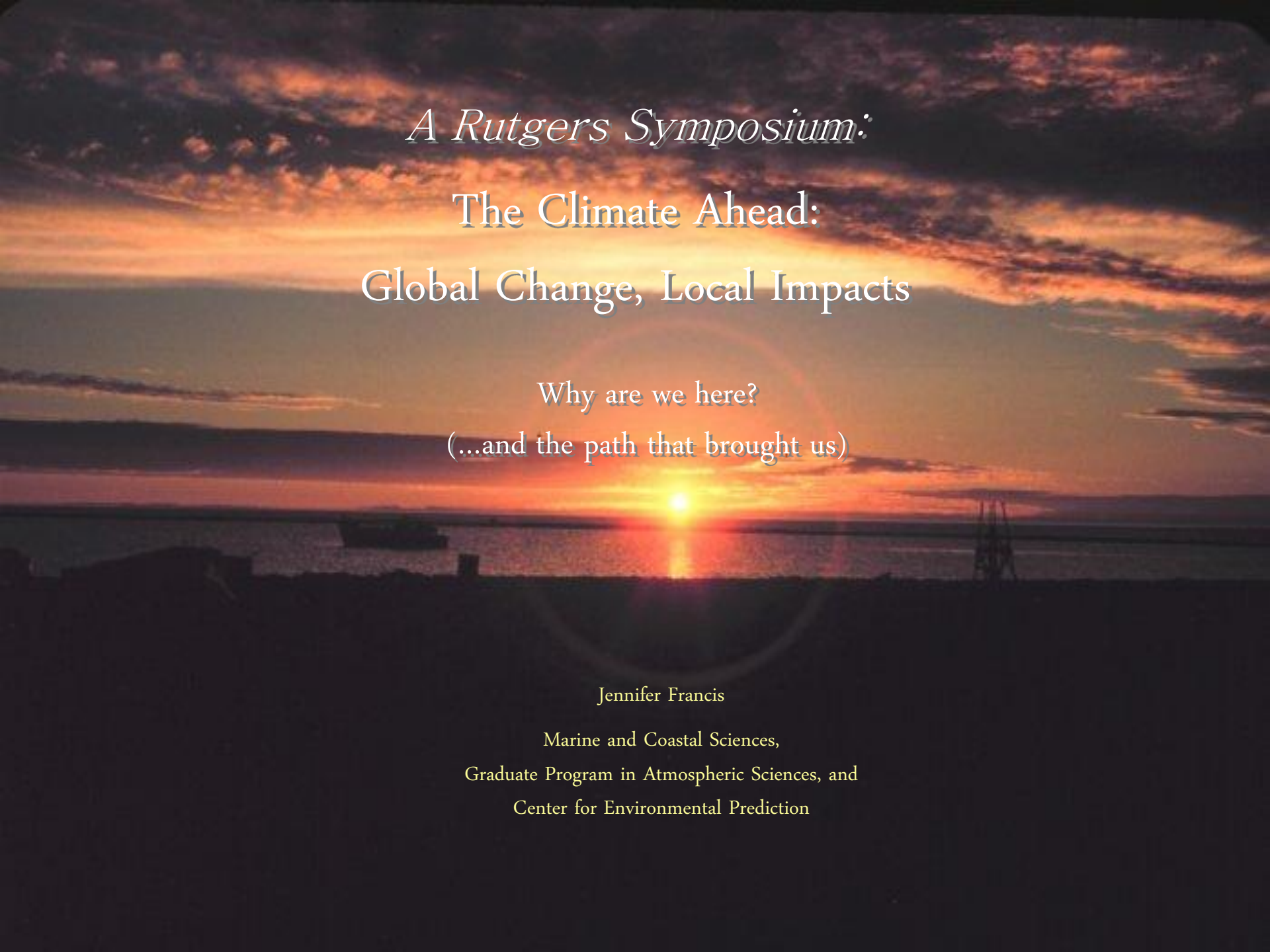


A Rutgers Symposium:

The Climate Ahead:

Global Change, Local Impacts

Why are we here?

(...and the path that brought us)

Jennifer Francis

Marine and Coastal Sciences,

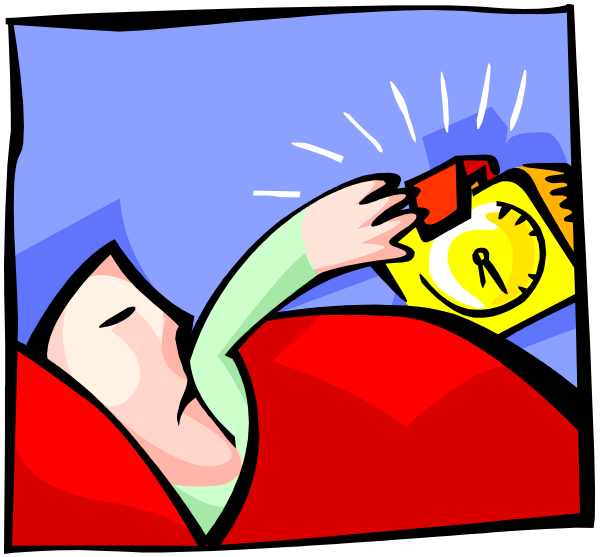
Graduate Program in Atmospheric Sciences, and

Center for Environmental Prediction

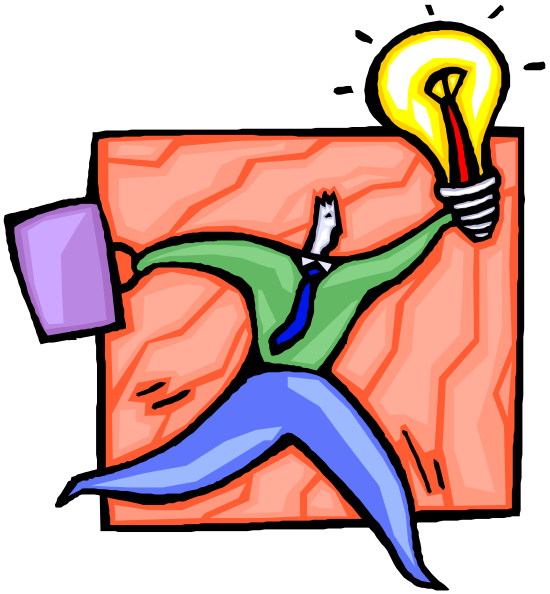
It all began with a restless night's sleep...

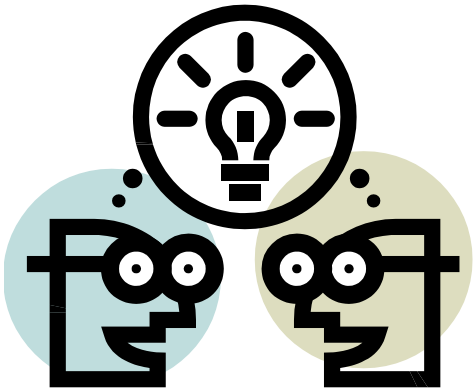
...and a vivid dream...

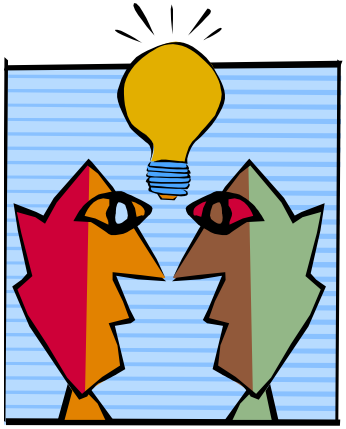
Fortunately, the alarm rang just in time...



Shaken but wide awake, Bob suddenly had a clear vision for the future…

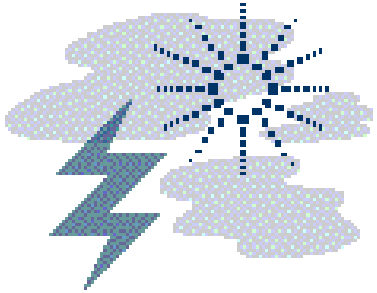




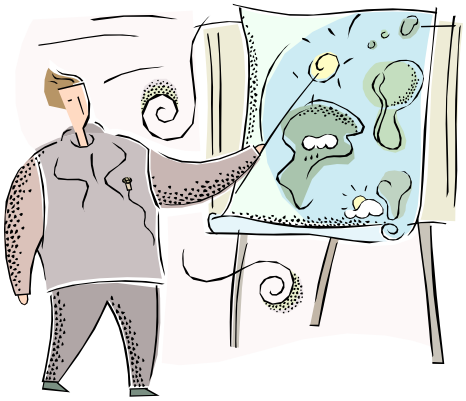


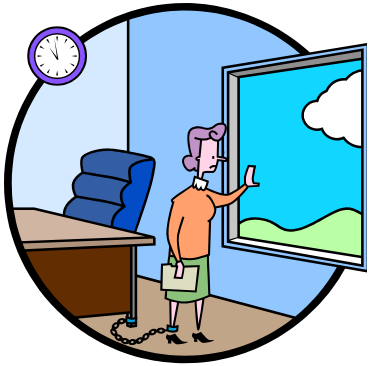
A Rutgers center of excellence for research, education, and outreach on climate change and the resulting environmental and societal impacts.

A great idea, but how do we get it off the ground?



But how do we deal with climate-related work, and how do we communicate?





Are we ready to talk about it here…

This is why we are here today.

The symposium is a first step toward making the Climate Change Initiative a reality.

Why NOW? Why HERE?

NOW because

- Observed change in the climate system is due in large part to human influences.
- Public awareness and concern is palpable.
- Effects are being felt across broad sectors of society and the economy.
- Projections clearly indicate increased physical changes and enhanced impacts.

Why NOW? Why HERE?

HERE because

- New Jersey is vulnerable to a wide variety of likely effects of climate change.
- New Jersey exemplifies an urban, coastal region with a complex environment and society.
- Rutgers is the center of gravity for research and education in New Jersey.
- Existing activities at Rutgers provide a firm foundation for a Center of Excellence in climate change research and outreach.

Today's objectives:

- Summarize existing climate-change-related research in the Rutgers community.
- Enhance communication and strengthen linkages among us.
- Identify research focus areas.
- Discuss high-priority investments in people and resources to fill the sails of this CCI.
- Plan for expanded Climate Change Summit in '07.

The Climate Ahead:
Global Changes, Local Impacts

AGENDA

Welcome *Broccoli, Furmanski, Goodman*

Why are we here?

The Path Taken *Francis*

Global Climate Change: Causes and Consequences *Broccoli*

B R E A K

Reports on Existing Activities at Rutgers

T H E M E 1

Modeling and Observations of
Large-scale Climate Change Reporter: *Robock*

Research Highlights *Falkowski, Rosenthal, Xu*

L U N C H

The Climate Ahead:

Global Changes, Local Impacts

AGENDA

Reports on Existing Activities at Rutgers (cont.)

T H E M E 2

Effects of Global Change on
Coastal Environments

Reporter: *Schofield*

Research Highlights

K. Miller, Able

T H E M E 3

Effects of Global Change on
Terrestrial Ecosystems and
Freshwater Resources

Reporter: *Weaver*

Research Highlights

Reinfelder, O'Neil

B R E A K

The Climate Ahead:
Global Changes, Local Impacts

AGENDA

Panel-led Discussion — Moderator: *Broccoli*

Synthesis

New linkages, priorities, paths forward

Plans for Climate Summit 2007

Panelists: *Andrews, Leichenko, McCay, Miller, Pray, Robock, Rudel, Schofield, Weaver*

Wrap-up — *Broccoli, Francis*

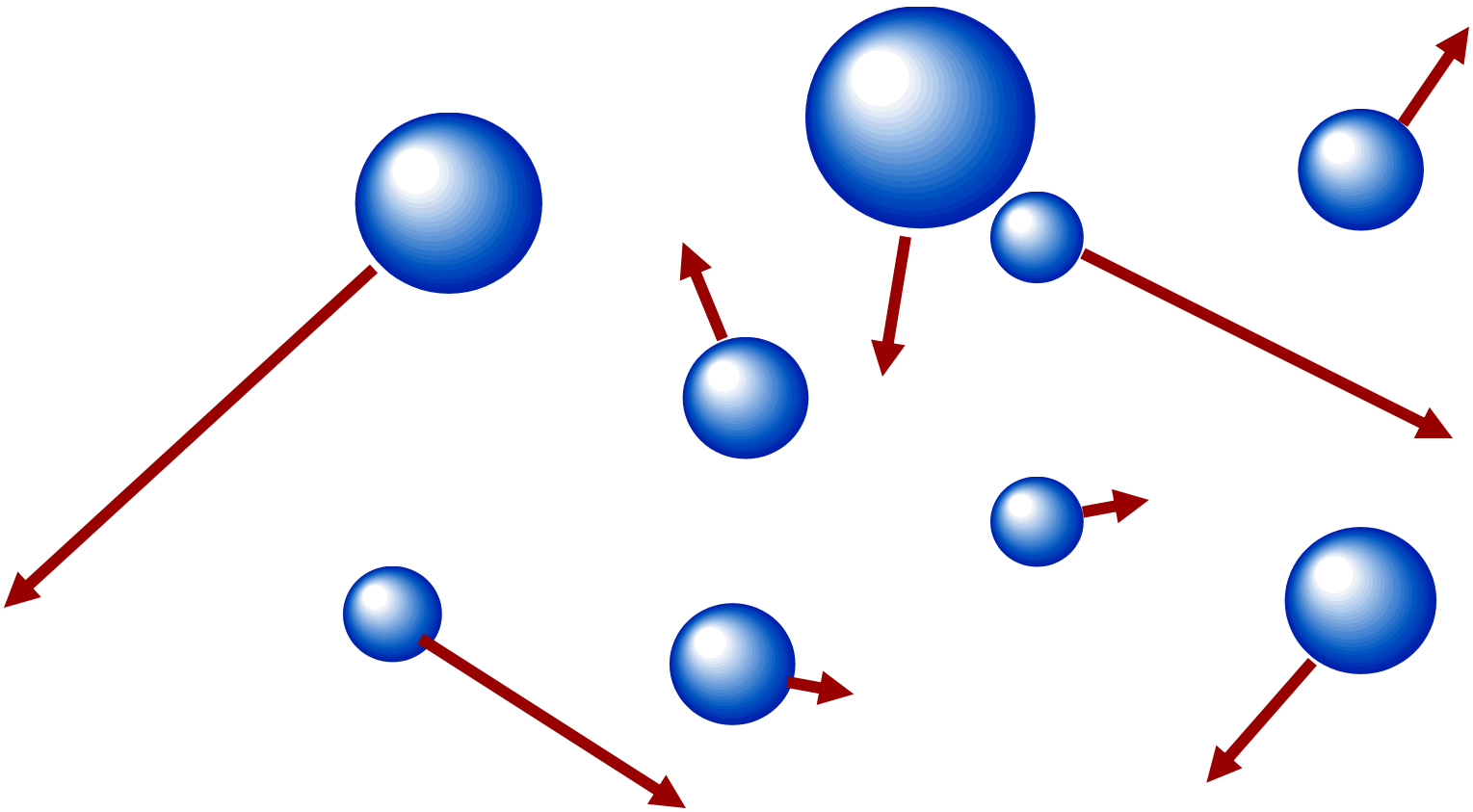
The END of the Symposium is the BEGINNING of Something Much Bigger for Rutgers.

Tie on your thinking caps! We need your ideas…

...to keep and increase the momentum (M).

M = mass x velocity

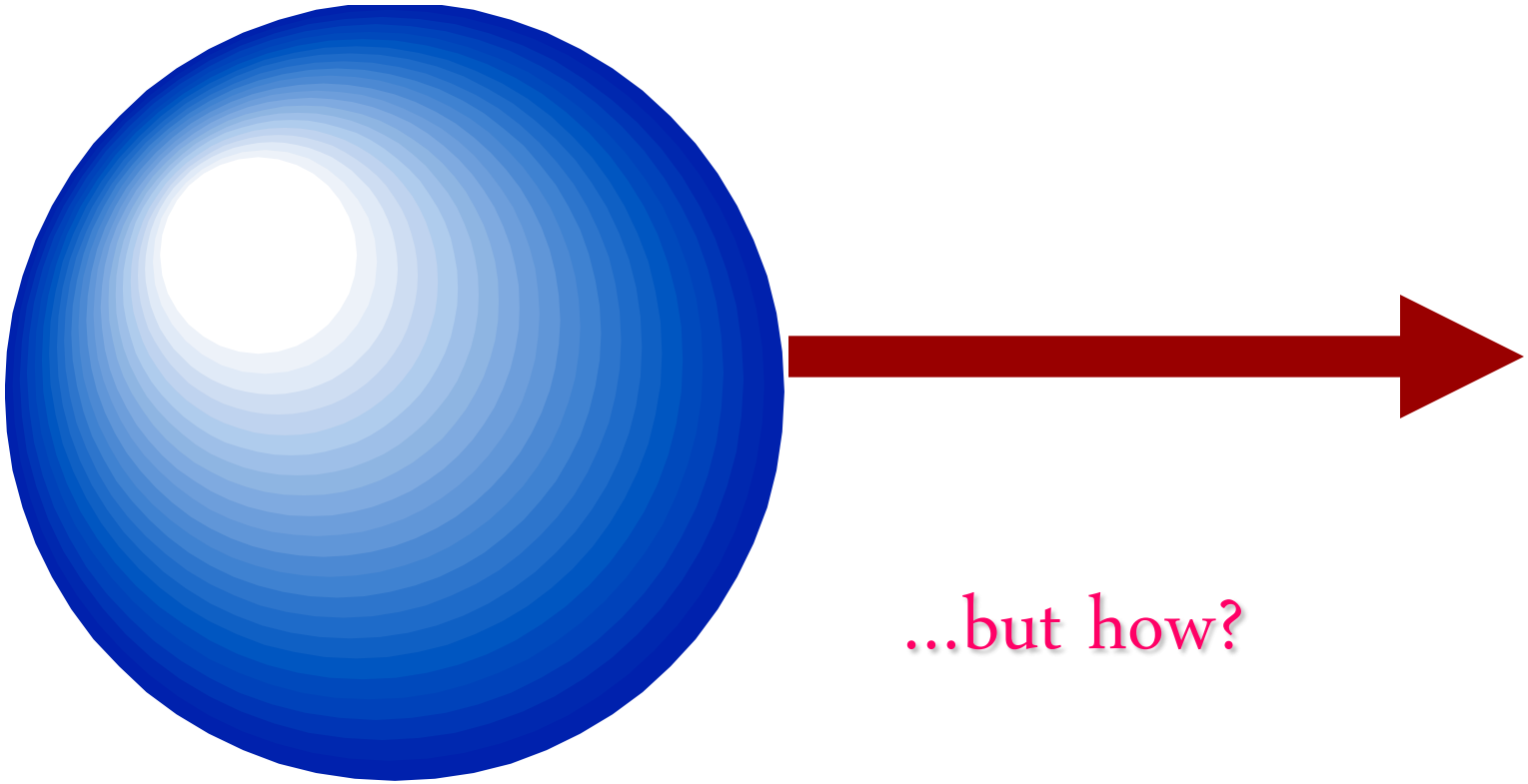
TODAY:



...to keep and increase the momentum (M).

M = mass x velocity

FUTURE:



...but how?

A formula for increased momentum:

- Identify our CENTERS OF GRAVITY in climate-change-related research, including communication, education, and policy implications.
- Articulate our VISION: We can't do it all... Playing to our strengths and needs, what do we want to be?
- Establish a NETWORK for researchers at Rutgers and elsewhere to connect with each other.
- Identify the OBSTACLES that prevent us from achieving the vision.
- Develop a PLAN for annihilating those obstacles.

Let the symposium begin!