

### Peer-Reviewed Articles and Chapters

1. G. An, B.G. Fitzpatrick, S. Christley, P. Federico, A. Kanarek, R. Miller Neilan, M. Oremland, R. Salinas, **R. Laubenbacher**, S. Lenhart, Optimization and control of agent-based models in biology: a perspective, *Bull. Math. Biol.*, 2016, in press.
2. D. Murrugarra, A. Veliz-Cuba, B. Aguilar, **R. Laubenbacher**, Identification of control targets in molecular Boolean network models via computational algebra, *BMC Syst. Biol.*, 2016, in press.
3. M. Oremland, K.R. Michels, A.M. Bettina, C. Lawrence, B. Mehrad, **R. Laubenbacher**, A computational model of invasive aspergillosis in the lung and the role of iron, *BMC Systems Biology* **10**:34, doi: 10.1186/s12918-016-0275-2, 2016.
4. A. Ibrahim, P. Vera-Licona, **R. Laubenbacher**, T. Favre, AlgoRun, a Docker-based packaging system for platform-agnostic implemented algorithms, *Bioinformatics*, doi:10.1093/bioinformatics/btw120, 2016.
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8. A. Veliz-Cuba, B. Aguilar, **R. Laubenbacher**, Dimension reduction of large sparse AND-NOT network models, *Electronic Notes in Theoretical Computer Science* **316**, 83-95, 2015.
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10. A. Veliz-Cuba, B. Aguilar, F. Hinkelmann, **R. Laubenbacher**, Steady state analysis of Boolean molecular network models via model reduction and computational algebra, *BMC Bioinformatics*, **15**:221, 2014.
11. A.S. Jarrah, F. Castiglione, N.P. Evans, R.W. Grange, and **R. Laubenbacher**, A mathematical model of skeletal muscle disease and immune response in the mdx mouse, *BioMed Research International*, <http://dx.doi.org/10.1155/2014/871810>, 2014.
12. P. Vera-Licona, A.S. Jarrah, L.D. Garcia-Puente, J. McGee, **R. Laubenbacher**, An algebra-based method for inferring gene regulatory networks, *BMC Systems Biology* **8**:37, doi:10.1186/1752-0509-8-37, 2014 (chosen as one of "Editor's Picks").
13. M. Oremland and **R. Laubenbacher**, Using difference equations to find optimal tax structures on the SugarScape, *J. Economic Interaction and Coordination* **9** (2), 233-253, 2014.
14. M. Oremland and **R. Laubenbacher**, Optimization of agent-based models: scaling methods and heuristic algorithms, *J. Artificial Societies and Social Simulation* **17** (2) 6, 2014.
15. **R. Laubenbacher**, F. Hinkelmann, D. Murrugarra, and A. Veliz-Cuba, Algebraic models and their use in systems biology, in *Discrete and Topological Models in Molecular Biology*, N. Jonoska and M. Saito (eds.), Springer Verlag, NY, 2014.
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17. A. Veliz-Cuba, D. Murrugarra, and **R. Laubenbacher**, Structure and dynamics of acyclic networks, *Discrete Event Dynamic Systems*, DOI 10.1007/s10626-013-0174-2, 2013.

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20. C. Kadelka, D. Murrugarra, and **R. Laubenbacher**, Stabilizing gene regulatory networks through feedforward loops, *Chaos*, **23** (2), DOI: 10.1063/1.4808248, 2013.
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### Book Chapters and Other Publications

1. **R. Laubenbacher**, Algebraic and Discrete Mathematical Methods for Modern Biology (R. Robeva, ed.), book review, *SIAM Review* **58** (2), 367-369, 2016.
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3. J. Chifman, **R. Laubenbacher**, and S. Torti, A systems biology approach to iron metabolism, in *A Systems Biology Approach to Blood*, S.J. Corey and M. Kimmels (eds.), Springer Verlag, NY, 2014, in press.
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## Books

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