4D Mouse Whole Body (MOBY) Phantom Version 2.0

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The 4D ROBY and MOBY phantoms were developed for small animal imaging research. They include highly detailed anatomies for a laboratory rat (ROBY) or mouse (MOBY) with over 1400 defined structures. The phantoms were designed to be similar to that of the XCAT human model. The phantoms include parameterized models for the beating heart and respiratory motions as well as numerous parameters to create normal and abnormal anatomical and motion variations. Like the XCAT, the ROBY and MOBY programs include a main phantom function to create voxelized versions of the phantoms as well as cardiac defect, cardiac plaque, lesion, anatomy altering, and vector functions.