

A Science of Research Integrity (SRI)

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Abstract

We propose a new scientific discipline - the science of research integrity (SRI) with some further thoughts [1] [2]. Science has been among many ways to discover truth. Science can discover truth about values, such as moral sense, although traditionally science has been considered neutral without morality. Just as the study of religion is recently considered a new science [3], so is the study of the mechanism for science integrity that can be developed as new science. What actually defines SRI? What are the theoretical principles and practical rules defined by SRI? How to develop SRI systematically? How to integrate the whole body of data that has studied research integrity throughout the history of science? These are among the questions that SRI addresses. Science community is an organic body. It suffers from illness, like a human being. Positive energy – good conduct of research strengthens science. Negative energy – research misconduct fails science. Both its thriving and suffering can directly impact its composing individuals' health. SRI, therefore, needs the tending of every scientist. Professionals can specialize in this field after training by well-developed teaching institute or program, though there is none currently. Whistleblowers may be trained as specialists for transformations. SRI related legal and justice procedures should be detailed. We use medical science including health science as analogous approach to define SRI, or simply a new branch of medicine in addition to its traditional location of ethics. Cases of eu-conduct or misconduct can be detailed with the identification of their mechanisms, the diagnoses of defined problems or newly defined issues, the treatment, the preventive measures and etc. Misconduct in science may have been existed soon as the science itself was birthed. In the past, the integrity issue may have been addressed without dealing with fundamental issues. Recently vigorous addresses of research integrity may have stimulated the further development of SRI.

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¹ SRI as a term has been presented at least as early as 2001. See the “*Office of Research Integrity ANNUAL REPORT 2001*” by Department of Health and Human Services, Office of the Secretary, and Office of Public Health and Science, USA. 2002. Page 36 and 39. < http://ori.hhs.gov/images/ddblock/ori_annual_report_2001.pdf >

² I have an elaboration last year on SRI. See “A science of research integrity – At Harvard an ethics case is in developing: my confrontation against misconduct”. 2012. < [http://energinity.com/HarvardCasePt4\[1\].pdf](http://energinity.com/HarvardCasePt4[1].pdf) >

³ I have proposed “faith science” in 2008; a mainstream journal “*New Scientist*” published “the surprising new science of religion” in 2012. < <http://www.energinity.com/fsunews1.html> >