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Robustness and Complexity in Biological Systems

Why are biological systems so complex? Are they poorly designed and filled with sloppy "hacks" or are they "intelligently designed" and the complexity is necessary for reliable performance in an uncertain environment. In this talk, I will discuss biological robustness strategies, limits to robustness, and our efforts to reverse engineer the design of a biological signaling network. Finally, I will make a few comments on the apparent paradox of a system being both robust and evolveable.