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| **NetDyn 1.0 Download** | |
| IMG_256 | **Dos/Windows Version** |
|  | Self-executable version ([netdyn.exe](http://xungulab.website/software/netdyn/download/netdyn.exe)) |
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| IMG_257 | **Description** |
|  | |  |  | | --- | --- | | When you run the program "NetDyn.exe", you will be asked to input the following data: | | |  | | | 1. The initial gene network, which is defined by a low order matrix stored in the file: "[matrix0.txt](http://xungulab.website/software/netdyn/document/matrix0.txt" \t "http://xungulab.website/software/netdyn/_blank)". | | |  | | | 2. The network growing rates: | | |  | (1) Gene duplication rate gd. (2) Gene loss rate gl. (3) Edge adding rate Ea. (4) Edge removing rate Er. (5) Genome duplication rate Gd. (6) Genome loss rate Gl.  You will have a chance to modify them. | |  | | | 3. Network size to which the gene network grows. | | |  | | | 4. Choose outputs: The purpose is to save time if you do not need some results. | | |  | (1) Network average distance (Y/N): Y (2) Network robustness (Y/N): Y (3) Network power law exponent (Y/N): Y (4) Network connection distribution (Y/N): Y Modify ? Y/N: | |  | | | 5. Summary: This reminds you of what you gave and what you will get | | |  | Input: matrix0.txt, all rates Output: matrix.txt degree.txt results.txt  All are displayes on the screen. | |  | | | Press ENTER when ready ...  The program then runs and generates a gene network with the given size. Several parmeters for the network are calculated: Average node connection, power law exponent, degree distribution, and so on. The results are stored in the files: [matrix.txt](http://xungulab.website/software/netdyn/document/matrix.txt" \t "http://xungulab.website/software/netdyn/_blank),[degree.txt](http://xungulab.website/software/netdyn/document/degree.txt" \t "http://xungulab.website/software/netdyn/_blank), [result.txt](http://xungulab.website/software/netdyn/document/result.txt" \t "http://xungulab.website/software/netdyn/_blank), etc.  See the whole running process [here](http://xungulab.website/software/netdyn/document/sample.txt" \t "http://xungulab.website/software/netdyn/_blank). | | |
| IMG_258 | **Contact** |
|  | For more information, please contact [Shiquan Wu](mailto:sqwu@cs.iastate.edu). Thanks. |