What is Responsible Sciences?

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What I am going to talk about?

1. History of responsible conduct of research
2. Summary of some research ethics
3. Do our students know about RCR?
4. Building essential skills for conducting responsible science.
5. Recommendations
1. History of Teaching RCR

Requirements for teaching RCR has emerged in 1982 when the Association of the American Medical Collages published report entitled “Maintenance of high ethical standards in the conduct of research”.

In July 1990 the National Institutes of Health (NIH) in USA requested all applicants to “Institutional National Research Service Award (NRSA) Research Training Grants (T32, T34)” to include instructions for RCR in their programs. In addition NIH provided a list of essential topics that should be covered in RCR education programs (NIH, 1994).

Since 1994 different organizations and universities established training programs and workshops to teach RCR ethical guidelines and responsibility in life sciences.
2. Summary of some Research Ethics

- Honesty
- Carefulness
- Objectivity
- Openness
- Respect for Intellectual Property
- Confidentiality
- Responsible Mentoring
- Respect for colleagues
- Social Responsibility
- etc......

http://www.niehs.nih.gov/research/resources/bioethics/whatis/
Do our students know about RCR?
A Study conducted by AMSRA

Ain-Shams Medical Students Research Association

They distributed questionnaire to assess level of understanding of RCR to 700 medical students in Ain-University campus and asked them to attend RCR campaign.

Google search: interview clip art
### Level of Awareness of RCR among Ain-Shams University medical students

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<td><strong>Peer review</strong></td>
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<td><strong>IRB</strong></td>
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Sample of results in review for publication
Awareness Campaign
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Assessing the Level of Education of Responsible Conduct of Research Among Egyptian Medical Students: Impact of Awareness Campaign
Building essential skills for the conduct of responsible bioscience could be achieved by..

Education (university, workshops, etc)

Laboratory Research

Measurable outcomes (Exams, laboratory log book, results reports, open discussions essay, presentations, publication)
Recommendations

• Educate early-career scientists (i.e., graduate students, scientists working at a post-doctoral level or equivalent, and junior faculty) about research ethics and conducting responsible bioscience.

• RCR teaching should be included in undergraduate university curriculum.

• Provide opportunities for career development and peer mentorship (programs, funds, projects..etc.).
Thanks for committee members and facilitators who dedicated their time and efforts for the success of the Egyptian Educational Institute on Responsible Science