Discussion

(a) "what kind of feedback you are looking to receive" is the topic I want to add here. As my major is machine learning and although I have my research from bachelor to master both related to neuroscience and working with clinical data for a while mainly with Bayes Inference Model, genetic field is still quite new to me and I do know it is a heated field either with genotypical or phenotypical study. I would really like to know how often do predictive model, especially those based on causality or reinforcement machine learning are utilized in biology related problem. Meanwhile, how practical do you think my model can be conducted and utilized? What kind of question do you hold after listening to my presentation. I would appreciate a lot if there are professionals who would like to give some similar experience or specific project example on how they deal with the similar problems. For instance, just about the protein binding, what model and how they applied those on their clinical data. Thank you!

References

Elijah Roberts, Shay Be er, Chris Bohrer, Rati Sharma, Michael Assaf, Dynamics of simple gene-network motifs subject to extrinsic fluctuations, 2015

Freedman,H.I.,Dynamics of simple gene-network motifs subject to extrinsic fluctuations,1980

Noufe H. Aljahdaly, Analytical Solutions of a Modified Predator-Prey Model through a New Ecological Interaction, 2019

ensembl,https://www.ensembl.org/index.html

Ingo Lohmar, Baruch Meerson, Switching between phenotypes and population extinction, Racah Institute of Physics, 2018

Marta Kwiatkowdka, Gethin Norman, David Parker, Stochastic Model Checking, Oxford, 2019

David Martínez-Rubio, Varun Kanade, Patrick Rebeschini, Decentralized Cooperative Stochastic Bandits, Oxford, 2005

Paul C Bressloff, Stochastic swiching in biology: from genotype to phenotype, Department of Mathematics, University of Utah, 2017

Baier, Christel, Principles of Model checking, Massachusetts Instititute of Technology, 2008

Cheng Lv, Xiaoguang Li, Fangting Li, Tiejun Li, Constructing the Energy Landscape for Genetic Switching System Driven by Intrinsic Noise, Peking University, 2014

C.W. Gardiner, Handbook of Stochastic Methods for Physics, Chemistry and the Natural Sciences, 4th ed, Handbook of Stochastic Methods for Physics, Chemistry and the Natural Sciences, 4th ed.,Springer, 2009

Yasar Demirel, in Nonequalibrium Thermodynamics(Third Edition), 2014

Matthias Heymann, Eric Vanden-Eijnden, Geometric Minimum Action Metod: A Least Action Principle on the Space of Curves, Courant Institute, 2007

authorRobert Balson Dingle, Their Derivation and Interpretation, Academic Press, 1973

J.C., Gittins, Keble College, Oxford, 2010

Ali, Isra, Alfarouk, Khalid O., Reshkin, Stephan J., Ibrahium, Muntaser E., Doxycycline as Potential Anti-cancer Agent, Anti Cancer Agents, 2018

 $G.S.\,$ Skone, Irina Voiculescu, Stratagems for effective function evaluation in computational chemistry, Oxford, $2010\,$

Zahid Ur Rehman, Quorum-Quenching Bacteria Isolated From Red Sea Sediments Reduce Biofilm Formation, KAUST,2016

Peter Minary, Charlotte M Deane, Explorong peptide/MHC detachment process using hiearchical natural move Monte Carlo, Oxford, 2015

Biancalani, E. Giamperi, A. Bazzani, G. Catellani, and A. Maritan, Phys.Soc, Jpn., Physics, 2015 D.M. Roma, R.A. P'Flanagan, A.E. Ruckenstein, A.M. Sengupta, R., Optimal path to epigenetic switching, Rarah Institute of Physics, 2015