

# SCIENTIFIC INTEGRITY AT RISK: Implications for Occupational and Environmental Medicine

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## Today's Objectives

- Focus: Abuse of science in federal policy making
- Examples
- Implications
- Possible reforms
- Call to action



## Abuse of Scientific Integrity

Any attempt to undermine, alter, or otherwise interfere with science for political or ideological reasons.



## Importance to OEM

- Inherent tensions and conflicts
- History of interference
- Ripe for abuse/misuse
- Reliance on science-based information
- OEM professionals at risk



## Science and Public Policy

### Science

- Transparent/Open
- Independent
- Disciplined
- Rigorous
- Tested & peer reviewed



### Policy

- Absence of full knowledge
- Competing interests
- Many inputs
- Search for consensus judgments

↑ Public Trust ↑

## UCS Involvement in SI

- Concerns
- Scientist meeting
- Investigation and release of reports
- Scientist statement
- Campus events
- Agency surveys
- Mobilizing
- Solutions



## Misuse of Science

- Control information
  - Suppress
  - Distort
  - Limit access or exchange
- Restrict or target scientists
- Rig the process



## Examples

- |  |  |
|--|--|
| Control information                        | Restrict / target scientists           |
| • EPA and mercury                          | • Control consultation & participation |
| • NCI and ABC                              | – WHO                                  |
| • CDC and abstinence                       | – International AIDS Conference        |
| • EPA and climate change                   | • Intimidate researchers               |
| • Congress and research on sexual behavior | – Barton investigation                 |

## Examples: Rig the Process

### Advisory Committees

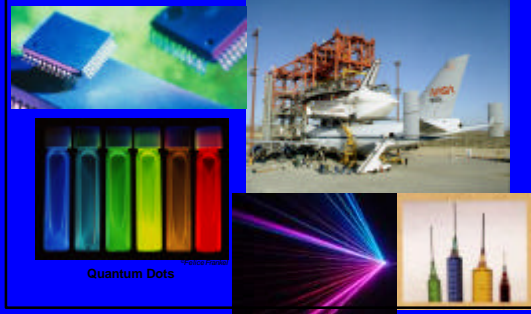
- Stack them
- Use litmus tests
- Disregard them

### Create Hurdles

- Data Quality
- Peer Review



## Implications: US Scientific Leadership



Quantum Dots

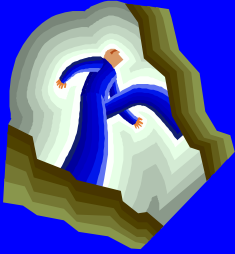
## Implications

- |   |  |
|---|--|
| • Impacts on public health, safety, and environment   | • Erosion of public trust <ul style="list-style-type: none"> <li>– in science &amp; research</li> <li>– in government</li> </ul> |
| • Confusion & mistrust of information <ul style="list-style-type: none"> <li>– Providers</li> <li>– Public</li> </ul> | • Demoralization of gov't scientists   |
|   | • Diminished agency capacity   |
|   | • Decreased public service   |

## Moving Towards Solutions

- |  |  |
|--|--|
| • Prohibit interference                                    | • Provide better scientific advice to Congress |
| • Protect scientists                                       | • Strengthen OSTP                              |
| • Bar litmus tests   | • Increase access to information               |
| • Ensure independence and expertise of Advisory Committees | • Spotlight abuse                              |
|  | • Hold officials accountable                   |

## Take Action



- Join the effort
- Speak out
  - Individually
  - professionally
  - organizationally
- Seek solutions
- <http://www.ucsusa.org>

## Defend Integrity of Science

Science is not a religion, ideology, or lobby; it is simply the best method hit upon to acquire knowledge about the real world.

E.O. Wilson