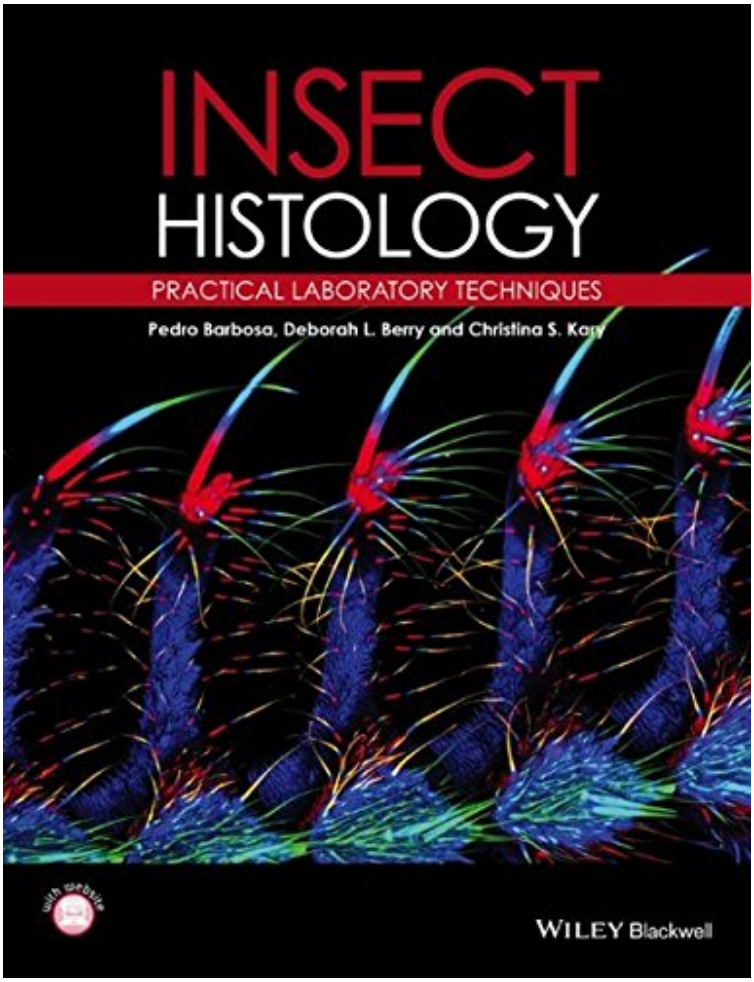
Insect Histology: Practical Laboratory Techniques

Pedro Barbosa, Deborah Berry, Christina K. Kary



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Pedro Barbosa, Deborah Berry, Christina K. Kary : Insect Histology: Practical Laboratory Techniques before purchasing it in order to gage whether or not it would be worth my time, and all praised Insect Histology: Practical Laboratory Techniques:

This title is a much needed update of Barbosa's self-published Manual of Basic Techniques in Insect Histology. It is a laboratory manual of 'traditional' and 'modern' insect histology techniques, completely revised using cutting-edge methodology carried out today and includes new immunohistochemical techniques not previously looked at. Insect Histology is designed as a resource for student and professional researchers, in academia and industry, who require basic information on the procedures that are essential for the histological display of the tissues of insects and related organisms.

A very useful book to have in your library. (British Journal of Entomology Natural History, 1 March 2015) From the Back CoverThis helpful guide is self-contained, holding all of the information you will need for the preparation of histological slides of all types of insect tissues. It explains the essential procedures for their preparation, providing step-by-step information on each phase, for example, on fixation, dehydrating, clearing, embedding, and staining. The laboratory manual explains the cutting-edge methodology carried out today, and provides a thorough collection of both historically established and modern insect histology techniques side-by-side. It is the first book to present these various techniques appropriate to insects. Key issues covered include: the use of genetic markers in insect histology; important approaches for the preparation of tissues andorgans for SEM and TEM Fluorescence; new immunohistochemical techniques; histological problems encounteredin insect tissues such as sclerotized chitin, yolk-laden eggs, chromosomes,genitalia, etc., and how to deal with them. Photographs show the likely results of procedures, components of the process, and advantages of the use of particular approaches or compounds. As a comprehensive resource, this book is for students and researchers in entomology, systematics, developmental biology, insect cell biology, and morphology, wanting a clear introduction to the procedures for the histological display of insect tissues.About the AuthorDr Pedro Barbosa is a Professor Emeritus at the Department of Entomology of the University of Maryland, College Park. He has been a professor at Rutgers University, the University of Massachusetts at Amherst and at the University of Maryland. Although his research focused on the ecology of insects and insect-plant interactions, he also has an interest in insect histology. Since his retirement in 2010 he has written several books on insects. Dr Deborah Berry is Co-Director for the Histopathology and Tissue Shared Resource at the Lombardi Comprehensive Cancer Center, Georgetown University, which provides research pathology support for translational cancer research. She has over 20 years experience in histology with a specialty in the histology of the fruit fly Drosophila melanogaster. Dr Christina Kary is a scientific editor with the journal Genes Development at Cold Spring Harbor Laboratory Press, New York. Before becoming an editor, she earned a PhD with Dr Eric Baehrecke at the University of Maryland and was a Jane Coffin Childs post-doctoral fellow with Dr Susan Mango at Harvard University.