

Protecting Public Health - Given Real and Manufactured Scientific Uncertainty

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According to repeated nationwide surveys,

More Doctors Smoke **CAMELS** than any other cigarette!

Doctors in every
branch of medicine
were asked, "What
cigarette do you smoke?"
The brand named most
was Camel!

You'll enjoy Camels for the same reasons
so many doctors enjoy them. Camels have
that rich, mellow, just after dark, and
a flavor unmatched by any other cigarette.
Make this available now. Smoke only
Camels for 30 days and you will find Camels
prove your taste. Even better they will
find them as your steady smoke. You'll
no longer consider a cigarette "new"!

THE DOCTORS' CHOICE IS AMERICA'S CHOICE!



For 30 days, test Camels in your "Z-Zone" (Z for Throat, Z for Taste)



"Believe me, folks, you'd want to read
this important new evidence on the
effects of smoking. Then you'll say,
as I do... **MUCH MILDER**

**CHESTERFIELD
IS BEST FOR ME!"**

Arthur Godfrey



NOW... Scientific Evidence on Effects of Smoking!

A MEDICAL SPECIALIST is making regular bi-monthly examinations of a group of people from various walks of life. 45 percent of this group have smoked Chesterfield for an average of over ten years.

After ten months, the medical specialist reports that he observed...

no adverse effects on the nose, throat and sinuses of the group from smoking Chesterfield.

**MUCH MILDER
CHESTERFIELD
IS BEST FOR YOU**

First and Only Premium Quality
Cigarette in Both Regular and
King-Size



CONTAINS TOBACCO OF BETTER QUALITY AND HIGHER
PRICE THAN ANY OTHER KING-SIZE CIGARETTE

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Reports on

Tobacco and Health Research

Vol. 7 No. 1

March-April 1964

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There is diversity of opinion regarding tobacco use and health. Charges against tobacco are widely publicized, but less attention is given to materials which indicate that differing opinions exist. This publication reports some of these materials.

Follow-up Study Sheds New Light on Smoking And Infant Survival

Small babies born of cigarette-smoking mothers are markedly less likely to die at birth than are small babies of non-smoking mothers, a University of California biostatistician has found.*

In a study of 6,800 infants born at the Kaiser Foundation Hospital, Oakland, Calif., Dr. Jacob Yerushalmy confirmed earlier findings that smoking mothers have more babies weighing under 5 lbs. 8 oz. (2500 gm.) at birth than do non-smokers.

Among 3,189 babies of non-smoking white women, Dr. Yerushalmy found 112 (3.5 percent) underweight, (Continued on page 2)

*"Mothers, cigarette smoking, and survival of infants." *American Journal of Obstetrics and Gynecology*, February 1964.

'Lung Cancer Rare in Bald Men'

A relatively low incidence of lung cancer among bald men has been reported by two New Orleans physicians.* In contrast, the study supported earlier findings that baldness is associated with "increased susceptibility to heart disease."

Drs. Morton Brown and Howard A. Buechner studied 225 control patients and 186 lung cancer patients at the New Orleans Veterans Admin-

From 1908 to 1959 . . .

Massive German Study Points to Occupational Hazards in Lung Cancer

An increase in lung cancer incidence in Germany has been found to be most marked in three groups of occupations exposed to air pollutants, a team of pathologists and statisticians has concluded.*

Their report included observations of recent lung cancer cases as well as study of autopsy records as far back as 1908. They found lung cancer incidence was most prevalent in a major industrial area among these groups:

- 1) Outdoor workers (high and deep construction workers, agricultural workers);
- 2) Industrial workers and craftsmen doing industrial type work;
- 3) Persons exposed to the effects of modern vehicular traffic (chauffeurs, railroad workers, messengers, traffic policemen, salesmen, etc., exclusive of office workers).

A lower incidence of epithelial lung cancer was found among (4) "crafts-

men of the old type who work in small shops," and among (5) "domestic, warehouse, store, office and administrative workers, and also members of the teaching profession," the investigators reported.

These conclusions emerged from a six-year study of 1,229 cases of the disease, plus an analysis of more than 26,000 autopsy records reaching back to the year 1908, according to Prof. Dr. Reinhard Poche, chief physician, Pathological Institute, Düsseldorf Medical Academy. The project also involved university departments of pathology at Bonn, Solingen, Bethel, Bielefeld, Dortmund, Duisberg, Essen, Essen-Steele, Cologne-Merheim and Münster.

The records studied covered the patients' history, occupations, urban or rural residence, war record, internment record, smoking habits and histological diagnosis.

The increase is accounted for chiefly by squamous epithelial carcinoma, Dr. Poche found, and must be re-

as opposed to 25 percent among Negro controls. Among the lung cancer patients, however, only 11 percent of the whites were bald, and only 10 percent of the Negroes, the investigators report.

The highest incidence of baldness among the lung cancer patients was 16 percent in the group aged 60-70 years. In contrast, the incidence of baldness among the controls in this

Tobacco's Campaign to Manufacture Uncertainty

“Doubt is our product, since it is the best means of competing with the ‘body of fact’ that exists in the minds of the general public. It is also the means of establishing controversy.”

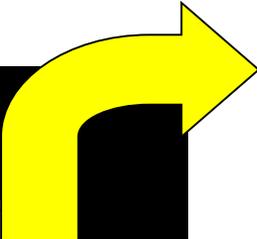
-Brown & Williamson Document No. 332506, 1969



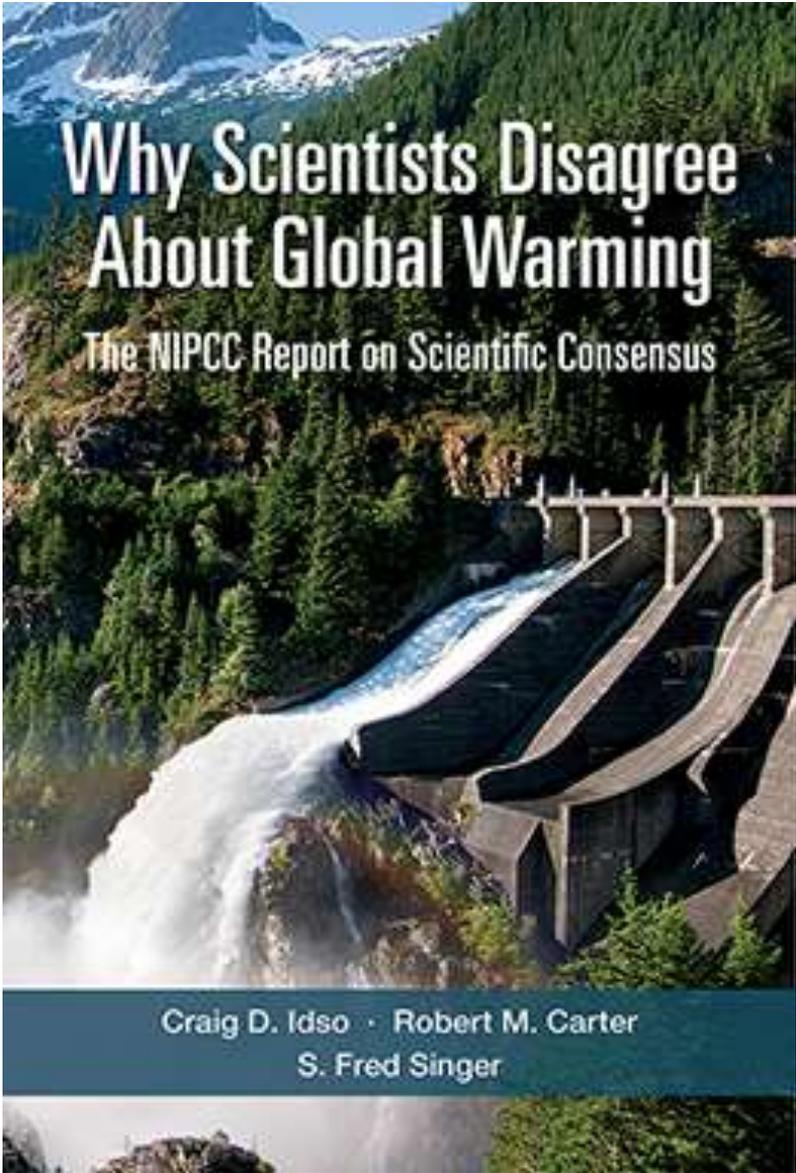
WINNING THE GLOBAL WARMING DEBATE – AN OVERVIEW

Please keep in mind the following communication recommendations as you address global warming in general, particularly as Democrats and opinion leaders attack President Bush over Kyoto.

1. ***The scientific debate remains open.*** Voters believe that there is *no consensus* about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, *you need to continue to make the lack of scientific certainty a primary issue in the debate*, and defer to scientists and other experts in the field.
2. ***Americans want a free and open discussion.*** Even though Democrats savaged President Bush for formally withdrawing from the Kyoto accord, the truth is that none of them would have actually voted to ratify the treaty, and they were all glad to see it die. Emphasize the importance of *“acting only with all the facts in hand”* and *“making the right decision, not the quick decision.”*
3. ***Technology and innovation are the key in arguments on both sides.*** Global warming alarmists use American superiority in technology and innovation quite effectively in responding to accusations that international agreements such as the Kyoto accord could cost the United States billions. Rather than condemning corporate America the way most environmentalists have done in the past, they attack their us for lacking faith in our collective ability to meet any economic challenges presented by environmental changes we make. This should be our argument. *We need to emphasize how voluntary innovation and experimentation are preferable to bureaucratic or international intervention and regulation.*
4. ***The “international fairness” issue is the emotional home run.*** Given the chance, Americans will demand that all nations be part of any international global warming treaty. Nations such as China, Mexico and India would have to sign such an agreement for the majority of Americans to support it.
5. ***The economic argument should be secondary.*** Many of you will want to focus on the higher prices and lost jobs that would result from complying with Kyoto, but you can do better. Yes, when put in specific terms (food and fuel prices, for example) on an individual-by-individual basis, this argument does resonate. Yes, the fact that Kyoto would hurt the economic well being of seniors and the poor is of particular concern. However, the economic argument is less effective than each of the arguments listed above.



“The scientific debate remains open. Voters believe that there is ***no consensus*** about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their view about global warming will change accordingly. Therefore, ***you need to continue to make the lack of scientific certainty a primary issue in the debate...***”
(emphasis in original)

The book cover features a photograph of a large concrete dam with multiple spillways. Water is cascading down the spillways, creating a misty spray at the base. The dam is set against a backdrop of dense green forest and snow-capped mountains under a clear blue sky. The title is overlaid on the upper portion of the image.

Why Scientists Disagree About Global Warming

The NIPCC Report on Scientific Consensus

Craig D. Idso · Robert M. Carter
S. Fred Singer



The Center for
Public Integrity



SUPPORT US

ME

SCIENCE FOR SALE

Published — February 16, 2016

Updated — Today at 7:01 am EST

FORD SPENT \$40 MILLION TO RESHAPE ASBESTOS SCIENCE



Case Studies

SUPPORT TO DRUG MANUFACTURERS

The Food and Drug Administration proposed cancellation of a registered new drug. Cancellation requires an administrative hearing. THE WEINBERG GROUP was retained by two manufacturers of the drug under attack, to define strategy for the administrative hearing, identify the experts to be used in the continued support of the drug; assist in the preparation of the experts for written testimony, analysis of the testimony of experts for the Food and Drug Administration, and preparation for oral cross-examinations and preparation of the summary brief. This led to an extensive process with a written appeal from the first decision to the Commissioner and leading to 10 additional years of sales prior to the ultimate cancellation of the drug.

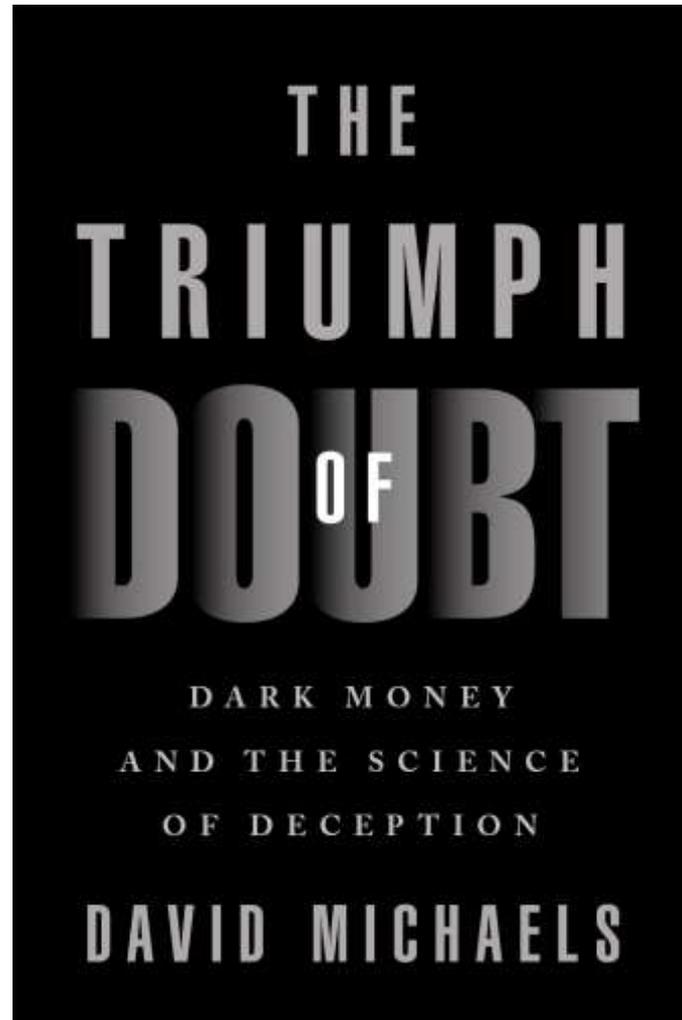
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Shameless Self-Promotion



The Enronization of Science

- Scientists hired to defend products or activities in regulatory and legal arenas
- Their value is their ability to influence regulation and litigation, not to provide valid science
- Produce science of questionable value

Selected Glassdoor Reviews by Product Defense Firm Employees

- “This is a law consulting company, not a science consulting company. Don’t expect to be a ‘scientist.’” [Cardno ChemRisk]
- “Some of the principal scientists have questionable ethics (and have been called out for it).” [Gradient]
- “Sometimes you will be working for the evil do-ers and trying to make it seem like they did nothing wrong.” [Exponent]

Marketing “Product Defense”

ASBESTOS, TOBACCO, PHARMACEUTICALS - WE'RE ALL NEXT!

- ◆ Scare science
- ◆ The loss of presumptive innocence
- ◆ Where will the liability end?

**Presented by
Mr. Joseph Huggard
The Weinberg Group LLC
18 June 2003**

A conflict of interest is strongly associated with tobacco industry–favourable results, indicating no harm of e-cigarettes

Charlotta Pisinger ^{a, b}  , Nina Godtfredsen ^{c, d}, Anne Mette Bender ^e

 **Show more**

<https://doi.org/10.1016/j.ypm.2018.12.011>

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Highlights

- Studies assessing the potential harm of e-cigarettes reach contradictory results.
- Abstracts from 94 studies were blinded and independently evaluated by two assessors.
- 95% papers without a conflict of interest (COI) found potentially harmful effects.
- Industry–related COI was strongly associated with finding of no harm of e-cigarettes.

The Funding Effect

- The close correlation between the results desired by a study's sponsors and the results reported
- Identified in studies of numerous classes of pharmaceuticals and other chemicals

The Work of Mercenary Scientists Hurts the Credibility of All Scientists



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Can We Trust the Advice of Conflicted Scientists?



Vioxx: A very quick natural experiment

- Results of several early studies lent themselves to conflicting interpretation.
- Merck-affiliated scientists and independent experts disagreed on how to interpret the data.
- Eventually, the truth is reached through double blind placebo trial (“gold standard”)

How did different scientists interpret the same data?

- US FDA approved Vioxx in May 1999
- In August 2001, JAMA publishes review of Vioxx trial by three scientists not associated with Merck.
- Patients taking Vioxx had 2.4 times the risk of cardiovascular event, compared with those taking naproxen.

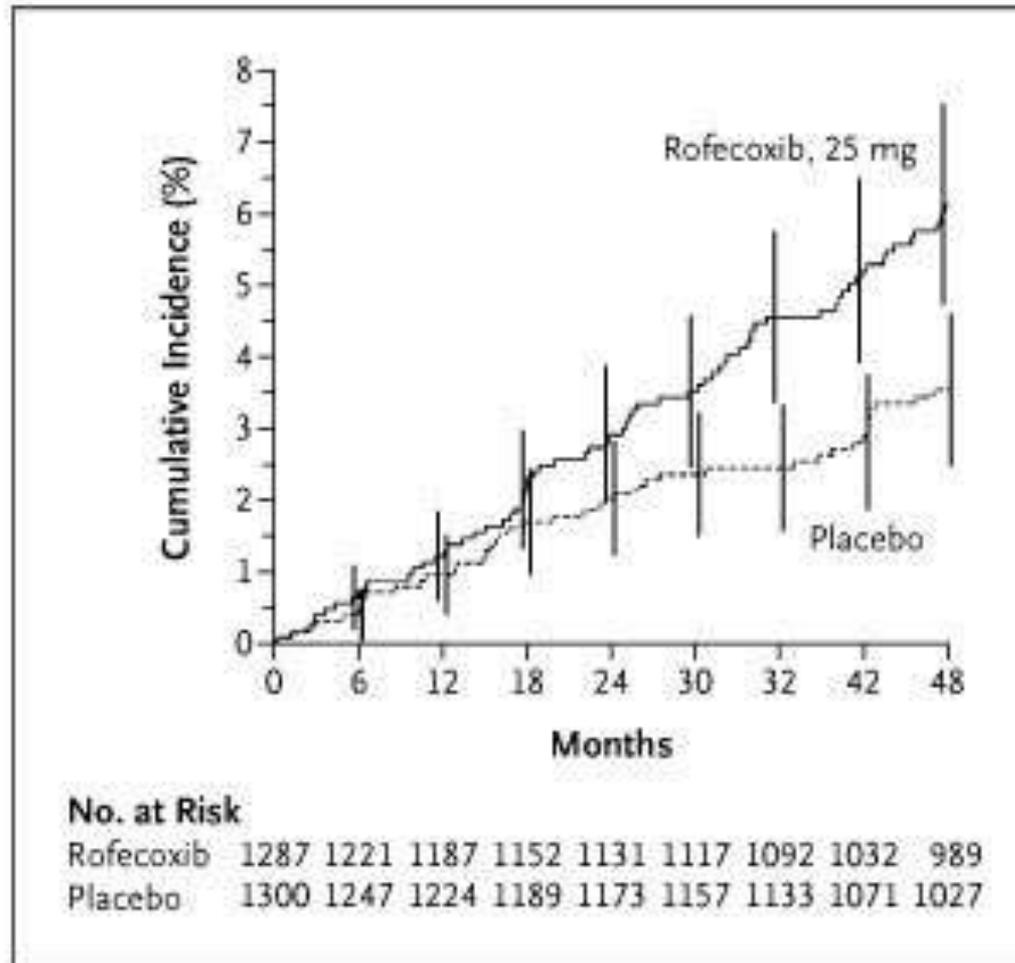
The response of conflicted scientists: “It’s the Aleve, not Vioxx”

- Merck-affiliated scientists blame Aleve:
“Differences observed between [Vioxx] and naproxen are likely the result of the antiplatelet effects of the latter agent.”
- “We believe that the analysis of [the independent scientists] provides no substantive support for their conclusions.”

Whose Interpretation was Correct?

- In 2000, Merck launched a randomized control trial, to test if Vioxx prevents colon polyps.
- Study compared Vioxx to a placebo.

Cumulative Incidence of Cardiovascular Events in the Vioxx and Placebo Groups



The Cost of Getting it Wrong

- 2004: Merck halts placebo trial and withdraws Vioxx from the market
- By then, an estimated 80M people worldwide (20M Americans) had taken the drug.
- FDA scientists estimate Vioxx caused between 88,000 and 140,000 heart attacks in United States alone.

How Did Merck-Affiliated Scientists Fail to See the Obvious?

“It is difficult to get a man to understand something when his salary depends on his not understanding it.”

- Upton Sinclair, 1935

Who Pays the Price for Manufactured Uncertainty?

- People, sickened by exposures that should have been prevented.
- Shareholders, when corporations are caught manipulating the scientific evidence to avoid regulation.

Asbestos discovery triggers Johnson & Johnson baby powder recall in US

18 October 2019



GETTY IMAGES

Health care giant Johnson & Johnson has recalled 33,000 bottles of baby powder in the US, after health regulators found trace amounts of asbestos in a bottle purchased online.

Lawsuits Involving Johnson's Baby Powder

- Studies have found ovarian cancer associated with use of talcum powder.
- In a lawsuit in Missouri, 22 women with ovarian cancer sued J&J, alleging their ovarian cancer was caused by Johnson's Baby Powder.
- Jurors agreed, awarding the women \$550M (\$25M each).

But there's more....

- The jurors were given documents showing how talc firms and their trade associations were able to convince US government agencies NOT to label products containing talc as potentially carcinogenic.

How the Talc Industry Avoided the Label “Carcinogenic”

- In 2000, US National Toxicology Program Board of Scientific Counselors considered categorizing “asbestiform talc” as a human carcinogen and non-asbestiform talc as reasonably anticipated to be a human carcinogen.
- Talc producers and users (including J&J) hired product defense firms to oppose the categorization
- The objective: “*create a reasonable doubt in their minds*”
- The strategy: “come up with more confusion.”

How'd That Work Out?

- Clearly influenced by J&J's behavior, the jurors awarded the women \$4.14B in punitive damages.
- One juror told the press: "We were just trying to find something they would feel."
- J&J market value decreased about \$50B, attributed to the asbestos/talc problem.
- The firm is now facing >14K ovarian cancer lawsuits

Another Example: Glyphosate

- 2015: WHO's International Agency for Research on Cancer categorized Monsanto's pesticide glyphosate as "probable" human carcinogen.
- Monsanto launched campaign against IARC, hiring numerous scientists to defend glyphosate.
- Monsanto's financial role and ghost-writing were not acknowledged in some papers.
- This all was revealed in lawsuits.

When the Jurors Saw the Documents.....

- Several workers sued Monsanto, alleging their non-Hodgkin's lymphoma was caused by glyphosate. Monsanto's behavior drove the size of the awards.
- In the first case, jurors awarded \$289M, including \$250M in punitive damages.
- In another case, jurors awarded a couple \$1B each in punitive damages.
- >20,000 lawsuits now pending.

How About the Stockholders?

- In 2016, Bayer purchased Monsanto for \$63B
- How'd that work out?

Worst deal ever? Bayer's market cap now close to the total cost it paid for Monsanto

by [Angus Liu](#) | Aug 29, 2019 12:13pm



Bayer's market cap now is close to the amount it paid for Monsanto, making the deal one of the worst in recent years. (Bayer)

What does one of the worst corporate deals in modern history look like? In Bayer's Monsanto takeover, it means the value of an entire company has gone poof.

Bayer acquired Monsanto for \$63 billion in 2018 after a tough buyout battle and intense antitrust scrutiny. The German conglomerate's market cap in

To Protect Public Health (and Stockholders) What Needs To Change?

- Producers of potentially hazardous chemicals must pay for the research, but not control it.
- Research on safety of products must be directed, conducted and interpreted by independent, unconflicted scientists.

What Else Needs To Change?

- Regulate toxic chemicals by class, not one by one.
- Chemicals are not innocent until proven guilty:

End the Presumption of Innocence!

Thank You for Listening

Milken Institute School
of Public Health

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