

Studies on the auditory cortex of rabbit

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The organization of the auditory cortex was studied in the rabbit. Tones of different frequencies and intensity were used to stimulate each ear independently or both ears simultaneously. Photographic records of the potentials evoked in the auditory cortex were used to prepare contour maps of the responsive areas for these different conditions of stimulation. Maps were also prepared by using sound pressure level figures, obtained from cortical audiograms. Both methods defined two subareas each with a low and a high frequency representation. The projection of the high frequencies for both these subareas overlapped in the middle part of the auditory field, separating the two fields of low frequency representation. Ipsilateral ear stimulation evoked potentials of smaller amplitude than those of the contralateral ear stimulation. Potentials also appeared in more restricted areas when the ipsilateral ear was stimulated. The widest field of cortical response was evoked by stimulation of both e