ID	Topics	Paper(s)
P1	Evolution	Schuster P, Fontana W, Stadler PF, Hofacker IL (1994) From sequences to shapes and back: a case study in RNA secondary structures. Proceedings of the Royal Society of London Series B: Biological Sciences 255: 279-284. http://doi.org/doi:10.1098/rspb.1994.0040.
P2	Evolution	Dieckmann U, Doebeli M (1999) On the origin of species by sympatric speciation. Nature 400: 354-357. http://doi.org/10.1038/22521.
P3	Evolution	Aldana M, Balleza E, Kauffman S, Resendiz O (2007) Robustness and evolvability in genetic regulatory networks. Journal of Theoretical Biology 245: 433-448. http://doi.org/https://doi.org/10.1016/j.jtbi.2006.10.027.
I1	Development	Zagorski M, Tabata Y, Brandenberg N, Lutolf MP, Tkačik G, et al. (2017) Decoding of position in the developing neural tube from antiparallel morphogen gradients. Science 356: 1379-1383.
I2	Development	Ma W, Trusina A, El-Samad H, Lim WA, Tang C (2009) Defining Network Topologies that Can Achieve Biochemical Adaptation. Cell 138: 760-773. http://doi.org/10.1016/j.cell.2009.06.013.
I3	Development	Farhadifar R, Röper J-C, Aigouy B, Eaton S, Jülicher F (2007) The influence of cell mechanics, cell-cell interactions, and proliferation on epithelial packing. Current Biology 17: 2095-2104.
I4	Development	Gibson MC, Patel AB, Nagpal R, Perrimon N (2006) The emergence of geometric order in proliferating metazoan epithelia. Nature 442: 1038-1041.
ST1	Evolutionary dynamics	Good BH, McDonald MJ, Barrick JE, Lenski RE, Desai MM (2017) The dynamics of molecular evolution over 60,000 generations. Nature 551: 45-50. http://doi.org/10.1038/nature24287.
ST2	Evolutionary dynamics	Sanjuan R, Blanquart F, Wymant C, Cornelissen M, Gall A, et al. (2017) Viral genetic variation accounts for a third of variability in HIV-1 set-point viral load in Europe. PLOS Biology 15: e2001855. http://doi.org/10.1371/journal.pbio.2001855.
ST3	Evolutionary dynamics	Lemey P, Rasmussen DA, Ratmann O, Koelle K (2011) Inference for Nonlinear Epidemiological Models Using Genealogies and Time Series. PLoS Computational Biology 7: e1002136. http://doi.org/10.1371/journal.pcbi.1002136.
K1	Adaptive circuits	Yi T-M, Huang Y, Simon MI, Doyle J (2000) Robust perfect adaptation in bacterial chemotaxis through integral feedback control. Proceedings of the National Academy of Sciences 97: 4649-4653. http://doi.org/10.1073/pnas.97.9.4649.
K2	Adaptive circuits	Barkai N, Leibler S (1997) Robustness in simple biochemical networks. Nature 387: 913-917. http://doi.org/10.1038/43199.
K3	Adaptive circuits	Muzzey D, Gómez-Uribe CA, Mettetal JT, van Oudenaarden A (2009) A Systems-Level Analysis of Perfect Adaptation in Yeast Osmoregulation. Cell 138: 160-171. http://doi.org/https://doi.org/10.1016/j.cell.2009.04.047.
S1	Synthetic gene circuits	Barnes CP, Silk D, Sheng X, Stumpf MP (2011) Bayesian design of synthetic biological systems. Proceedings of the National Academy of Sciences 108: 15190-15195.
S2	Synthetic gene circuits	Oyarzun DA, Stan GB (2013) Synthetic gene circuits for metabolic control: design trade-offs and constraints. J R Soc Interface 10: 20120671. http://doi.org/10.1098/rsif.2012.0671.
S3	Synthetic gene circuits	Nielsen AA, Der BS, Shin J, Vaidyanathan P, Paralanov V, et al. (2016) Genetic circuit design automation. Science 352: aac7341. http://doi.org/10.1126/science.aac7341.
S4	Synthetic gene circuits	Shaw WM, Yamauchi H, Mead J, Gowers G-OF, Bell DJ, et al. (2019) Engineering a Model Cell for Rational Tuning of GPCR Signaling. Cell 177: 782-796.e727. http://doi.org/https://doi.org/10.1016/j.cell.2019.02.023