

Histology protocols**Tim D. Hewitson & Ian A. Darby (Eds)****Humana press, Totowa, NJ, USA****Series: Springer Protocols****Methods in Molecular Biology,****Volume 611, 2010****Pages: 230; €83.15****ISBN: 978-1-60327-344-2**

Impressive as it can sound in the era that Biology sees a clear dominance of reductionism with the idea that complexity can be disentangled more and more thanks to the use of molecular tools, the reader will remain fascinated by this slim and agile volume devoted to bring together two apparently separated words: molecular biology and histology. Simply remembering to the youngest scientists that Histology allowed the introduction of the fourth dimension (the time!) in Biology, nearly seventy years ago, thanks to the use of radioactive isotopes to follow cell fates and molecules dynamics; even more, remembering that so much of what we know on human diseases comes from the classical cytological description of paraffin embedded histological pieces. Each of the non-young scientists has surely spent days and days to prepare the practical part of the basic examination of Histology, the first examination that throbbed our heart. Making brief the philosophical reflection, I think that there is no possibility to carry on

good research without the histological localization of the molecular signals that the molecular tools can provide, FISH being paradigmatic. In other words, without the space localization (histology) of the molecular signals related to the phenomenon we are studying, well, we would be looking at its ghost; while looking simply at the body (histology) of the studied phenomenon we will lose its essence. There is a clear need in modern Biology of this Histology protocols that allow closing the gap! Thus, it comes out clearly the contribution that Histology can still give to Biology and Medicine simply referring to Chapters 1, 2 and 3 where the opportunity to extract RNA from histological sections (and thus the opportunity to open the "RNA word" to the preserved and archived tissues) is so finely presented. Part II, the core of the volume, is devoted to the modern staining techniques and thus, as expected, immuno, double immuno, lectin histochemistry, duplex *in situ* hybridization, just to mention a few of the "modern" versions of "old techniques", are well illustrated. Four chapters are devoted to the imaging, from the confocal to the quantitative morphological techniques.

For the reader of a cyto- and histochemistry journal it is a must!

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