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Theme: **RNA control and developmental systems biology**

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The discoveries summarized in your excellent [article](#), when combined with the result of Venter's group demonstrating the feasibility of transplanting the whole genome of one organism into another different unicellular organism, open the door for an even bigger biological big bang. By combining synthetic biology with RNA control, it creates the possibility of understanding minimal multicellular systems. Using computer modeling and simulation to design genomes for artificial multicellular organisms, one can then create synthetic genomes and transplant them into genomeless stem cells which then generate synthetic multicellular systems. Granted this is futuristic, but the possibility is approaching rapidly. Such minimal, synthetic multicellular organisms and their corresponding computer-simulated mirror organisms, open the door to better understanding of development, evolution, tissue regeneration and multicellular diseases such as cancer. The key here is combining the *in silico*, computer modeling and simulation methods of multicellular systems biology with the *in vivo* methods of synthetic biology.

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