratory	Refers to laboratories that conduct experiments with RG1 pathogens or non-pathogenic biological materials.
13	Biosafety Level 2 (BSL-2) laboratory	Refers to laboratories that conduct experiments with RG2 pathogens, biotoxins, or potentially pathogenic biological materials.
14	Biosafety Level 3 (BSL-3) laboratory	Refers to laboratories that conduct experiments with RG3 pathogens.
15	Dispose	Refers to the addition, disposal, or transfer of biological materials in the Lab/BMB.

No.	Term	Description
16	Emergency response personnel	Refers to the Lab/BMB supervisor and manager, the biosafety manager of the I&RC, and relevant safety personnel at AS.
17	Enhanced Biosafety Level 2 (BSL-2+) laboratory	Refers to experimental operations, such as the non-proliferation or non-concentration of specific RG3 pathogens (e.g., HIV), in BSL-2 laboratories approved by the regulatory authority, provided that staff follow the personal protective equipment requirements and operating procedures of BSL-3 laboratories.
18	Field testing of transgenic plant	Refers to the genetic characterization and biosafety assessment of genetic transplants conducted in isolation facilities approved by the Ministry of Agriculture.
19	High-containment laboratory	Refers collectively to the BSL-3 and ABSL-3 laboratories of the I&RC at AS.
20	High-hazard biological material	Refers to RG3 or higher pathogens, biotoxins, positive specimens for infectious diseases managed as RG3 pathogens, and other regulated biological materials.
21	Infectious biological material	Refers to biological materials that can cause infection or disease in humans and animals, including human and animal pathogens, pathogen derivatives, and substances identified as containing such pathogens or derivatives (e.g., positive specimens and infectious cell lines).
22	Local government health bureau	The Nangang Campus of AS and the laboratories/BMBs of the I&RCs located in the National Biotechnology Research Park and the National Taiwan University campus are under the Department of Health of the Taipei City Government. The laboratories/BMBs of the Institute of Cellular and Individual Biology at the Linhai Research Station are under the Department of Health of the Yilan County Government, while the laboratories/BMBs of the Southern Biotechnology Center of the Research Center for Agricultural Biotechnology are under the Department of Health of the Tainan City Government.
23	New personnel	Refers to research staff and research technical personnel who are working in a Lab/BMB for the first time.
24	On-duty personnel	Refers to new personnel working in a Lab/BMB who, upon completing the mandatory biosafety training hours for new staff, will be classified as on-duty personnel starting the following year.
25	P620 packing instruction	Refers to the competent authority's three-layer packaging requirements for the transportation of specific infectious biological materials.
26	Recombinant	Refers to a pathogen, cell, animal, or plant that contains recombinant DNA.
27	Regulated biological material	Refer to the infectious biological materials regulated of AS IBC, including: 1. RG2 and RG3 pathogens. 2. Biological toxins. 3. Vaccine strains, cell lines, and recombinants (e.g., lentivirus) regulated as RG2 and RG3 pathogens, as well as other infectious biological materials, including regulated biotoxins and P620 packaging requirements for positive specimens, as announced by the competent authority.

No.	Term	Description
28	Regulated biological material bank	Refers to the storage of regulated biological materials for the BMB.
29	Regulated gene experiment	Refers to experiments on gene recombination and gene transfer in animals and plants, which are subject to the approval of AS IBC.
30	Regulated isolation facility	Refers to the specific isolation facilities, including semi-enclosed greenhouses, isolation greenhouses, and isolation nets, at the I&RC recognized by the Ministry of Agriculture as a field trial institution for genetically modified plants.
31	Research Reagents	Refers to reagents containing pathogens, inactivated pathogens, or their derivatives, where the original use is for research purposes.
32	Research technical personnel	Refers to the Senior Research Specialist, Associate Research Specialist, Assistant Research Specialist, and Research Technician at AS.
33	Research staff	Refers to the Distinguished Research Fellow, Research Fellow, Associate Research Fellow, Assistant Research Fellow, and Research Assistant at AS.
34	Risk Group 1 pathogen	Refers to pathogens that are not associated with disease in healthy adults or animals, such as E. coli K12 and adeno-associated viruses.
35	Risk Group 2 pathogen	Refers to pathogens that rarely cause serious diseases in humans or animals and for which prevention and treatment are usually available, such as *Staphylococcus aureus*, Hepatitis B virus, Rabies virus, and others.
36	Risk Group 3 pathogen	Refers to pathogens that can cause serious, potentially fatal diseases in humans or animals, for which prevention and treatment may be available, such as human immunodeficiency virus (HIV), novel coronavirus, and African swine fever virus (ASFV).
37	Risk Group 4 pathogen	Refers to pathogens that can cause serious, fatal diseases in humans or animals for which there is currently no known prevention or cure, such as Ebola, smallpox, and Marburg viruses.
38	Selected biological material	Refers to the control by the competent authorities of specific regulated biological materials that pose a serious threat to public health and safety, including two categories: selected pathogens and selected biological toxins.

Abbreviations of Nouns：

1. Academia Sinica：AS
2. Biological laboratory：Lab
3. Biological material bank：BMB
4. Biological safety manager：biosafety manager
5. Institutional biosafety committee：IBC
6. Institutes and research centers：I&RC