

A Critical Review of McLeod, Saille and Nerlich, 2018, Risk in Synthetic biology - Views from lab.

Introduction

McLeod, Saille and Nerlich assess the use of risks and responsibilities by introducing the new technological modelling (RRI and AREA). This critical review will recap McLeod, Saille and Nerlich's article and evaluate the risks and responsibilities of new tech in which authors discussed in the article.

Summary

McLeod, Saille and Nerlich talk the risks and responsibilities of tech filed by four sections. In the first section, authors speak the "Responsible Research and Innovation" (RRI) is suitable for researchers committing an appropriate result. They also present their worries on the stress of financial support by industries will affect the innovation. In the second session, the authors explore the possible stress problems. In the third section, authors talk the communication being a solution of stress mentioned in the part 2. In the last chapter, the authors introduce the new model strategy, AREA (anticipate, reflect, engage and act), but they also mention this strategy is not efficient to improve the control of all kinds of risks.

Evaluation

In this article, authors have introduced the risks of psychology and responsibilities that happened in the science field. Authors reveal the most concerns or stress is from the researchers' fear of failure, and these stresses may cause the ethical issues, such as fake results and heavily dependent on the industry's needs. It is a good view to let readers know and prevent such mistakes in the PP2 course or even the further project and research. As the views of social networks defined, the risks are not only about tech people itself, taking the responsibilities to tech users are also essential [1]. For the solutions, the authors emphasise the communication can release the stress, the model of either RRI and AREA is built as a framework to help researches finish work professionally. Since the decision making always exists in tech building, having a good ethic model of decision making is also a convenient tool for scientists. Zhu and Jesiek show the ethic knowledge, contextual knowledge and attitudes are good aspects to assess scientists' ethics [2]. In the final part, the authors showed the research results of using RRI and AREA that do not have a practical impact on reacting the risks happened to scientist's psychology. However, it could be better if authors do not only focus on the risks of psychology because there are other risks. Authors could mention more about solving the ethical problems and introduce more approaches that can help scientists take ethic responsibilities in work.

Conclusion

In sum, this article is a useful resource for people who have the same risk in the psychological side. Although the influence of using RRI and AREA is not noticeable, authors also give the hope of using these two strategies to improve the scientific production.

References

- [1] S. Baase, *A Gift of Fire: Social, Legal, and Ethical Issues for Computing Technology*. Prentice Hall Press, 2012, p. 496.
- [2] Q. Zhu and B. K. Jesiek, "A Pragmatic Approach to Ethical Decision-Making in Engineering Practice: Characteristics, Evaluation Criteria, and Implications for Instruction and Assessment," *Science and engineering ethics*, vol. 23, no. 3, pp. 663-679, 2017.