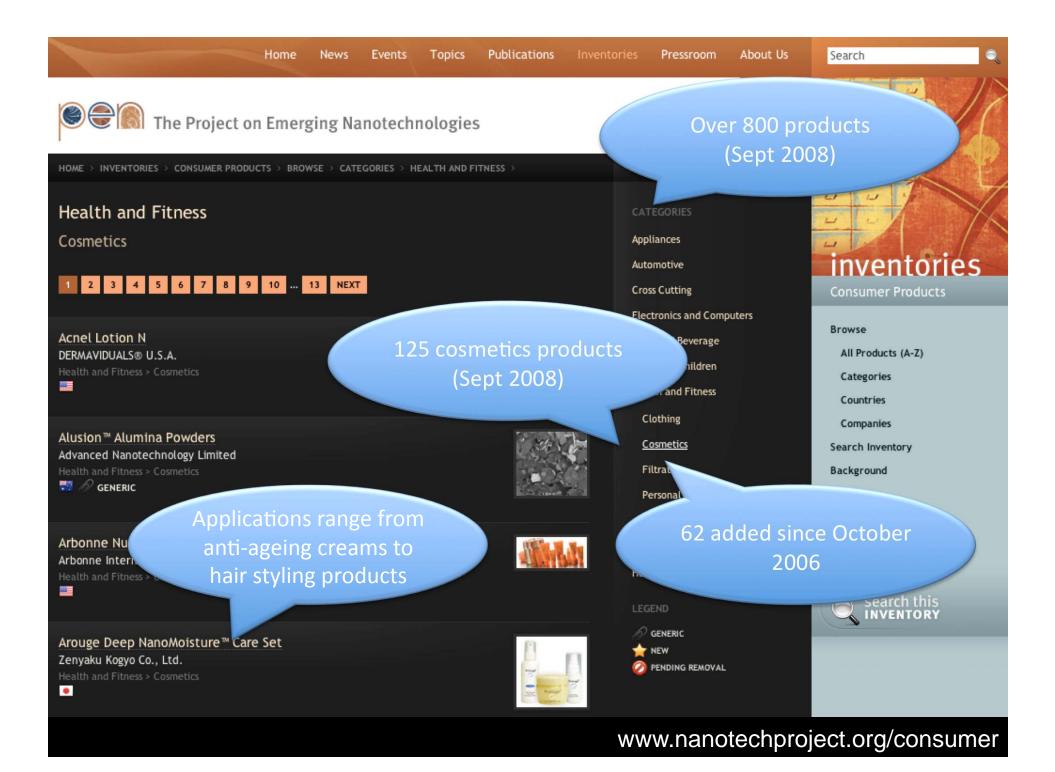
# Nanotechnology and Cosmetics

FDA Nanotechnology Public Meeting

September 08 2008 Rockville, MD

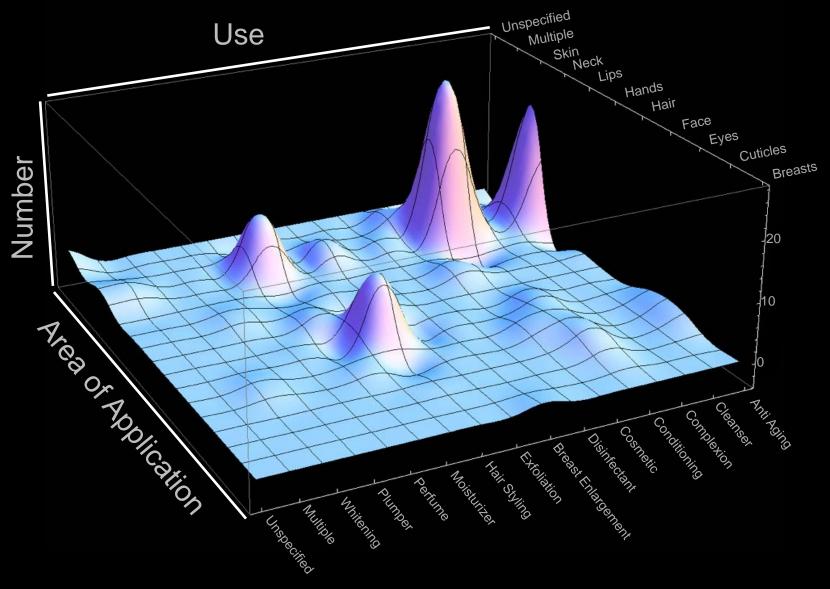
Andrew D. Maynard

Chief Science Advisor, Project on Emerging nanotechnologies Woodrow Wilson International Center for Scholars



#### Current State of Knowledge on Nano-Cosmetics

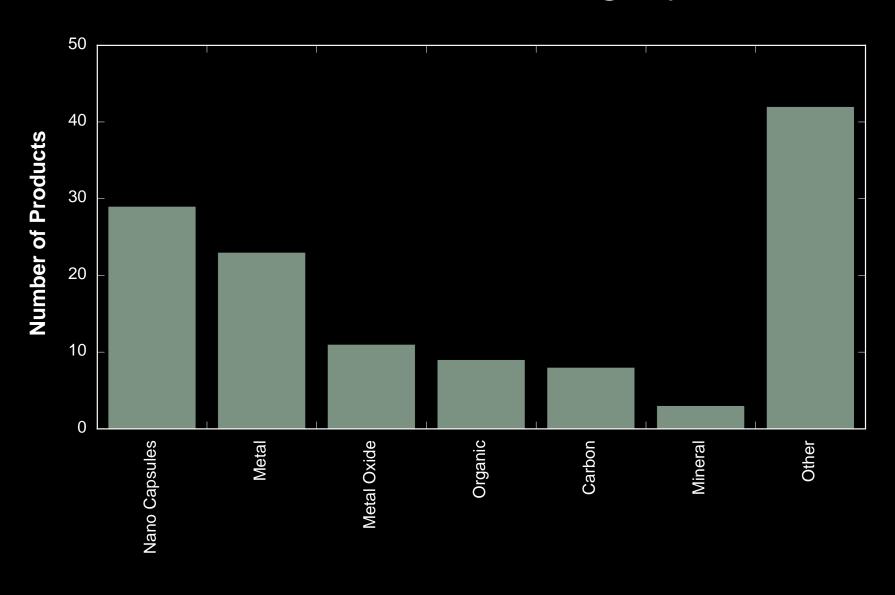
## Product Functions & Application Areas



Source: PEN Consumer Products Inventory, September 2008. www.nanotechprojects.org/consumer

#### Current State of Knowledge on Nano-Cosmetics

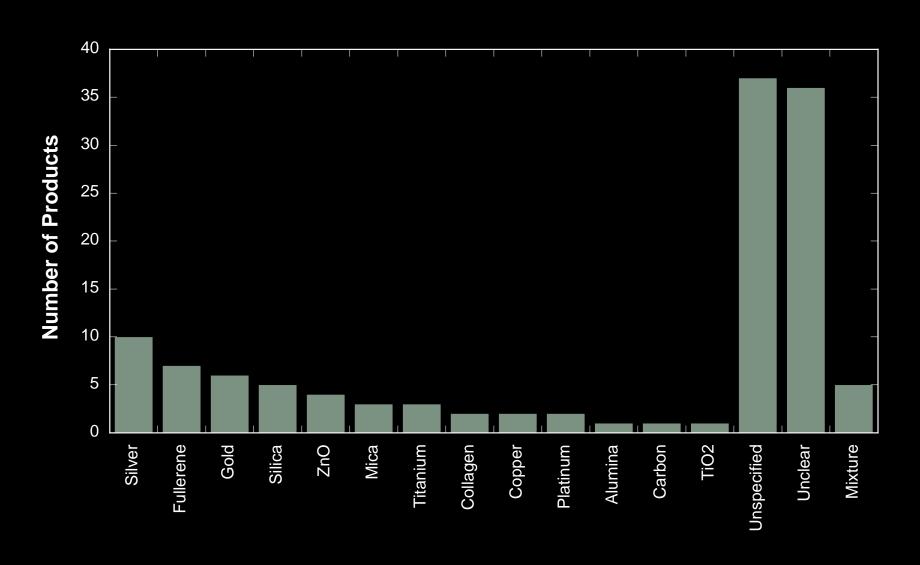
## Nanomaterial Category



Source: PEN Consumer Products Inventory, September 2008. www.nanotechprojects.org/consumer

#### Current State of Knowledge on Nano-Cosmetics

## Principle Nanomaterials Used



Source: PEN Consumer Products Inventory, September 2008. www.nanotechprojects.org/consumer

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  - Exposure and dose may be influenced by particle size, shape, and surface properties



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- Nano-sizing materials may change their risk profile
  - Exposure and dose may be influenced by particle size, shape, and surface properties
  - Hazard may depend on scale-associated properties in addition to chemical identity
- Nanotechnology has the potential to blur the boundary between cosmetics and drugs



### **Action Points**

- Criteria are needed for defining new materials for legal or regulatory purposes
- Relevant regulatory trigger-points are needed
- Nanomaterial-specific knowledge is needed
  - Through targeted research
  - Through information-sharing by industry
- Transparency is essential