**VII. Atlas of 73 Transverse Levels**

A discussion of how to use this Atlas, along with details about how it was produced, may be found in section III. However, it is useful to summarize the following points here.

In general, cell groups are outlined with dashed lines, whereas fiber tracts are shown in light gray. As far as labeling is concerned, major cell groups are abbreviated with upper case letters (for example, *AHN* refers to the anterior hypothalamic nucleus), subdivisions of cell groups are indicated by lower case letters following the main abbreviation (for example, *AHNa* refers to the anterior part of the anterior hypothalamic nucleus), and fiber tracts are indicated by lower case letters alone (for example, *ac* refers to the anterior commissure). Many times when the subdivisions of a cell group are small, only the lower case abbreviations for some of the subdivisions are used (for example, see the paraventricular hypothalamic nucleus, PVH, in Atlas Level 25); care has been taken to avoid possible confusion with fiber tracts when this has been done. It should also be obvious that all of the layers for each cortical area have not been labeled because the basic lamination pattern often extends across adjacent areas; characteristic lamination features have been emphasized.

It is also worth re-emphasizing that the boundaries indicated for cell groups and fiber tracts are often crude approximations; reasons for this may be appreciated by studying the primary literature referred to in section VIII, and by examining normal and experimental histological preparations directly under the microscope. Fuzzy borders are the rule rather than the exception in the nervous system. In addition, it should be re-emphasized that many of the boundaries indicated in the drawings cannot be seen in the photomicrographs—they were determined microscopically. Low-power photomicrographs have relatively low resolution compared to the tissue section itself.

The rostrocaudal distribution of frontal sections used for the Atlas is shown in Figure 10, where the thickness of the sections is shown to scale. The stereotaxic coordinate system indicated for each Atlas Level is based on Paxinos and Watson (1986; see section IIIB).

A number of the more common synonyms for structures labeled in the Atlas (including those for Paxinos and Watson 1998) may be found in the Index.
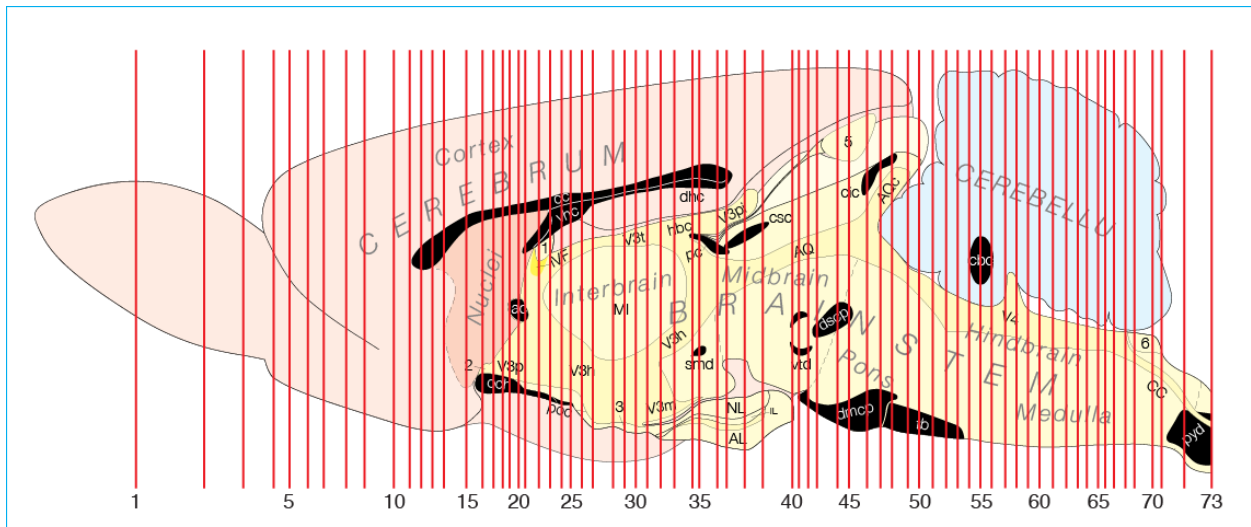
Fig. 10. This parasagittal view of the rat brain shows how the 73 atlas levels are positioned along the longitudinal (z) axis. Based on fig. 1, which was reconstructed from the atlas templates themselves.