

Wrinkle-Free Brain Sections

Connie McManus, Utah State University conmac@cc.usu.edu

Equipment:

Waterbath set at 35 to 37 degrees C Slide warmer set at 40 to 45 degrees C

Procedure:

- 1) Fill waterbath with deionized water that has been boiled for 15 minutes and cooled. Add approximately 100 mL of 95% ETOH and 5 mL gelatin adhesive. Stir well. (Note: it is important to boil the water -- which can be done the previous day -- to drive off gases that create small bubbles. Objects, such as coins, in the bottom of the water bath also work, but many times I have disturbed the bubbles on the bottom causing them to float up where they sit beneath my section!).
- 2) Face the block and cut brain sections at room temperature. Do not soak the faced blocks in any solution.
- 3) Float ribbons in the waterbath and tease the desired section off the ribbon.
- 4) Pick up this section and discard the others. Because the waterbath is cool, the sections will be wrinkled.
- 5) With a dissecting probe or razor blade, cut off overlapping paraffin from the edge of the slide.
- 6) Place slide on the slide warmer, making sure there are two or three drops of water from the water bath under the section, allowing the section to float on the slide.

- 7) Watch the section carefully. After the section is smooth and wrinkle-free, absorb the excess water from under the section with a small mop made from a Kimwipe or other absorbent toweling. Remove the slide from the slide warmer and place in a staining rack in a vertical position.
- 8) If the sections float off during staining, silinated slides may also be used in addition to gelatin. If these are used, however, extra care must be taken to keep a lot of water beneath the section when picking it up and cutting off the excess paraffin from the edge of the slide. As long as the section floats above the slide, it will be able to spread out. If, however, the section comes in contact with the surface of the slide, it will immediately adhere and the section will remain wrinkled.

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