HOTSPOT THRESHOLD:

A deposition density threshold is set to be 2.33 () standard deviations above the median.

APICAL DISTANCE ANALYSIS:

The lapdMouse archive contains a set of cylindrical airway segments approximated from the three-dimensional airway tree meshes. Based on the segment positions, the carina of mouse lung is determined by locating the midpoint of the upper terminals of left and right main bronchi. The plane perpendicular to the bisector line between the left and right bronchi and intersecting with the carina is parameterized and denoted as the apical plane. Distances between the near-acini deposition centroids and the apical plane are then calculated and denoted as the apical distance. The apical distances of deposition centroids that are above the apical plane are assigned to be negative. Mean aerosol deposition is then regressed on apical distance.