

Research needs expressed in the Decisions of the Conference of the Parties to the Convention on Biological Diversity: Cross-Cutting Issue: New and Emerging Issues, Synthetic Biology

The consolidated *modus operandi* of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) lists among its functions that SBSTTA should *inter alia* identify new and emerging issues relating to the conservation and sustainable use of biodiversity. One topic under discussion is synthetic biology (<http://www.cbd.int/emerging/>).

The cited Decisions that expresses research needs are XII/24 and XIII/17.

Direct research needs

Decision	Paragraph	Chapeau / Heading	Text	Source http://www.cbd.int/decisions/
XII/24	Para 3	The Conference of the Parties	<p><i>Urges Parties and invites other Governments,</i></p> <p>d) To carry out scientific assessments concerning organisms, components and products resulting from synthetic biology techniques with regard to potential effects on the conservation and sustainable use of biodiversity, taking into account risks to human health and addressing, as appropriate, and according to national and/or regional legislation, other issues such as food security and socioeconomic considerations</p> <p>e) To encourage the provision of funding for research into synthetic biology risk assessment methodologies and into the positive and negative impacts of synthetic biology on the conservation and sustainable use of biodiversity, and to promote interdisciplinary research that includes related socioeconomic considerations;</p>	doc/?meeting=cop-12
XIII/17	Para 9	The Conference of the Parties	<p><i>Encourages Parties and invites other Governments and relevant organizations</i></p> <p>a) To conduct research on the benefits and adverse effects of organisms, components and products of synthetic biology on biodiversity, with a view to filling knowledge gaps and identifying how those effects relate to the objectives of the Convention and its Protocols;</p>	decisions/cop/?m=cop-13

Indirect research needs

Decision	Paragraph	Chapeau / Heading	Text	Source http://www.cbd.int/decisions/
XII/24	Para 3	The Conference of the Parties	<i>Urges Parties and invites other Governments,</i> a) To establish, or have in place, effective risk assessment and management procedures and/or regulatory systems to regulate environmental release of any organisms, components or products resulting from synthetic biology techniques;	doc/?meeting=cop-12
XIII/17	Para 6	The Conference of the Parties	<i>Notes</i> that the general principles and methodologies for risk assessment under the Cartagena Protocol and existing biosafety frameworks provide a good basis for risk assessment regarding living organisms developed through current applications of synthetic biology, or that are currently in the early stages of research and development, but such methodologies may need to be updated and adapted for current and future developments and applications of synthetic biology;	decisions/cop/?m=cop-13
XIII/17	Para 7	The Conference of the Parties	<i>Also notes</i> that it is not clear, given the current state of knowledge, whether or not some organisms of synthetic biology, which are currently in the early stages of research and development, would fall under the definition of living modified organisms under the Cartagena Protocol, and <i>further notes</i> that there are cases in which there may be no consensus on whether the result of a synthetic biology application is “living” or not;	decisions/cop/?m=cop-13