An Exercise in Scientific Integrity: Advisory Committee Composition

I. Independent Advisory Committees

The U.S. government frequently authorizes the formation of independent expert panels to address critical national issues in the fields of science and technology. Committee members serve without pay, consider the latest developments in the field in question, and then advise the federal government and the public so that relevant and fact-based policy decisions can be made.

Consider the following factors that go into creating such a panel:

- Expertise of the members
- Diversity of backgrounds (e.g., academia, industry, government, public interest groups, nonprofits, stakeholders)
- A balance of defensible positions on the issue
- Objectivity or bias—are the members all willing to see other perspectives?
- Conflicts of interest, such as funding or institutional affiliation

1. Do you feel any of the factors above are more or less important than others? If so, which ones?

Supported opinion

2. Consider creating a committee to advise Congress on the effects of a toxic pollutant in a small community. Who should be included in this scientific advisory panel (scientists with a certain specialty, industry proponents, community leaders, etc.)?

Examples could include chemists familiar with the chemical, doctors familiar with diagnosing and treating its side effects, toxicologists familiar with the details of the chemical's effects, scientists working in the affected communities

3. A conflict of interest is usually defined as a financial interest that could impair a person's objectivity. This is different from a bias, since members are selected to provide a reasonable balance of opinions, and some bias is unavoidable. Consider the following examples—are these conflicts of interest or acceptable bias? Briefly, why?

A. A scientist with a long history of research on one aspect of the issue in question
B. A scientist who works or has worked in industry
C. A scientist who works or has worked as a paid consultant in litigation on the issue
D. A scientist who is an outspoken member on the board of an advocacy group
E. A scientist who has criticized the government on topics not directly related to their line of research

A. – Not a conflict (it's the scientist's expertise)
B. – Possible conflict if the scientist worked with the industry in question
C. – Possible conflict (the scientist received funds for promoting points of view)
D. – Possible conflict if the scientist's stance is extreme
E. – Not a conflict (not related to the issue)

II. Politicizing Advisory Committees

In recent years, there has been unprecedented political interference in the integrity of federal science advisory committees. Some of the ways this has been done include:

- Stacking panels with members likely to vote a particular way
- Using political "litmus tests" to screen candidates (e.g., if candidates do not support the president, they are not invited to join the panel)
- Limiting public access to information
- Ignoring or distorting the panel's conclusions
- Disbanding the panel

The examples below are true accounts of interference that have occurred since 2000. Choose two and briefly describe which method(s) were used to interfere with the scientific integrity of the committees, and what possible outcomes could result.

A. Dr. W. David Hager was appointed to the FDA's Reproductive Health Advisory Committee, which advises the agency on controversial issues such as contraceptives and abortion. Dr. Hager, who was initially suggested for the committee chair but was later confirmed only as a member, has co-authored a book recommending scripture readings as a treatment for premenstrual syndrome, and has refused to prescribe contraceptives to unmarried women.
B. Only seven of a proposed 26 qualified candidates were approved for the National Institutes of Health Fogarty International Center's Advisory Board. A Nobel laureate in medicine was rejected for signing too many letters published in the *New York Times* critical of President Bush; an expert in women's health was rejected for publicly supporting a woman's right to abortion.
C. An external advisory committee established alongside the National Nuclear Security Administration (NNSA) was dismissed in 2003. A senior NNSA official was displeased with the fact that committee members had published articles on the limited effectiveness of nuclear weapons against deeply buried targets, which undermined the administration's plans to develop nuclear "bunker busters".
D. In the summer of 2002, the Centers for Disease Control's (CDC) Advisory Committee on Childhood Lead Poisoning Prevention was expected to rule in favor of a more stringent federal standard to prevent lead poisoning. Weeks before the committee met, the secretary of Health and Human Services took the unprecedented step of rejecting nominees recommended by CDC scientists and appointing five individuals distinguished by their likelihood to oppose the tougher standard. At least two of these appointees had financial ties to the lead industry.

A. – Unqualified member with extreme, non-mainstream points of view that conflict with the panel's intent; could skew the panel
B. – Rejection of qualified candidates for political reasons; prevents the best possible minds from working on projects; compromises the science
C. – Advisory committee dismissed for views opposing current political agendas; rejection of quality science conducted for the purpose of crafting policies
D. – Panel stacked with conflicted members after qualified candidates were rejected; important protective health measures not taken as a result