Abbreviations

BRC	Biological Resource Centre
DGR	Dangerous Goods Regulations
DNA	DeoxyriboNucleic Acid
EORTC	European Organisation for Research and Treatment of Cancer
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICD-O	International Classification of Diseases for Oncology
ISBER	International Society for Biological and Environmental Repositories
LIMS	Laboratory Information Management System
LN2	Liquid Nitrogen
MRC	Medical Research Council
MTA	Material Transfer Agreement
NCI	National Cancer Institute
OCT	Optimum Cutting Temperature
OECD	Organisation for Economic Co-operation and Development
OECI	Organisation of European Cancer Institutes
PCR	Polymerase Chain Reaction
QA/QC	Quality Assurance/Quality Control
R&D	Research and Development
RNA	RiboNucleic Acid
SOP	Standard Operating Procedures
TNM	TNM classification of malignant tumours
TUBAFROST	The European Human Tumor Frozen Tissue Bank
UNECE	United Nations Economic Commission for Europe
WHO	World Health Organization

Glossary

Biorepository: a place, room or container where biospecimens are stored. Biorepositories vary considerably, ranging form formal organisations to informal collections of materials in an individual researcher's freezer.

Biospecimen: a quantity of tissue, blood, urine or other biologically derived material used for diagnosis and analysis. A single biopsy may generate several biospecimens, including multiple paraffin blocks or frozen biospecimens. A biospecimen can include everything from subcellular structures (DNA) to cells, tissue (bone, muscle, connective tissue and skin), organs (e.g. liver, bladder, heart, kidney), blood, gametes (sperm and ova), embryos, fetal tissue, and waste (urine, faeces, sweat, hair and nail clippings, shed epithelial cells and placenta).

Collection: assemblage, for research purposes, of biological material selected on the basis of clinical or biological characteristics.

Dry ice: solid phase carbon dioxide.

ICDO: the International Classification of Diseases for Oncology (ICD-O) is a domain specific extension of the International Statistical Classification of Diseases and Related Health Problems for tumour diseases. This classification is widely used by cancer registries.

Informed consent: an educational process between the investigator and the prospective subject (or the subject's legally authorized representative) as a means to ensure respect for persons; mutual understanding of research procedures, risks, rights, and responsibilities; and continuous voluntary participation. **Material Transfer Agreement**: a binding label agreement between the provider of research materials and the recipient of the materials, setting forth conditions of transfer and use, protecting proprietary interests, and restricting distribution of the material. An important aspect of the MTA is that it normally removes liability on the part of the provider that might arise from the recipient's use of the research material.

Patient: a person undergoing medical treatment.

Processing: any procedure employed after biospecimen collection but prior to its distribution, including preparation, testing, and releasing the biospecimen to inventory and labelling.

Quality assurance: an integrated system of management activities involving planning, implementation, documentation, assessment and improvement to ensure that a process or item is of the type and quality needed for the project.

Quality control: specific tests defined by the Quality assurance to be performed to monitor procurement, processing, preservation and storage, biospecimen quality, and test accuracy. These may include but are not limited to performance evaluations, testing and controls used to determine accuracy and reliability of the biorepository's equipment and operational procedures as well as monitoring of the supplies, reagents, equipment and facilities.

Sample: portions of biospecimens distributed to researchers.

Subject: a living individual about whom an investigator, either professional or student, conducting research obtains (1) data through intervention or interaction with the individual or (2) identifiable private information. A human subject may also be a patient, but is not necessarily one.

Tissue: refers generally to a biologic collection of cells, and the extracellular matrix and/or intercellular substances surrounding them. Tissue is most often referred to in the context of solid tissue, as originating from a solid organ; however, tissue can also be defined more broadly to include collections of cells and intercellular substances from bodily fluids such as blood.

TNM Classification of Malignant Tumours: TNM is the cancer staging system developed and maintained by the International Union Against Cancer (UICC) to achieve consensus on one globally recognised standard for classifying the extent of spread of cancer. The Mandatory parameters ('T', 'N', and 'M') are:

T ((0),1-4): size or direct extent of the primary tumour

N (0-3): spread to regional lymph nodes

M (0/1): distant metastasis

Use of an «X» instead of a number or other suffix means that the parameter is not assessed.

Bibliography

Declaration of Helsinki. 1-5. 1964.

Australian Biospecimen Network, A. Biorepository Protocols. 1-78. 2006.

CryoBioSystem. The Fundamentals of cryobiology. 1-11. 2002.

Eiseman, E., G. Bloom, J. Brower, N. Clancy, and S. Omlsted, 2003, Case studies of existing human tissue repositories: best practices for a biospecimen resource for the genomic and proteomic era.

Garcia-Closas, M. et al., 2001, Collection of genomic DNA from adults in epidemiological studies by buccal cytobrush and mouthwash: Cancer Epidemiol Biomarkers Prev, v. 10, no. 6, p. 687-696.

Griese, M., 1999, Pulmonary surfactant in health and human lung diseases: state of the art: Eur. Respir.J., v. 13, no. 6, p. 1455-1476.

Grizzle, W. E., and J. Fredenburgh, 2001, Avoiding biohazards in medical, veterinary and research laboratories: Biotech.Histochem, v. 76, no. 4, p. 183-206.

International Air Transport Association, I., 2007, Dangerous goods regulations.

International Society for Biological and Environmental Repositories, I., 2005, Best Practices for Repositories I: Collection, Storage, and Retrieval of Human Biological Materials for Research: Cell Preservation Technology, v. 3, no. 1, p. 5-48. King, I. B., J. Satia-Abouta, M. D. Thornquist, J. Bigler, R. E. Patterson, A. R. Kristal, A. L. Shattuck, J. D. Potter, and E. White, 2002, Buccal cell DNA yield, quality, and collection costs: comparison of methods for large-scale studies: Cancer Epidemiol Biomarkers Prev, v. 11, no. 10 Pt 1, p. 1130-1133.

Makowski, G. S., E. L. Davis, and S. M. Hopfer, 1996, The effect of storage on Guthrie cards: implications for deoxyribonucleic acid amplification: Ann Clin Lab Sci, v. 26, no. 5, p. 458-469.

Mbogori, M., M. Kimani, A. Kuria, M. Lagat, and J. Danson, 2006, Optimization of FTA technology for large scale plant DNA isolation for use in marker assisted selection: African Journal of Biotechnology, v. 5, no. 9, p. 693-696.

Mulot, C., I. Stucker, J. Clavel, P. Beaune, and M. A. Loriot, 2005, Collection of human genomic DNA from buccal cells for genetics studies: comparison between cytobrush, mouthwash, and treated card: J Biomed Biotechnol., v. 2005, no. 3, p. 291-296.

National Consortium for the human saliva proteome, 2007, National Consortium for the human saliva proteome Salivary Proteome Handbook Procedures and Protocols.

OECD. Guidance for the Operation of Biological Research Centres. 1-17. 2004.

Office of Biorepositories and Biospecimen Research, NCI. NCI Best Practices for Biospecimen Resources. 2007. Organisation for Economic Co-operation and Development, Biological Resource Centres: underpinning the future of life sciences and biotechnology. 1-66. 2001.

Pilch, B., and M. Mann, 2006, Large-scale and highconfidence proteomic analysis of human seminal plasma: Genome Biol., v. 7, no. 5, p. R40.

Reynolds, H. Y., 2000, Use of bronchoalveolar lavage in humans-past necessity and future imperative: Lung, v. 178, no. 5, p. 271-293.

Robbins, R, S Rennard. The Lung: Scientific Foundations. 445. 1996. Lippincott-Raven, Philadelphia.

Smith, L. M., and L. A. Burgoyne, 2004, Collecting, archiving and processing DNA from wildlife samples using FTA databasing paper: BMC Ecol., v. 4, p. 4.

Steinberg, K. et al., 2002, DNA banking for epidemiologic studies: a review of current practices: Epidemiology, v. 13, no. 3, p. 246-254.

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. The Belmont Report. 1-8. 1979.

TUBAFROST. European Human Frozen Tumor Tissue Bank TUBAFROST. 1-7. 2003.

World Health Organization, W. Biorisk management: laboratory biosecurity guidance. 2006.

World Health Organization, W., 2007a, World Health Organization, W. Blood Safety and Clinical Technology Guidelines on Standard Operating Procedures for CLINICAL CHEMISTRY.

World Health Organization, W., 2007b, World Health Organization, W. Blood Safety and Clinical Technology Guidelines on Standard Operating Procedures for MICROBIOLOGY. Yokota, M., N. Tatsumi, O. Nathalang, T. Yamada, and I. Tsuda, 1999, Effects of heparin on polymerase chain reaction for blood white cells: J.Clin.Lab Anal., v. 13, no. 3, p. 133-140.