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(54) Title: PERTURBATION RESPONSE AND TARGET CELL STATE MODELING

(57) Abstract: One or more embodiments include predicting, using one or more perturbation response models configured to take as input one or more basal states associated with one or more biological systems and a first plurality of perturbations, a first plurality of responses of the one or more biological systems to the first plurality of perturbations, predicting, using one or more cell state models configured to take as input the first plurality of responses, a first plurality of cell states associated with the first plurality of responses, wherein the one or more cell state models have been trained using a second plurality of training samples comprising observations of a plurality of biological systems paired with a second plurality of cell states, and selecting one or more additional perturbations included in the first plurality of perturbations for experimental evaluation based on the first plurality of cell states.

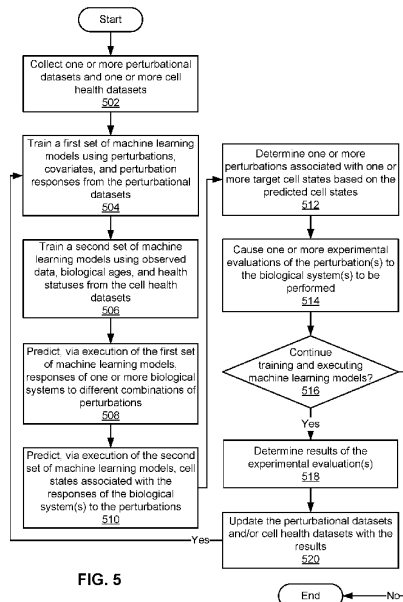


FIG. 5

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