



December 3, 2009



National Laboratories and International Cooperation

J. Stephen Rottler

Vice President, Science and Technology

Chief Technology Officer

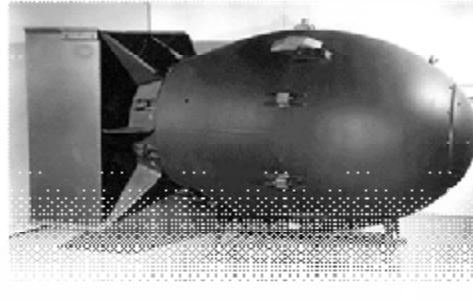


Sandia National Laboratories



Sandia's History

“Exceptional service in the national interest”



THE WHITE HOUSE
WASHINGTON

May 15, 1946

Dear Mr. Wilson:

I am informed that the Atomic Energy Commission intends to ask that the Bell Telephone Laboratories accept under contract the direction of the Sandia Laboratory at Albuquerque, New Mexico.

This operation, which is a vital aspect of the atomic weapons program, is of extreme importance and urgency to the national defense, and should have the best possible technical direction.

I hope that after you have heard more in detail from the Atomic Energy Commission, your organization will find it possible to undertake this task. In my opinion you have here an opportunity to render an exceptional service to the national interest.

I am writing a similar note direct to Dr. C. E. Disty.

Very sincerely yours,

Mr. Harry S. Truman,
President,
American Telephone and Telegraph Company,
150 Broadway,
New York 1, N. Y.



The Evolution of Our Mission

1950s

Production engineering and Manufacturing engineering

1960s

Development engineering

1970s

Multiprogram laboratory

1980s

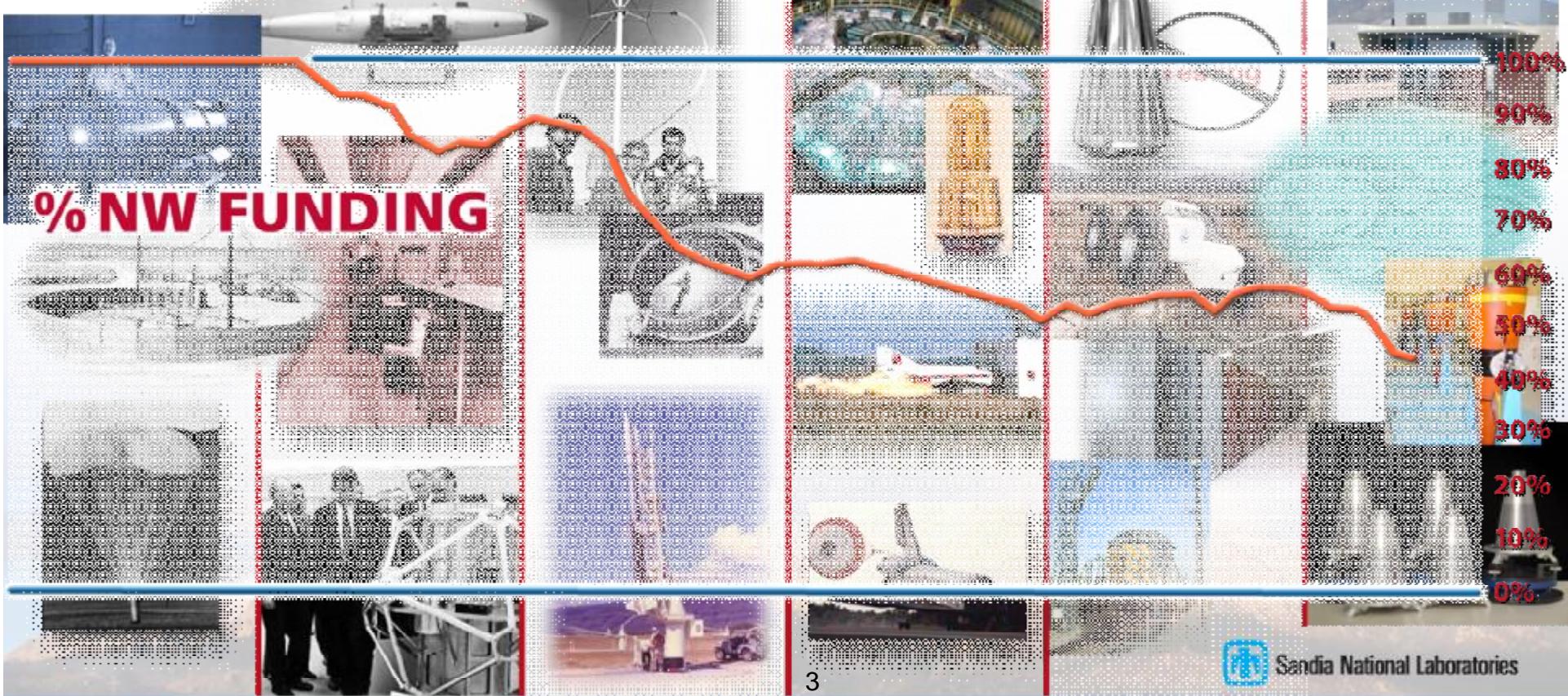
Research, development and production

1990s

Post-Cold War transition

2000s

Expanded national security role





Defense Systems & Assessments

Materials International Space Station Experiment

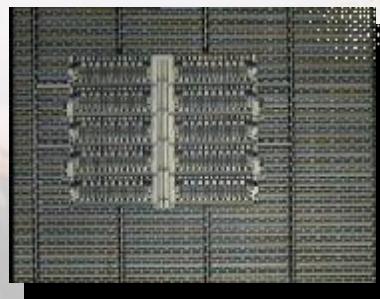


Real-time SAR images



Small robotic vehicle

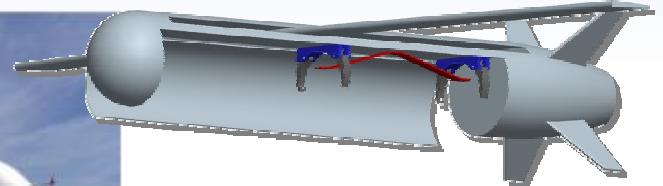
MEMS louvers



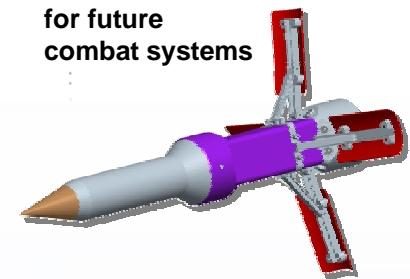
Shuttle return to flight



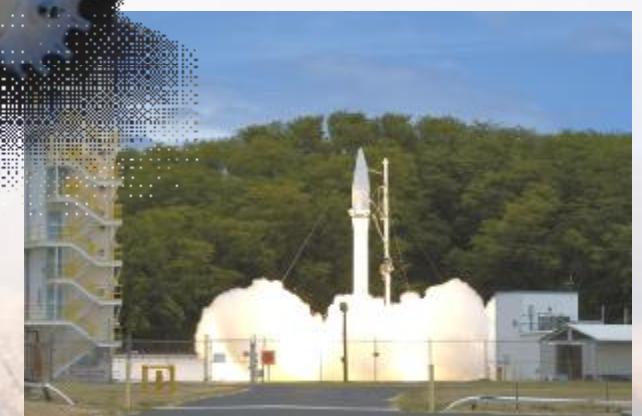
Predator UAV with SAR



Ground sensors
for future
combat systems



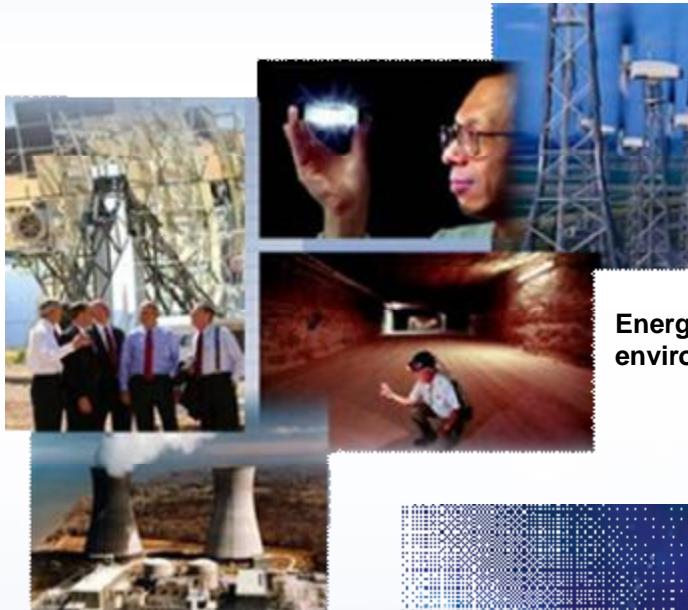
Target launch for
Ballistic Missile Defense



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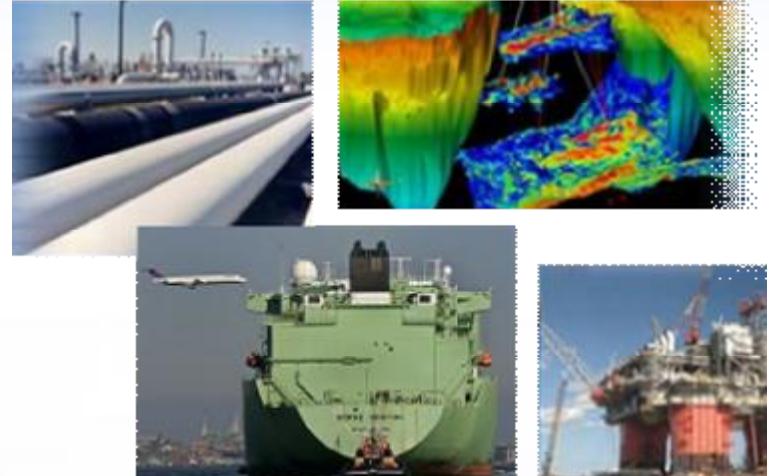


Energy, Resources & Nonproliferation



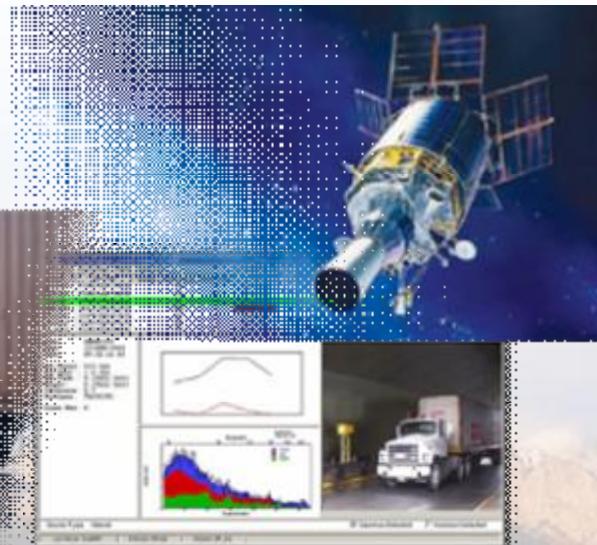
Safe, secure, reliable energy supply and infrastructure

Energy efficiency and environmental stewardship



Energy and water interdependency

Nonproliferation



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Homeland Security & Defense



Airport security



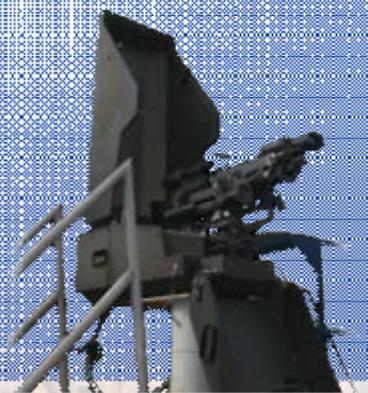
Maritime security



Energy supply



Infrastructure security

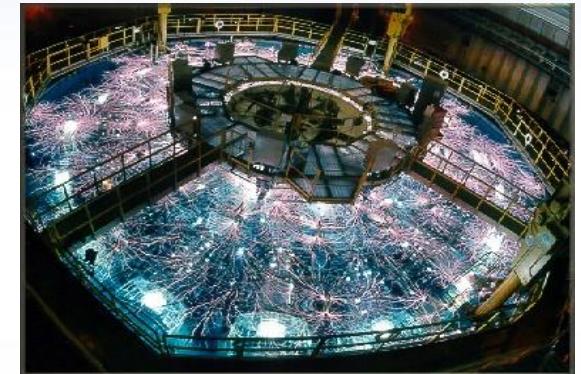


Physical security,
base protection





Science-Based Engineering



**High
Performance
Computing &
Simulation**

**Nanotechnologies and
Microsystems**

**Extreme
Environments**

**Computer
Science**

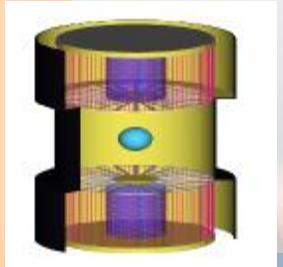
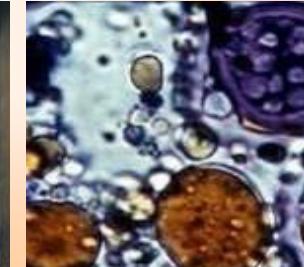
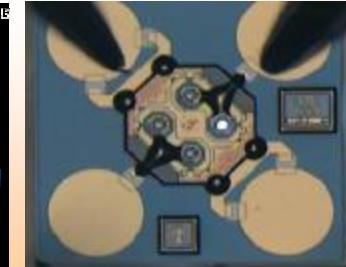
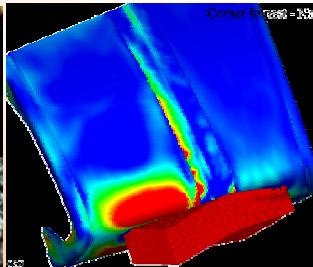
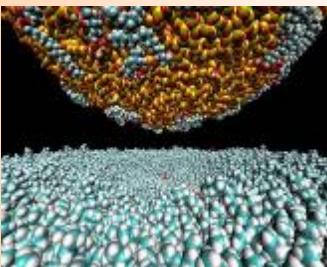
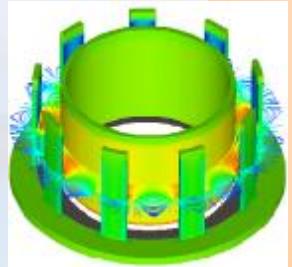
Materials

**Engineering
Sciences**

**Micro
Systems**

Bioscience

**Pulsed
Power**



Engaging the Scientific Community Helps Us Maintain a World-Class Workforce

Center for Integrated Nanotechnologies



Computer Science Research Institute



Combustion Research Facility



TheScientist
BEST PLACES TO WORK 2008
POSTDOCS



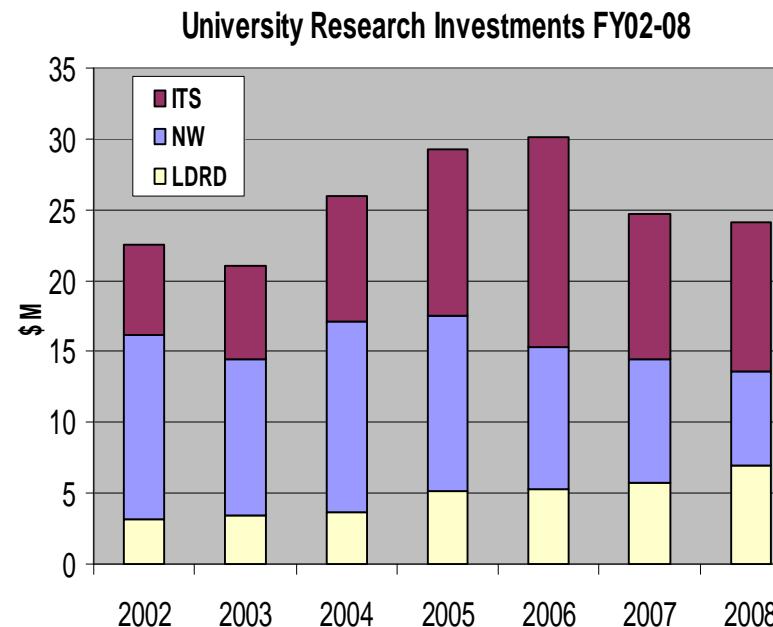
Truman Fellows



Student Interns

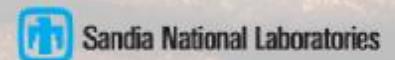
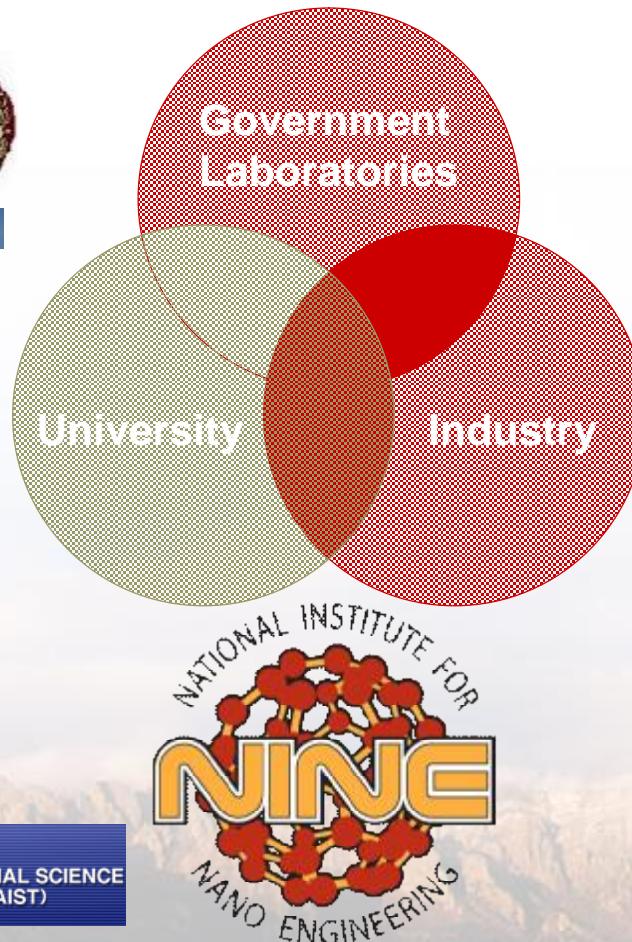


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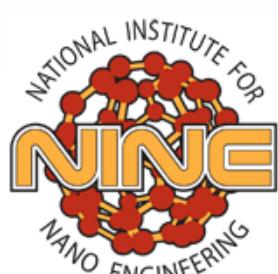


Partnerships on a Global Scale

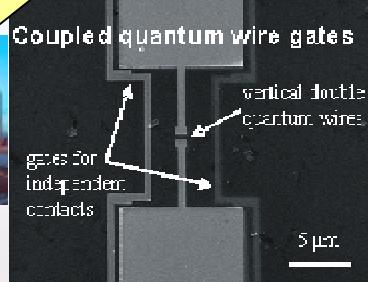
Accelerating Innovation



Example: National Institute for Nano-Engineering



Students
Mentors
Facilities



Next-generation Nanoelectronics

Technical Depth

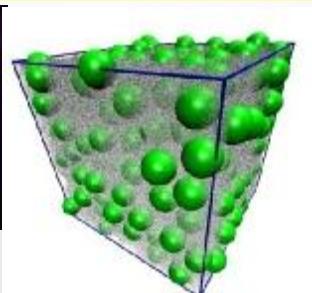
Teamwork

Breadth

Leadership

Global Innovation Leaders

Nano for Energy



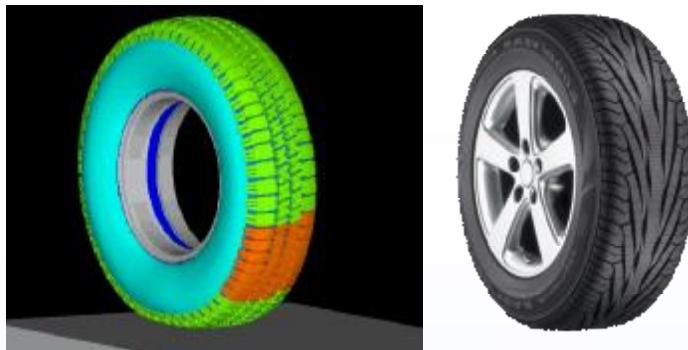
Computation & Modeling

Nano Materials

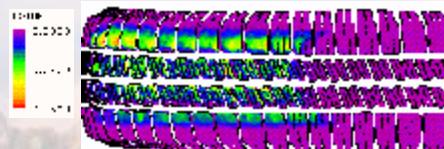
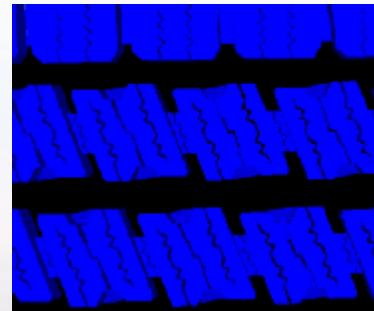


2007
NINE
Summer
Class

Example: Industrial Partnerships



Assurance™
Featuring
TripleTred
Technology™



P&G

LOCKHEED MARTIN



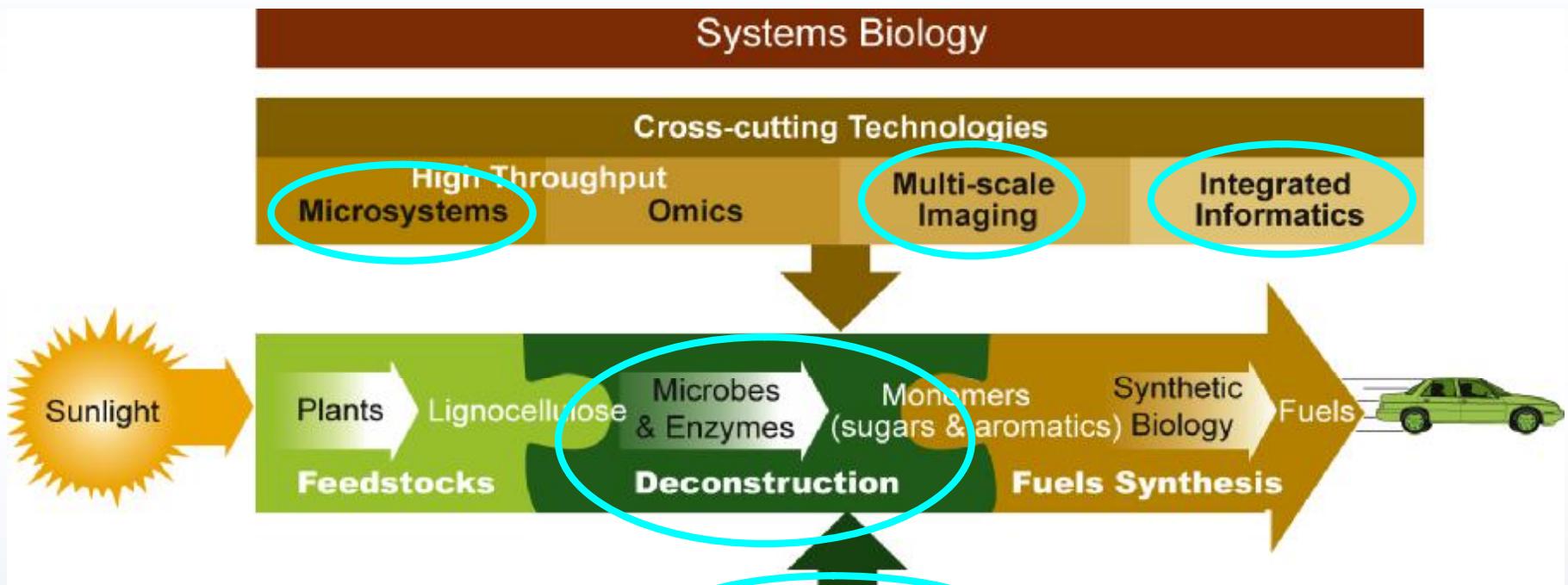
CORNING

ExxonMobil
Taking on the world's toughest energy challenges.™



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Example: DOE Joint BioEnergy Institute



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Emerging International Collaborations

- „ Carbon Capture and Storage
- „ Low-Carbon Technologies
- „ Photovoltaics
- „ Climate Change
- „ Smart Grid
- „ Nuclear Energy
- „ Energy Efficiency
- „ Renewable Technologies
- „ Energy and Water Relationships
- „ Nanoelectronics and Nanomaterials
- „ Computational Materials Sciences
- „ Basic Research



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