

# **THE NEED FOR NEW APPROACHES TO INTELLECTUAL PROPERTY RIGHTS IN THE CONTEXT OF RESPONSIBLE RESEARCH AND INNOVATION**

Dr. Franc Mali, University of Ljubljana,  
e-mail: franc.mali@fdv.uni-lj.si

Dr. Toni Pustovrh, University of Ljubljana  
e-mail: toni.pustovrh@fdv.uni-lj.si

The context of the European Responsible Research and Innovation strategy (RRI) shows the need for a shift towards new approaches for the normative regulation of new emerging technologies. In the perspective of RRI, soft legislation (codes of conducts, open source, etc.) needs to reflect a good R&D and innovation policy (Von Schomberg, 2013; Owen, Macnaghten, Stilgoe, 2012). The use of such soft (more flexible) regulatory mechanism is particularly useful when the application and usefulness of traditional legislative actions is uncertain. The recent debates about how to approach the issue of intellectual property rights (IPR) in the case of the new emerging technologies are also part of a general RRI problem, that is, how to employ »soft regulatory tools« in order to increase the efficiency and commercialization of innovations on the one hand, and democratize their production, use and control on the other.

In our contribution, we will focus on IPR issues in synthetic biology. Synthetic biology represents one of the most advanced (transdisciplinary) fields of modern biosciences, where the contradictions regarding how (if at all) to legally

protect and commercialize bioinventions have recently begun to pile up. The reasons are manifold: in synthetic biology, it is much easier to patent altered DNA sequences than those derived from natural sources; the massive infrastructure and tasks connected with the commercialization of the results of synthetic biology call for a withdrawal from the rigid patenting of inventions; the types of methods, techniques and databases (software, biobricks, etc.) employed open questions about the use of new forms of IPR (copyright, licensing, etc.); etc. We will attempt to explain these new dilemmas of synthetic biology in the context of the past and recent regulation of property rights in the biogenetic sciences in general. In our exploration of the open questions and dilemmas of IPR in the new emerging technologies we will also use the results of empirical research that we have conducted at the European as well as the national (Slovenian) level.