

The 4D Holographic Desk for Clinical Diagnosis in Nuclear Medicine

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Holodeck (Figure 1) is an immersive visualization system that provides with a medical imaging software to improve the accuracy, speed and efficiency for clinical diagnosis in Nuclear Medicine (MRI/MRT) and Confocal Microscopy. This system integrates a workbench that generates interactive and gesturally operable 3D real models, based on the two-dimensional images coming from the existing PET/TC and Confocal systems, with total access for a cross-disciplinary tele-collaboration. This prototype is a collaborative R&D project developed between CreativiTIC and CIBIR (Centre for Biomedical Research of La Rioja - Rioja Health Foundation).

The images coming from PET/TC (Figure 2) & Confocal microscopy (Figure 3) are processed, transformed into 3D models and displayed in the Holodeck workbench. The models (generated by layers and independently operable and printable) are manipulated with tactile screens and gestural computation devices.



Fig. 1 – HoloDeck, a multipurpose 4D holographic viewer



Fig. 2 – PET/TC

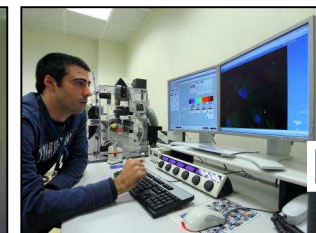


Fig. 3 - Confocal

