

## Accepted Manuscript

Extended logistic growth model for heterogeneous populations

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PII: S0022-5193(18)30087-0  
DOI: [10.1016/j.jtbi.2018.02.027](https://doi.org/10.1016/j.jtbi.2018.02.027)  
Reference: YJTBI 9370

To appear in: *Journal of Theoretical Biology*

Received date: 7 December 2017  
Revised date: 13 February 2018  
Accepted date: 22 February 2018

Please cite this article as: Wang Jin, Scott W. McCue, Matthew J. Simpson, Extended logistic growth model for heterogeneous populations, *Journal of Theoretical Biology* (2018), doi: [10.1016/j.jtbi.2018.02.027](https://doi.org/10.1016/j.jtbi.2018.02.027)



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## 1 **Highlights**

- 2 • New stochastic model of heterogeneous cell migration and proliferation
- 3 • Continuum limit related to a novel generalisation of classical logistic growth
- 4 • Parameterise model with experimentally-derived heterogeneous prolifera-  
5 tion rates
- 6 • New quantitative framework to explore the implication of neglecting het-  
7 erogeneity
- 8 • Perturbation solutions provide analytical insight into the role of heterogene-  
9 ity

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