

Time-lapse microscopy study of noise in development

Gritti, Nicola

DOI

[10.4233/uuid:23580f57-9ed1-4fa3-95ad-b8fe7cc8ba05](https://doi.org/10.4233/uuid:23580f57-9ed1-4fa3-95ad-b8fe7cc8ba05)

Publication date

2017

Document Version

Final published version

Citation (APA)

Gritti, N. (2017). *Time-lapse microscopy study of noise in development*. [Dissertation (TU Delft), Delft University of Technology]. <https://doi.org/10.4233/uuid:23580f57-9ed1-4fa3-95ad-b8fe7cc8ba05>

Important note

To cite this publication, please use the final published version (if applicable). Please check the document version above.

Copyright

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights. We will remove access to the work immediately and investigate your claim.

Propositions

accompanying the dissertation

Time-lapse microscopy study of noise in development

by

Nicola Gritti

1. In the future, upon design of brighter fluorescence reporters, the dynamics of most processes during *C. elegans* development will become accessible thanks to our time-lapse microscopy technique (this thesis, Chapter 2).
2. Even though *C. elegans* development is largely invariant, it is not deterministic, but instead it is impacted by stochastic noise (this thesis, Chapters 3 and 4).
3. Multiple sources of noise drive the stochastic AC/VU cell fate decisions (this thesis, Chapter 5).
4. Good social interactions enhance the productivity (and happiness) of the group members.
5. Critical thinking of the data, rather than optimism, should drive the direction of future experiments.
6. All the inputs of a complex system must be identified and studied in order to understand its dynamic behavior.
7. The ideal experiment is capable of testing multiple hypothesis at the same time.
8. First (and second) year PhD students are often very inefficient workers.
9. Paranympths should have a chance to participate more actively during a defense ceremony.

These propositions are regarded as opposable and defensible, and have been approved as such by the promoters Prof. dr. ir. S.J. Tans and Dr. J. S. van Zon.