

## **Evolution on a Chip: Towards a Quantitative Understanding of Evolution**

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It was said by Monod that the theory of evolution is “the most important scientific theory ever formulated, because of its general implications...and tremendous philosophical, ideological and political implications”. Yet, in the US only 40% of the general public agree that the theory of evolution is probably right, and of that fraction 50% believe it is guided by a superior intelligence. One of the reasons for this skepticism is in fact the rather poorly understood quantitative foundations of the experimental aspects of evolution and neodarwinism. I will discuss recent experiments in my own lab that seek to develop an experimental approach to understanding evolution dynamics of cells in a world that we make by a combination of microfabrication and nanofabrication.