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Teaching interdisciplinary courses on responsible conduct in the life sciences — implications for biorisk assessments of GMOs



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Genetic engineering is a powerful set of methods used in basic research, biomedicine. and biotechnology. In the molecular biology laboratory, there are established standards in biosafety to protect humans and the environment from unwanted consequences of genetic engineering although internationally agreed, legally binding biosafety standards have not been developed yet. The World Health Organisation as one international actor provides a "Laboratory Biosafety Manual" outlining key biosafety standards and a "Guidance framework for the responsible use of the life sciences" to foster biorisk assessment strategies which could be implemented by national research institutions [1, 2]. Practitioners in both the life sciences and in biotechnology should be trained in comprehensive biorisk assessments which would also further strengthen the implementation of the international agreement on banning biological weapons [3]. Recently, we reported about lessons learned from conducting two iterations of an international interdisciplinary online workshop on responsible conduct in the life sciences [4]. Here, we provide insights from the third workshop and the impact of the lessons learned from this long-standing workshop series on the own work in the molecular biology laboratories of the organisers in respect to biorisk assessments and science communication.

Keywords: interdisciplinary courses; GMO; biosafety.

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