***eLife’s* transparent reporting form**

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* You should state whether an appropriate sample size was computed when the study was being designed
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* If no explicit power analysis was used, you should describe how you decided what sample (replicate) size (number) to use

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No experiments were carried out.

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* You should report how often each experiment was performed
* You should include a definition of biological versus technical replication
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* Statistical analysis methods should be described and justified
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* For each experiment, you should identify the statistical tests used, exact values of N, definitions of center, methods of multiple test correction, and dispersion and precision measures (e.g., mean, median, SD, SEM, confidence intervals; and, for the major substantive results, a measure of effect size (e.g., Pearson's r, Cohen's d)
* Report exact p-values wherever possible alongside the summary statistics and 95% confidence intervals. These should be reported for all key questions and not only when the p-value is less than 0.05.

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* Indicate how samples were allocated into experimental groups (in the case of clinical studies, please specify allocation to treatment method); if randomization was used, please also state if restricted randomization was applied
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* We encourage you to upload relevant additional data files, such as numerical data that are represented as a graph in a figure, or as a summary table
* Where provided, these should be in the most useful format, and they can be uploaded as “Source data” files linked to a main figure or table
* Include model definition files including the full list of parameters used
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Please indicate the figures or tables for which source data files have been provided:

All numerical data for creating the figures was generated by programme code. The code is available on github at

<https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgithub.com%2Fcp4u17%2FsimCellState&amp;data=01%7C01%7CP.S.Greulich%40soton.ac.uk%7C456f3ca966504816749908d7c81f66ad%7C4a5378f929f44d3ebe89669d03ada9d8%7C0&amp;sdata=bu9350UuJFNW80Ia3GqwPQpCNyFNf%2BD3KH54%2BpUWHks%3D&amp;reserved=0>