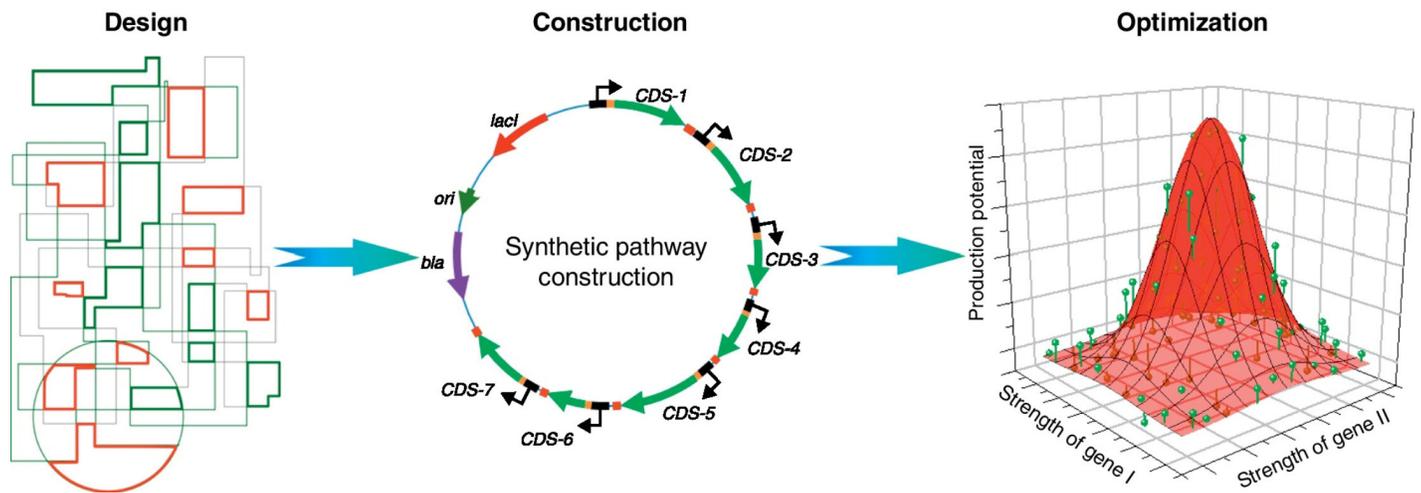


Call for Papers



Plant Physiology[®]

2019 Focus Issue on Synthetic Biology

Edited by Andrew Hanson, Julian Hibberd, Mattheos Koffas, Joachim Kopka, and Elli Wurtzel

Deadline for Submission: Sept 1, 2018

This *Plant Physiology* Focus Issue will showcase current applications of Synthetic biology (SynBio) approaches in plant biology and their future potential to enhance research and its translation into useful products.

SynBio exploits DNA writing, genome editing, parts standardization, computational design and other bioengineering advances. It is transforming biology from a largely descriptive discipline to a truly synthetic one with the power to radically reconfigure life and to give organisms capacities that do not exist naturally. This unprecedented power is already driving research, training, and career objectives, and will soon have major economic and societal impacts.

To create a snapshot of the emerging SynBio field, we encourage submissions on SynBio and novel supporting technologies applied to plants, photosynthetic eukaryotic or prokaryotic microorganisms, and to plant processes or phytochemical biosynthesis pathways engineered in non-photosynthetic microorganisms. We invite original innovative research on the rational engineering of plant systems at all levels, including proteins, protein complexes, sensors, metabolic and signalling pathways, microcompartments such as carboxysomes, subcellular compartments, cell types or tissues, as well as the engineering of novel plant hybrid species and the interactions of plants with viruses, bacteria, and other organisms. Given the emerging nature of SynBio, the scope of this Focus Issue is intentionally broad in regard to organisms, topics, and applications.

Authors interested in contributing should indicate this in the cover letter when submitting papers online at <http://pphys.msubmit.net/>. Please select "Synthetic Biology" from the Focus Issue list in the online submission system. Articles published in *Plant Physiology* on this topic within 2 years before and after the Focus Issue publication date will be collected in an online Focus Collection.

Please contact Andrew Hanson (adha@ufl.edu), Julian Hibberd (jmh65@cam.ac.uk), Mattheos Koffas (koffam@rpi.edu), Joachim Kopka (kopka@mpimp-golm.mpg.de), or Elli Wurtzel (ELEANORE.WURTZEL@lehman.cuny.edu) for more information.

To submit an article, go to <http://pphys.msubmit.net>