“Hot Button” Issues in the Life Sciences
What is a **Hot Button** Issue?
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1) A grant proposal topic that would gain the attention of a US Senator
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2) A topic that could get you in a fight at a local bar
What is a Hot Button Issue?

1) A grant proposal topic that would gain the attention of a US Senator

2) A topic that could get you in a fight at a local bar

3) “A social, economic, theological, spiritual, scientific or legal issue which has become a political issue, as a result of deliberate action or otherwise, whereby people become politically active over that issue.” --Wikipedia
Old Hot Button Issues in the Life sciences (pre-1970)

- Pesticides and Other Chemicals
- Cigarette Smoke
- Nuclear Energy/Irradiated Food
- Evolutionary Biology
- Genetic Testing (Eugenics)
- Animal Rights/Treatment
- Invasive species/extinctions
- Population Growth

Genetic Engineering (Synthetic Biology)

Stem Cell Research

Genomic and Neurological Mapping

Global Climate Change

Geoengineering

Antibiotic Resistance/Agriculture

Immunizations/Vaccines
Not Hot Button issues

Biological Control

Organic Agriculture

Bed Nets (for Malaria)

Genetically Engineered Medicines (insulin)

Radiation breeding

Nanotechnology

Synthetic organs
Why Does a Life Science Topic Become a **Hot Button** Issue?
Why Does a Life Science Topic Become a Hot Button Issue?

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Synthetic organs
Genetic Engineering
“It’s the product not the process”
Maybe it is we scientists who have the deficit because our paradigms are too narrowly focused, temporally and spatially.
“It’s the product not the process”
Keep our food safe!
Stop GMOs!
GREENPEACE
“It’s the product not the process”
“It’s the product not the process”

It’s the product and process, but mostly the profit
The “Environmentalization” of the GM Struggle

Fred Buttel

The environmental and post-environmental politics of genetically modified crops and foods-----2005

Environ. Politics--- vol 14  pgs 309-323
Monsanto

No food shall be grown that we don't own
March Against Monsanto
May 25th: 286 cities to rise up against corporate evil
“It’s the product not the process”

It’s the product and process, 
but mostly the profit...
and power/politics
Presidents of Peru

Alan Garcia

Ollanta Humala
The Legacy Effect
NSF-IGERT
Graduate Student Training
Genetic Engineering and Society:
The Case of Transgenic Pests
Culex quinquefaciatus
Tsetse fly  African trypanosomiasis