

<b>Box 1.</b>	<b>Definition of Synthetic Biology</b>
<b>Richard Kitney and Paul Freemont (synthetic biologists)</b>	There is, in some quarters, still doubt about the definition of synthetic biology. This is not a view held by the international synthetic biology community....The accepted definition is "synthetic biology aims to design and engineer biologically based parts, novel devices and systems – as well as redesigning existing, natural biological systems." (Kitney and Freemont 2012)
<b>US Presidential Commission for the Study of Bioethical Issues</b>	Synthetic biology is the name given to an emerging field of research that combines elements of biology, engineering, genetics, chemistry, and computer science. The diverse but related endeavors that fall under its umbrella rely on chemically synthesized DNA, along with standardized and automatable processes, to create new biochemical systems or organisms with novel or enhanced characteristics. (PCSBI 2010)
<b>International Civil Society Working Group on Synthetic Biology</b>	Synthetic biology broadly refers to the use of computer-assisted, biological engineering to design and construct new synthetic biological parts, devices and systems that do not exist in nature and the redesign of existing biological organisms, particularly from modular parts. Synthetic biology attempts to bring a predictive engineering approach to genetic engineering using genetic 'parts' that are thought to be well characterized and whose behavior can be rationally predicted. (ICSWGGB 2011)
<b>Carolyn M.C. Lam, Miguel Godinho, and Vitor A.P. Martins dos Santos (synthetic biologists)</b>	SB is a field that aims to create artificial cellular or non-cellular biological components with functions that cannot be found in the natural environment as well as systems made of well-defined parts that resemble living cells and known biological properties via a different architecture. (Lam <i>et al.</i> 2009)
<b>Scientific Committees to the European Commission</b>	SynBio is the application of science, technology and engineering to facilitate and accelerate the design, manufacture and/or modification of genetic materials in living organisms to alter living or non-living materials (European Commission 2014).*
<b>UK Royal Academy of Engineering</b>	Synthetic biology aims to design and engineer biologically based parts, novel devices and systems as well as redesigning existing, natural biological systems (RAE 2009).
<b>Thomas Murray (bioethicist)</b>	"Synthetic biology embodies: a faith that biological systems can be brought to heel, and made predictable and controllable; a stance toward the intricacy of biological organisms aptly described by Tom Knight as an "alternative to understanding complexity is to get rid of it"; a confidence that biological entities can be hacked apart and reassembled to satisfy human curiosity and to serve important, legitimate human purposes; a <i>hope</i> that error and malevolence can be deterred, contained or out manoeuvred through the vigilance of governments and, especially, the collective efforts of well-intentioned scientists, engineers and garage biologists" (Various 2009).

\* The first preliminary opinion on "Synthetic Biology – Definition" comprises a survey of more than 30 definitions (European Commission 2014).