SUMMARY OF ISSUES RAISED

The following is intended to give a brief overview of the breadth of issues which arose during the course of the workshop. This list is best considered as a starting point in two senses. First, the list of issues is undoubtedly incomplete and hence forms a starting point for a general discussion of ethical issues in physics. Second, the statement of each of the issues is necessarily brief, and hence forms the starting point for a more detailed and precise identification of that issue and for an analysis of its ramifications.

I. Funding
A. What constitutes effective use of resources?
B. Has society gotten its money's worth from publicly funded research?
C. To what extent are projects and their potential applications oversold?
D. When should lobbying for a project be considered unethical?
E. Do we no longer have the luxury of funding research for its own sake?
F. If research funds are being poorly allocated, is it ethical to use deception in redirecting them?
G. Is there a fundamental and unresolvable conflict between the dual sponsor-vendor role of the federal government?
H. Can independent peer review exist for large scale projects?
I. Does peer review work?
J. To what extent does accepting funding from an organization prejudice the direction of the research?
K. To what extent are projects dragged out in order to continue receiving funding?
L. Is there a conflict between the funding of large scale projects and small projects, and if so what is a fair distribution of resources between the two?

II. Politics and Science
A. When does technical advice become political advice?
B. How often do physicists compromise their beliefs to get or keep a job?
C. Is it ethical to understate troubling scientific results to the public in order to allow them time to adjust?
D. Are there any options to accepting political encroachments into technical advice?
E. Should personal or professional loyalty ever outweigh the need for whistle-blowing?
F. When should technical advice be peer reviewed first?
G. Who is qualified to be an expert witness?
H. What protections can be offered to whistle-blowers?
I. What protections can be offered to victims of spurious whistle-blowing?

III. Merit and Value Judgments
A. What factors are appropriate to consider in making merit and value judgments?
B. Is peer review an ethical requirement?
C. Is the single-blind review process, common to most physics journals, preferable to double-blind or to a system in which all parties are identified?
D. How do we deal with classified research when making merit and value judgments in an unclassified environment?
E. How are varying levels of scientific contribution to a particular line of research appropriately acknowledged?

IV. Laboratory Ethics
A. What constitutes fraud?

B. Should carelessness ever be considered unethical?
C. Should openness be considered an ethical requirement in academia?
D. When an issue of lab safety arises, should the senior member in a research group take responsibility for the most dangerous job?

V. Other
A. To what extent is one responsible for the consequences of one's research?
B. Do physicists have a responsibility to "science" or to the "scientific community"?
C. Are there any truly universal ethical principles in science?
D. When is it unethical to publish in the popular press first?
E. Should the public police science?
F. Should scientists be responsible for policing themselves?
G. What responsibilities do we have when as a nation we enter into international scientific agreements?
H. What constitutes exploitation in a mentor/student relationship?
I. Have many physics students been unfairly misled about their prospects for securing employment in the field?

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