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**Special Focus on Materials - Part 1**

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**On The Cover:** Materials science provides many opportunities to develop tools in diverse areas, including polymer science and bio-based manufacturing, biosensors and bioelectronics, and nanotechnology applications. In this issue, four articles focus on the impact of materials science on biotechnology. Two Opinion articles from Guo-Qiang Chen and colleagues discuss systems and synthetic biology perspectives on polyhydroxyalkanoates, a potential framework for understanding their diversity, and strategies for their bio-based production. Christopher Bettinger reviews novel materials advances for ingestible electronics, which will form the basis for the next generation of diagnostic and therapeutic medical devices. Mauri Kostainen and colleagues review strategies and platforms for devices and drug delivery systems at the nano-scale, based in particular on DNA origami and nanostructures. Cover image from iStockPhoto/7immy and cover design by Ernesto Andrianantoandro.

