

**19.04.2021**  
**14:00 CEST**

Jagiellonian University and [ZULF NMR Innovative Training Network](#) Open Online Seminar  
([click this link to join via MS Teams](#))



## **Self-responsibility and autonomy**

### **Dual Use Research of Concern and risk management in science**

**Dr Gregor Becker**

Head of the group for bioethics in life science, UJ, Triple-B Faculty, since 2007

DUAL USE RESEARCH: “Research that, based on current understanding, can be reasonably anticipated to provide knowledge, products, or technologies that could be directly misapplied by others to pose a threat to public health and safety, agriculture, plants, animals, the environment, or material.”

[...] in the 20th century it was physics that raised first strong concerns on the Janus-face of science: on the one hand serving mankind and its future with creating knowledge and contributing to an amazing technological progression, and on the other hand delivering dangerous know-how that could seal the fate of humanity and all life on this planet [...]. ([read full description here](#))

## **Physics applications and potential misuse or dual-use**

**Vasiliki Mollaki, PhD Genetics.**

Scientific Officer, Hellenic National Bioethics Commission, Greece.  
Ethics Expert, European Commission, Brussels.

Despite the benign aims of scientists, there are some types of research that involve elements that can be used for malevolent purposes, which is termed “misuse” in ethics. At the same time, some materials or methods used in research cannot be applied just for civilian but also for military purposes, which is termed “dual-use” in ethics. Although potential misuse is more frequent in biomedical experiments and dual-use is more common in engineering studies, these two issues can also be identified in physics applications. The present lecture aims to give examples of how materials, methods, technologies, or knowledge gained by physics research can raise potential misuse or dual-use concerns. The moral and legal obligation of researchers to identify such ethical issues is discussed, and recommendations are made on how they could be addressed.

