Book Review: Developing and Organizing an Institutional Biospecimen Repository, edited by Donna E. Hansel and Scott D. Jewell

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With increasing use of human tissue specimens in biomedical research comes the need for higher quality and more centralized biorepositories. There is significant variability in biospecimen quality and usability across institutions at this time, prompting the development of best practices, guidelines, and biorepository accreditation programs in recent years. Some institutions have an existing centralized biorepository, some have scattered “satellite” biorepositories housed in research laboratories, while others do not have organized biospecimen repository at all. Current standards for biorepositories require attention to patient-informed consent processes, timely and standardized procedures for biospecimen collection, processing, and biobanking to ensure excellent tissue quality, and establishment of ethical policies for granting access and distribution of specimens for research. With these considerations in mind, the authors of Developing and Organizing Institutional Biospecimen Repository have put together a key reference guide for anyone responsible for establishing and maintaining biorepositories.

Written by authors who have established expertise in the field of biobanking, this collaborative publication provides readers with a comprehensive framework with which to implement biobanking strategies. The book is divided into ten chapters, beginning with defining the role of the biorepository at an institution (Chapter 1) and the key role of the pathology department (Chapter 2). The authors then address management and key personnel (Chapter 3), infrastructure and scope of services that could be provided by the repository (Chapter 4), standardization of specimen collection, processing, and storage flow (Chapter 5), quality control of specimens (Chapter 6), informatics (Chapter 7), the very detailed informed consent process (Chapter 8), cost assessment (Chapter 9), and relationships with outside institutions and industry (Chapter 10).

In those ten chapters, the authors address a myriad of practical concerns and issues, including how to obtain institutional and funding support, deciding on location and space, what types of biospecimen kits and freezers are recommended, software designs to manage biospecimen data, when to obtain informed consent, budgeting, and how to assess/approve requests for specimens. They also address contentious issues such as how access to biospecimens will be granted, which parties will have priority access to specimens/data, and how to manage intellectual rights resulting from research using human tissues.

This detailed guide to biorepository establishment and management will prove a handy reference for those in charge of all or part of a biorepository. With up-to-date information on the latest equipment, links to guidelines established by biorepository societies, important details on standard collecting and processing procedures and more, this book is both comprehensive and user-friendly. It is a must-have for pathologists or professionals involved in any aspect of biorepository planning, maintenance, or development as well as research, legal and financial realms.

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