

Challenges of emerging bi threats and future prospects: The case of synthetic biology

Tim Trevan

International Council for the Life Sciences, USA

Synthetic biology promises advances in virtually every field of human endeavour, including agriculture, medicine, materials sciences, energy, fuel and the environment. However, it also brings new risks that need to be identified and addressed to ensure that the science progresses responsibly and society is able to exploit its products safely.

Three particular types of risk need to be addressed:

1. Security: advances in both the basic science and the technology of synthetic biology could also make it much easier to create designer biological weapons;
2. Safety: the more scientists who work on synthetic biology in laboratories, the greater the chance of accidents or unintended consequences;
3. Environment: processes need to be in place to ensure that those products of synthetic biology that are released into the environment do not do unintended damage to ecosystems.

The presentation will describe efforts underway to address these issues.

Biography

Tim Trevan is the Executive Director of the International Council for the Life Sciences. Earlier, he was the political advisor to the UN Special Commission for Iraq and served as a British diplomat in Yemen, at the Conference on Disarmament, and in London dealing with inter alia weapons of mass destruction.

Tim has commented extensively on radio, TV and print media on weapons of mass destruction, terrorism and international security issues. His book, Saddam's Secrets, about Iraq's weapons of mass destruction programmes, was published by HarperCollins.

Tim graduated in Cellular Pathology from Bristol University and obtained his MBA from INSEAD.

trevan@iclscharter.org