



UNIVERSITÀ  
DEGLI STUDI  
DI TRIESTE

Traduzione inglese

Quesito 1

**COMMENTS**

It is evident that stained sections can be stored for many years without an appreciable change in the contrast. It should be noted that the quality of section staining may sometimes become deteriorated, perhaps depending on contamination, e.g., by lipids or atmospheric moisture.

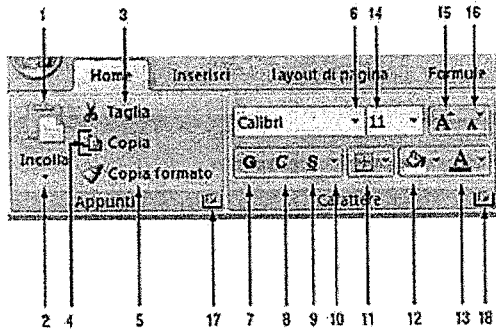
It is also evident that unstained sections remain stainable for very long periods of time and that the cytological details, when sections eventually are stained, are similar to those in newly cut and stained sections. For this reason the investigator should save a few grids with unstained sections. In this way a spare set of the specimen is obtained, should the first staining be suboptimal. An improved section-staining technique may become available at a later date.

Handwritten signatures: A, C, B, R

Informatica

Quesito 1

Rispondere al seguente quesito facendo riferimento all'IMMAGINE dis4628:  
 Cliccando sulla freccia a lato del pulsante 12 della Barra Home di Microsoft Excel 2007:



si può scegliere del testo standard da inserire nella cella selezionata

si può scegliere il colore del testo da applicare alla cella selezionata

si può condividere il documento con altri utenti

si può scegliere il colore dello sfondo da applicare alla cella selezionata

Handwritten signatures and initials: "A", "C", "AB", "R".

## Traduzione inglese

## Quesito 2

**COMMENTS**

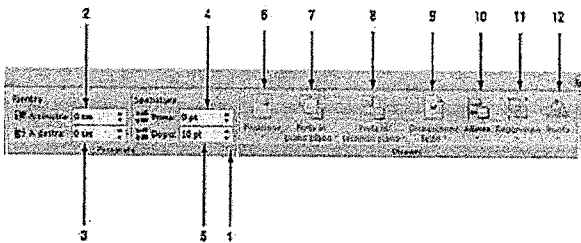
The freezing step is of outmost importance in all cryopreparation procedures. A simple method is to plunge the specimen into the coolant, either manually or with some instrument. Fixed or unfixed tissues, which are not cryoprotected and which are manually plunged into liquid nitrogen, invariably show ice crystal formation due to the low heat conductivity of the nitrogen gas formed at the interface between tissue and liquid nitrogen. Ice crystal formation can be avoided if the specimen is treated with a cryoprotectant or if it is very small, such as molecules on a grid, and plunged into a suitable coolant at high speed by means of refined instrumentation (see Robards and Sleytr, 1985; Echlin, 1992). For the best result, plunge freezing should be carried out with cooled propane or ethane, which are superior to nitrogen as coolants. However, for practical purposes, in connection with immunocytochemistry on cryosections of aldehyde-fixed tissues, cryoprotection with 2.3 M sucrose and subsequent manual plunge cooling into liquid nitrogen is usually quite adequate.

V C RB B

Informatica

Quesito 2

Rispondere al seguente quesito facendo riferimento all'IMMAGINE dis4630:  
 Qual è, tra le seguenti, una funzione del pulsante 11 della Barra Layout di pagina di Microsoft Word 2007?



- Separare due o più documenti uniti
- Gestire convenientemente più file di diversi programmi della suite Microsoft Office 2007
- Configurare opportunamente i pulsanti delle barre degli strumenti di Word
- Separare due o più immagini unite in un'unica immagine

Handwritten signatures and initials: C, RB, VA, and a stylized signature.

Traduzione inglese

Quesito 3

**COMMENTS**

Prolonged osmium fixation at room temperature results in pronounced extraction of both the nucleus and the cytoplasm, whereas the same tissue fixed at low temperature is also well preserved after 24 hr. Fixation in glutaraldehyde can be prolonged for months or even years without major structural changes. The fact that glutaraldehyde fixation is rather insensitive to variations in temperature and fixation time has the practical consequence that glutaraldehyde-fixed specimens can be shipped to other laboratories without adverse effects on fixation quality.

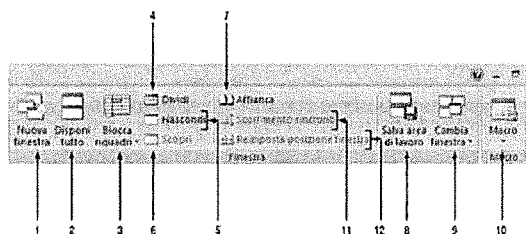
The temperature of glutaraldehyde fixatives has much less influence on tissue fine structure than that of osmium tetroxide fixatives, except that microtubules seem less well preserved by cold glutaraldehyde fixatives.

Ag BB Vh  
DE

## Informatica

## Quesito 3

Rispondere al seguente quesito facendo riferimento all'IMMAGINE dis4612:  
 Dopo avere aperto un foglio di calcolo con Microsoft Excel 2007, si preme il pulsante 3 della Barra Visualizza. Quale tra le seguenti opzioni è presentata?



Mantenere l'attuale foglio di lavoro sempre in primo piano

Non consentire di modificare il tipo di carattere utilizzato

Non far scorrere il foglio di lavoro in verticale

Mantenere sempre visibile la prima riga della tabella

CG RB VA RR

ALL 11/1

Traduzione inglese

Quesito 4

**COMMENTS**

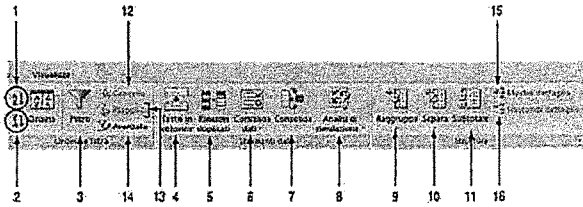
The electron spectroscopic imaging allows the localization of calcium to defined regions of cells and tissues. Background subtraction was carried out using the analySIS software. Two electron energy loss images in front of the element edge in question are determined and then used to extrapolate the background at the calcium edge. In the present case the analysis is qualitative, but quantitative estimations of the elements are also possible. The sensitivity of the method varies for the elements, and for certain heavy atoms only a small number of atoms are required. The spatial resolution in electron spectroscopic imaging is in the range of a few nanometers down to 0.5 nm depending on the element; in this respect, and considering the time required for acquisition, it is superior to X-ray microanalysis, which can also give elemental distribution maps and quantitative data on elements.

ba Cg RR RB

# Informatica

## Quesito 4

Rispondere al seguente quesito facendo riferimento all'IMMAGINE dis4609:  
Su un foglio di lavoro di Microsoft Excel 2007 con le intestazioni sulla prima riga, quale pulsante della Barra Dati permette di attivare del menu a tendina sulle intestazioni in modo da visualizzare solo i dati corrispondenti a determinati criteri?



Pulsante 3

Pulsante 9

Pulsante 6

Pulsante 8

Handwritten signatures and initials at the bottom right of the page, including a large signature and the letters 'AB'.



## Traduzione inglese

## Quesito 5

**COMMENT**

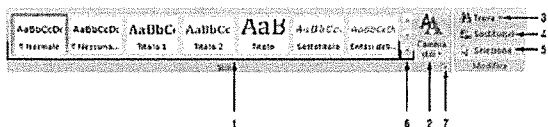
Mild etching of the section with basic ethanolic solutions can remove part of the embedding medium and expose epitopes in the tissue, thus increasing the sensitivity of the labeling. At the same time there is a gradual modification and deterioration of tissue fine structure, and the duration of the etching is critical. In many cases only a few seconds contact between the section and the etching solution is sufficient and must be followed by a thorough rinse. The effects on immunolabeling of the etching procedure vary between embedding media and between cellular antigens. If the method is applied it is thus necessary to determine carefully in each case the optimal conditions for the etching. If the etching is too extensive, immunolabeling will decrease rather than increase as compared to the untreated section.

W C DRB

## Informatica

### Quesito 5

Rispondere al seguente quesito facendo riferimento all'IMMAGINE dis4631:  
 Si supponga di avere aperto un documento di Microsoft Word 2007 e di aver selezionato un paragrafo. Quale pulsante della Barra Home deve essere premuto per formattarlo come titolo di capitolo?



Pulsante 5

Nessun pulsante della Barra Home

Un qualsiasi pulsante del gruppo di cui fa parte il pulsante 1

Un pulsante specifico del gruppo 1

U C R B