

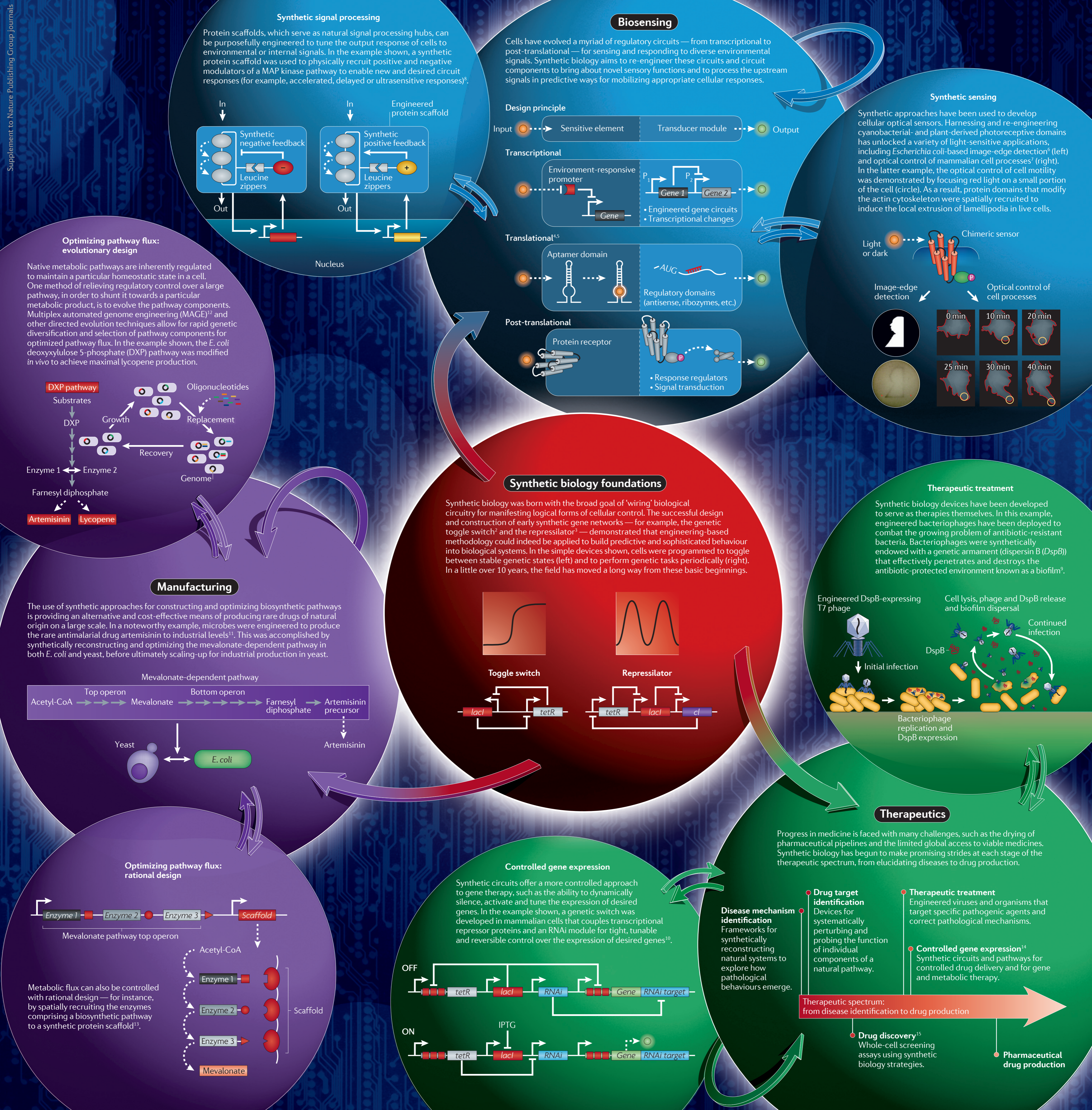
Synthetic biology: applications come of age

Ahmad S. Khalil and James J. Collins

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Synthetic biology is bringing together engineers and biologists to design and build novel biomolecular components, networks and pathways and to use these constructs to rewire and reprogram organisms. These re-engineered organisms will change our lives over the coming years, leading to cheaper drugs, 'green' means to fuel our cars and targeted therapies for attacking 'superbugs' and diseases such as cancer. The *de novo* engineering of genetic circuits, biological modules and synthetic pathways is beginning to address these crucial problems and is being used in related practical applications¹.



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In August 2010, Blue Heron became a wholly owned subsidiary of OriGene Technologies, Inc. Together we can now provide a one-stop solution for the molecular biology research community.

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