



S9 Supplementary Figure Plot of airway radius, normalized by the corresponding radius in relaxed conditions, versus generation number for each of the model's 12 generations for the condition reached at the end of Suppl. Video S6. Lines connecting the data points show the pathways for each of the terminal units. Lines in red correspond to airways within the cluster (right side of the model) and in blue to airways outside the cluster. Note the clear separation between the two sides of the model and the 3 distinct levels of constriction in generation 12. Also important is to note that constriction of airways takes place at all level of the tree (values of relative radii are less than unity) but it is clearly exaggerated in the airways leading to the cluster (points connected by red lines) and in particular in most of the airways leading to highly constricted terminal bronchioles in generation 12 of the model.