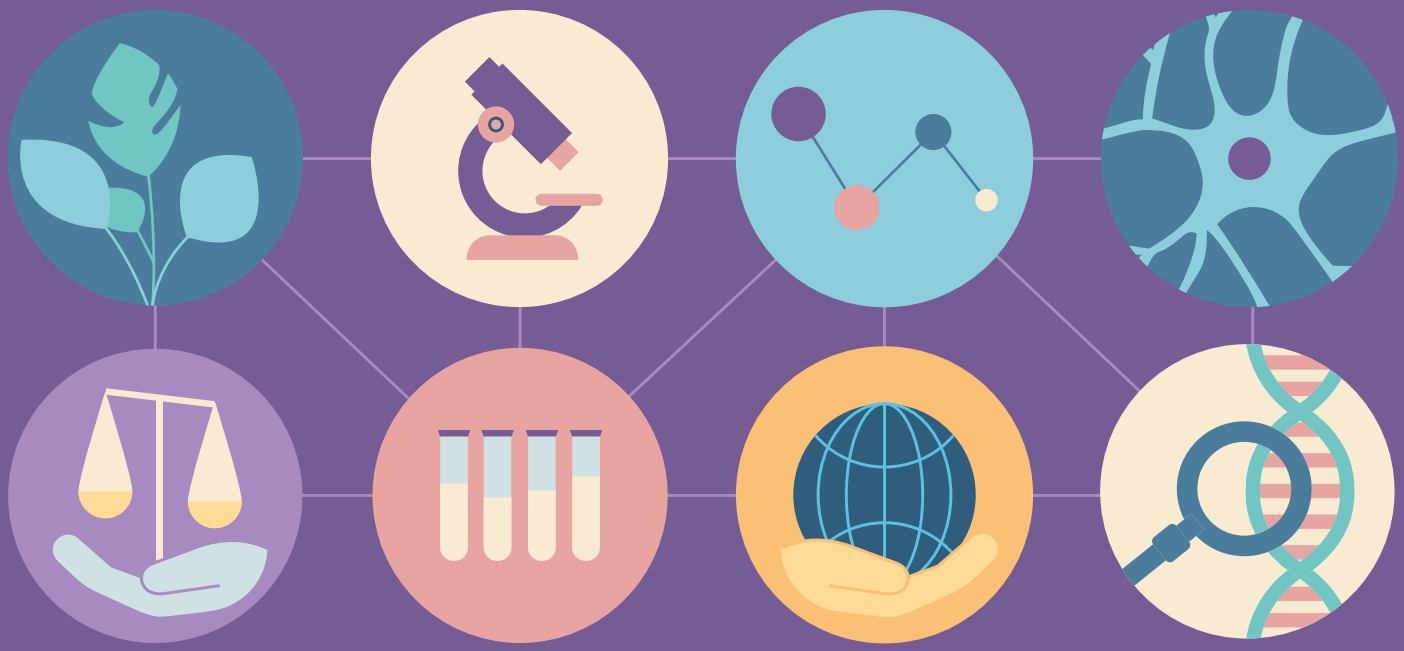
World Health Organization

Global guidance framework for the responsible use of the life sciences

Mitigating biorisks and governing dual-use research



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Global guidance framework for the responsible use of the life sciences: mitigating biorisks and governing dual-use research

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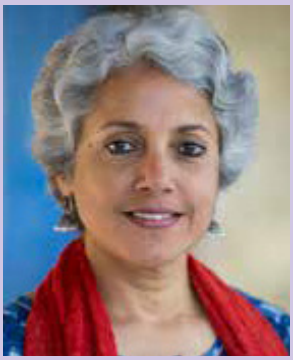

Life sciences and technologies can offer endless opportunities to improve our health, our societies and our environment. However, developments and advances in life sciences and associated technologies may pose risks that include safety and security risks caused by accidents, inadvertent and deliberate misuse to cause harm. For example, advances in synthetic biology can have beneficial applications in medicine, energy, and environmental remediation but can also raise safety and security concerns by enhancing the pathogenic characteristics of ordinary organisms, creating new pathogens from synthetic DNA or reconstructing extinct pathogens. Development in neurosciences can help preventing and treating neurological disorders such as Parkinson's disease and Alzheimer's disease, but new knowledge and applications can also create new risks, including those of manipulating the way we think, move or behave. These risks arising from developments in the life sciences and converging technologies need to be recognized and mitigated. This is the objective of this framework. The values, principles, tools and mechanisms described in this framework aim to support Member States and stakeholders to prevent and mitigate biorisks and govern dual-use research.

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