

Promoting and Enhancing Research in the Life Sciences:

The Role of a Code of Conduct

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Biomedical Research Community has a “Culture of Responsibility”

1. Continued advancement of biomedical research depends upon public support
2. Continued development of biomedical research is critical for the health and security of the country
3. Biomedical research must be done in a safe and transparent fashion with responsible use of human subjects and animals

Biomedical Research Community has a “Culture of Responsibility”

1. Commitment to advancement of society: healthcare and knowledge
2. Commitment to education
3. Validity of scientific data
4. Openness to questions and exchange
5. Science is an international activity



Francis Crick and James Watson

(Molecular Genetics, G.S. Stent, 1971)

The Recombinant DNA Guidelines

1. Early 1970s, new technology developed: sequence, synthesis, and recombination of DNA
2. Concerns about possible dangers: public and some scientists -1973
3. Scientific community proposes a moratorium until conference - 1974
4. Asilomar Conference recommends NIH guidelines - 1975
5. NIH guidelines issued - June 23, 1976
6. Revised guidelines - January 2, 1979

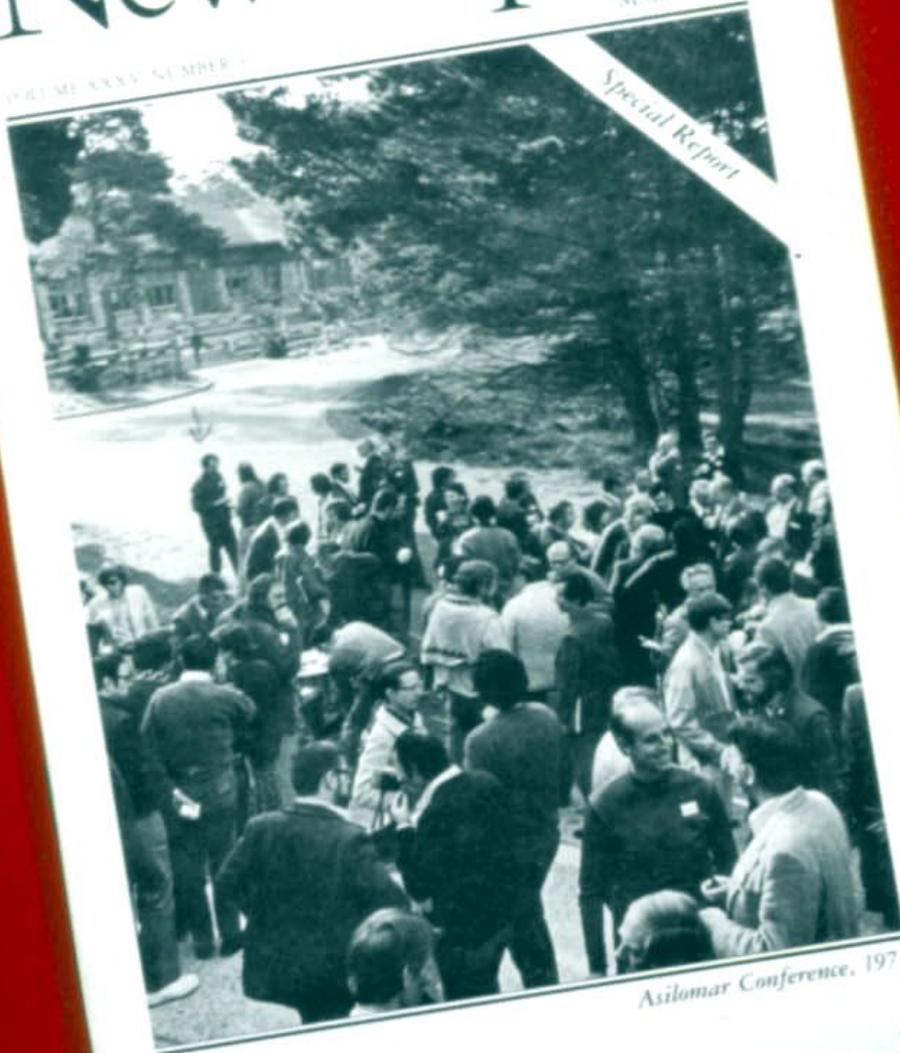
National Research Council

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Asilomar Conference, 1975

Impact of Guidelines and Process of Their Development

1. Led by scientific community including funding agencies
2. International at the onset and in further development
3. Process was public
4. Compliance was almost universal: public support of science and community standards
5. Mechanism for change with progress of science

Teaching Codes of Conduct at MIT

- All second year graduate students in Department of Biology
- Also MIT-wide course on similar topics

Subjects Taught in Courses on “Responsible Conduct in Research”

1. Scientific misconduct, record keeping, reporting results, and data selection
2. Mentoring, authorship, peer review, and confidential information
3. Intellectual property, patents, trade secrets, and responsibility to the public
4. Use of humans in biomedical experimentation
5. Use of animals in biomedical experimentation

Support Activities and Organization for Biomedical Research: MIT Office of Vice-President for Research

1. Committee on the Use of Humans as Experimental Subjects (Institutional Review Board - IRB)
2. The Committee on Animal Use
3. Academic Misconduct Policy
4. Office of Intellectual Property Council
5. Office of Sponsored Programs - Conflicts of Interest
6. Environmental Programs Office
 - a. Committee on Assessment of Biohazards (Institute Biosafety Committee equivalent)
 - b. Select Agent Control
 - c. Chemical, Radiation, and Lab Safety

Thank you for
the opportunity
to present this
lecture