Working Group 1: Historical Context of the Nano-enterprise

Central Premise:

- Anticipating societal and ethical issues of nanotechnologies demands understanding its rich and complex history

Goals:

- Create resources and tools necessary to document emerging research enterprise.
- Explore several key issues central to understanding nanotech's past and current context.

Principal Members

- Patrick McCray (UCSB)
- Mary Ingram-Waters (UCSB)
- Tim Lenoir (Duke University)
- Cyrus Mody (Chemical Heritage Foundation)

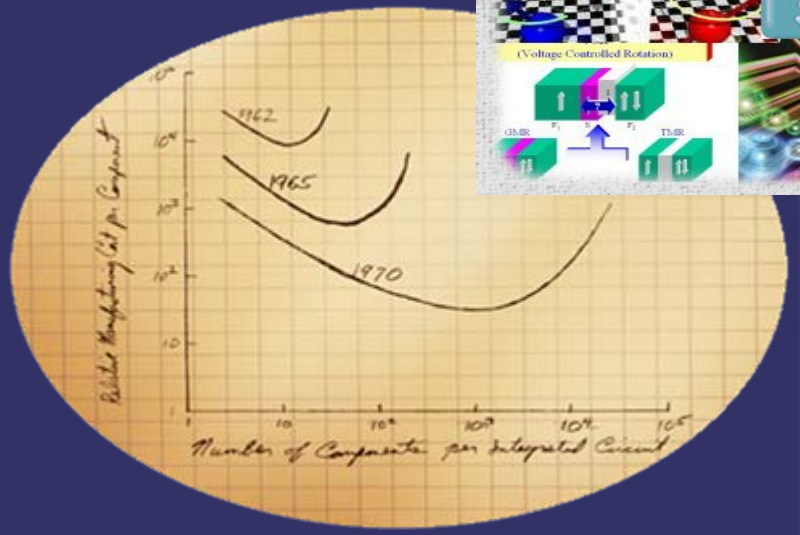
CNS-UCSB and its activities are funded by the National Science Foundation under cooperative agreement. #SES 0531184. Any opinions, findings, and conclusions are those of the author and do not necessarily reflect the views of the National Science Foundation.

Research Initiatives for Year One

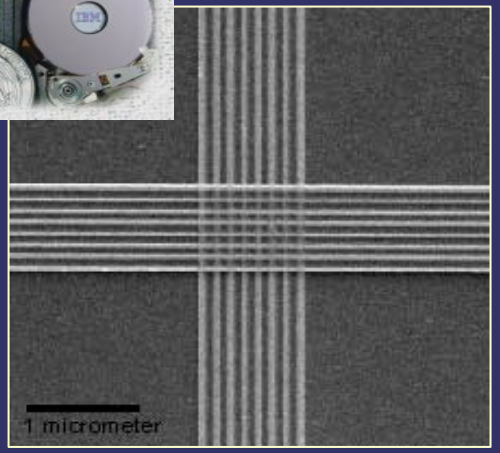
- Spintronics and Nanoelectronics
- Oral History Collection
- Nanotechnology, Futurism, and the Public Imagination
- Nano's "Hidden" Histories

Nanoelectronics as "Over the Horizon" Technology

Spintronics

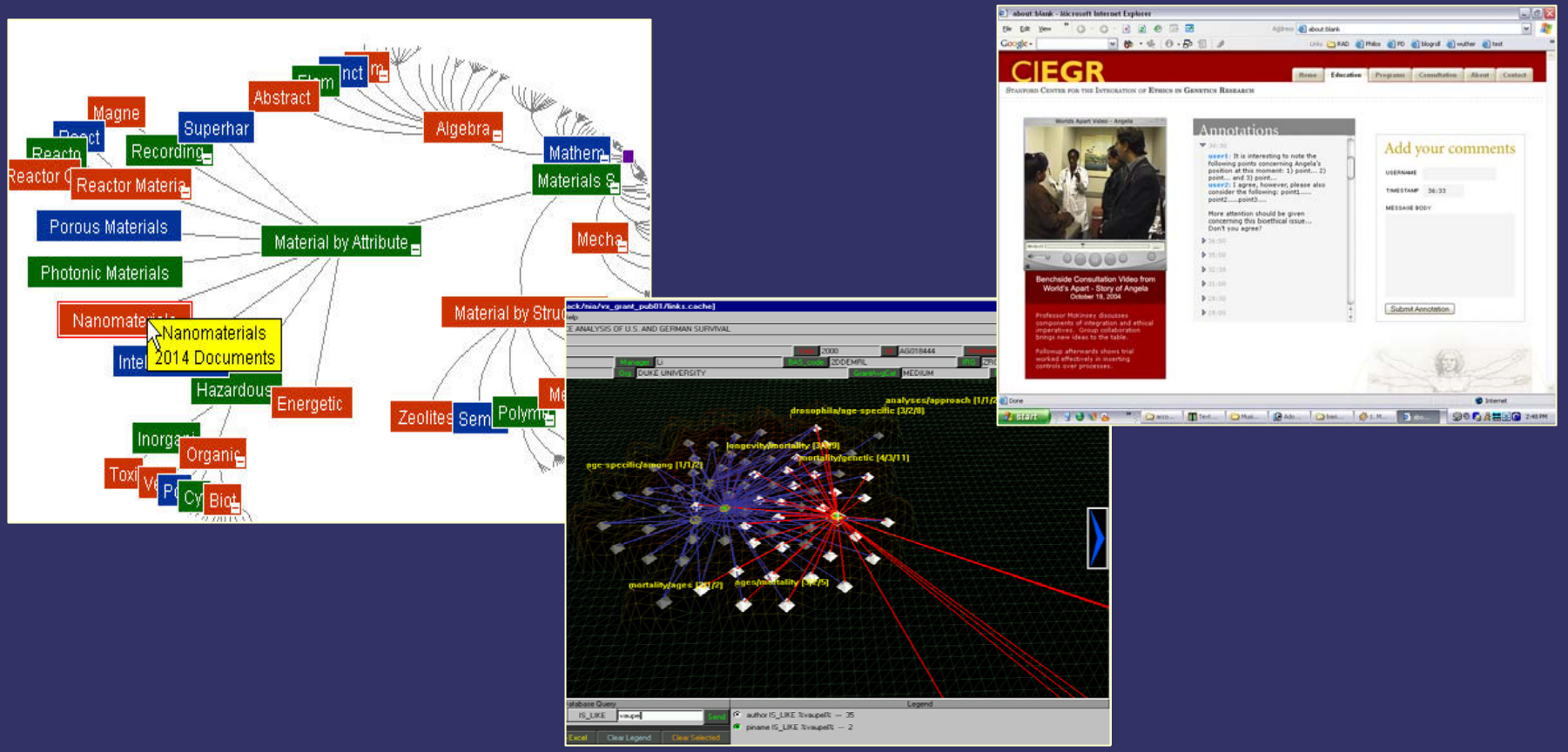


Moore's Law, 1965

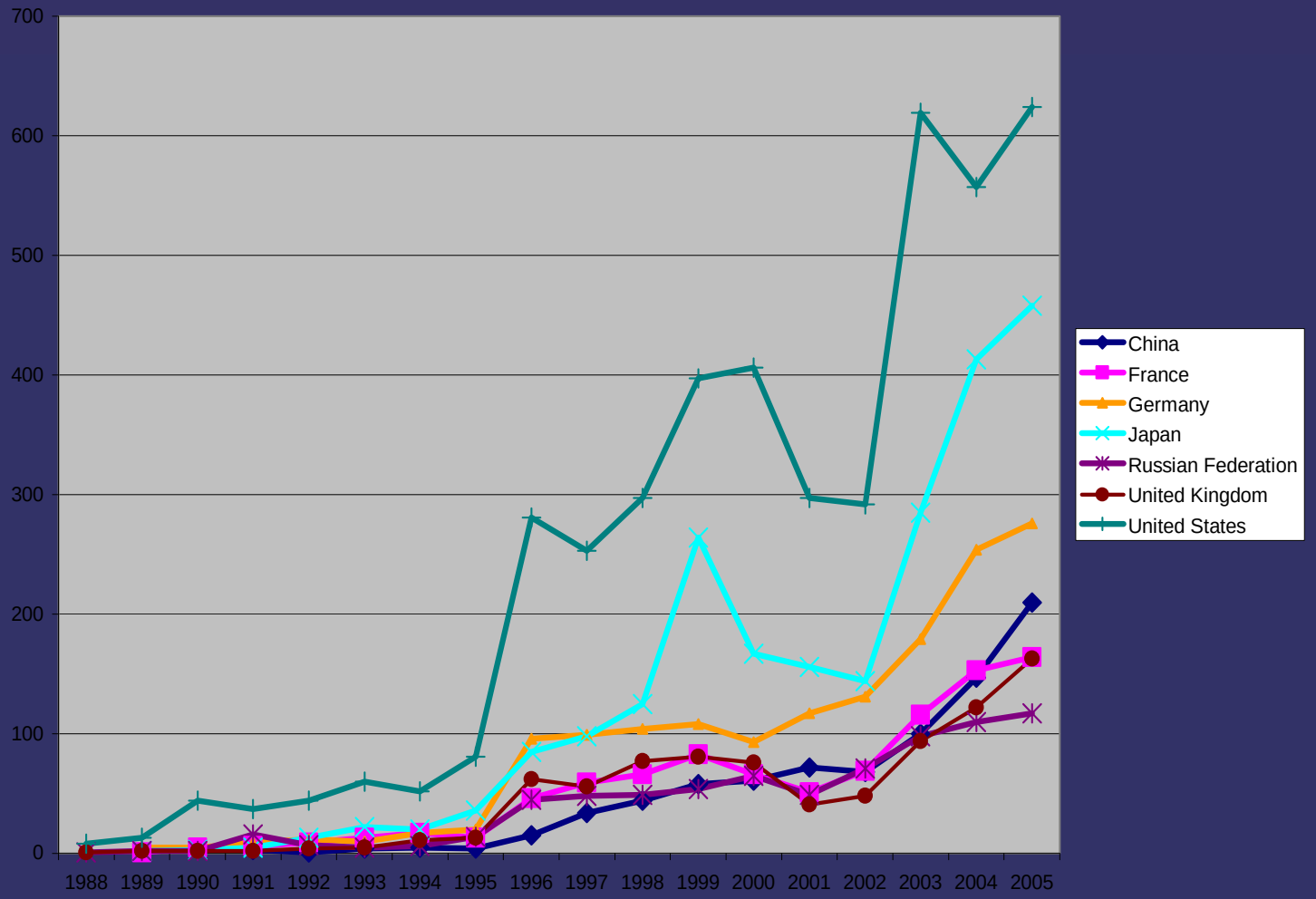


Today's 'near-nano' wires

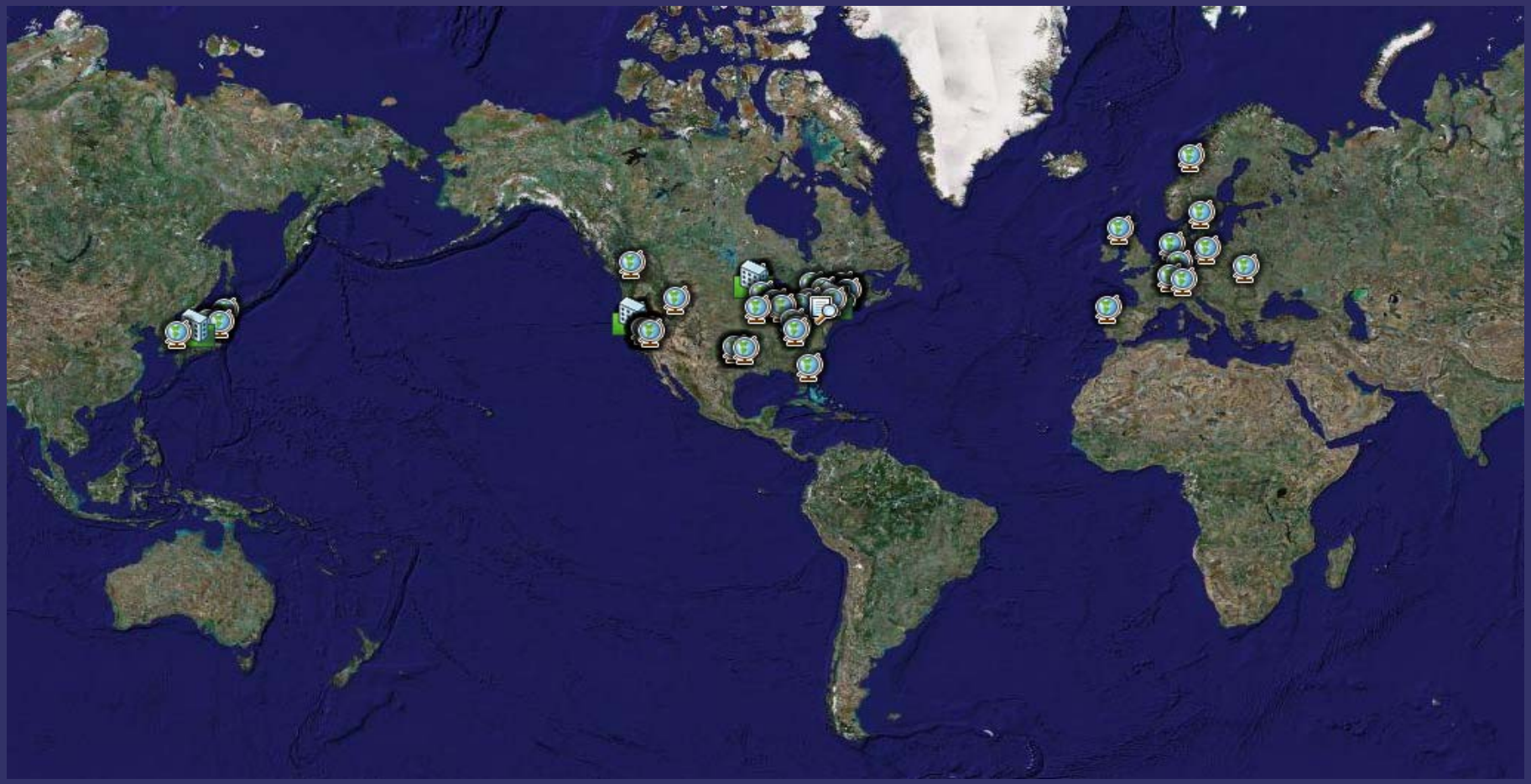
Data Mapping and Visualization



Ex: Spintronics Publications

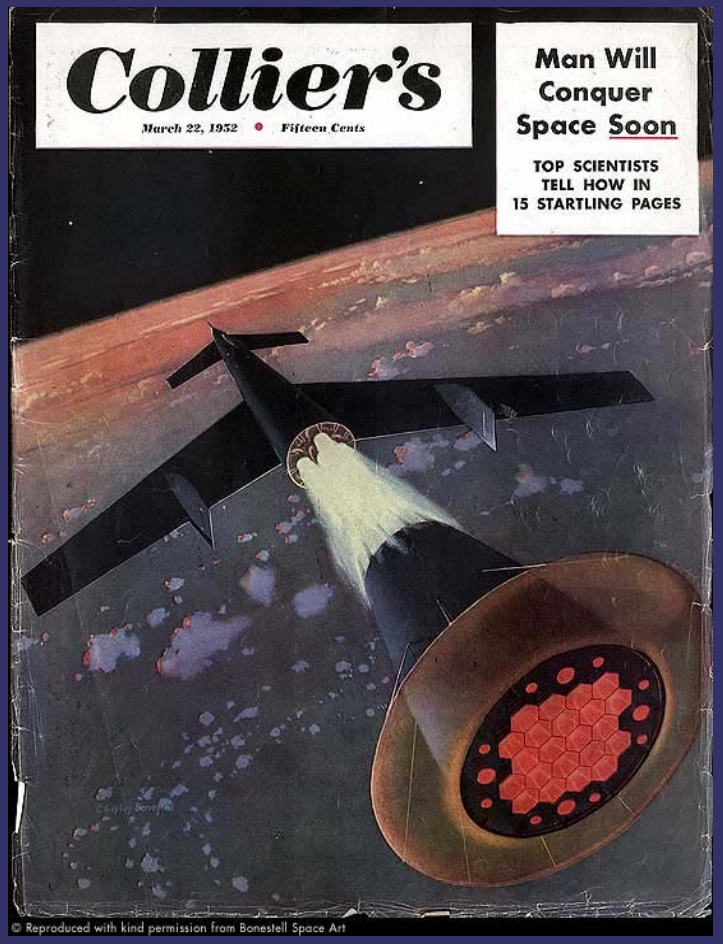


Temporal/Geospatial Distribution of Researchers

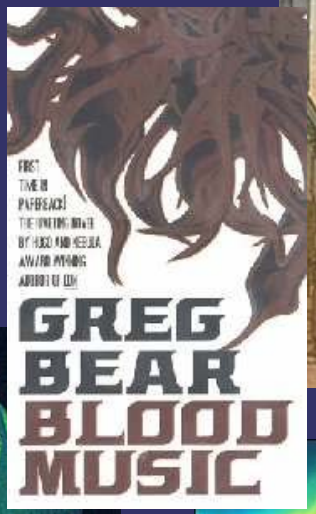


Nanotechnology and Oral History

Nanotechnology and the Public Imagination



C. 1950



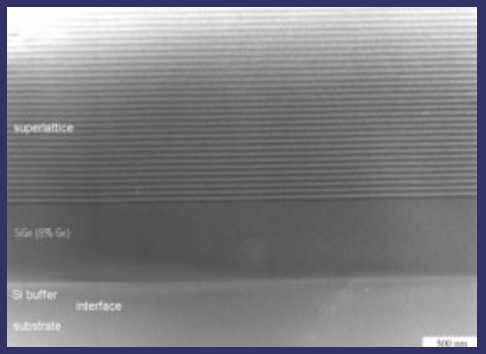
TODAY

Nano's Hidden Histories

1973 Nobelist
Leo Esaki

1993, Al Cho
receives NMS

Modern MBE machine



Si-Ge superlattice