

# The STC Proposal Process



# The nature of STCs 1

STCs involve research, education, and knowledge transfer.

They typically involve partnerships among multiple institutions, including international partnerships.

STCs can and do focus on many different fields. It is quite possible for there to be no STC in our field.

STC funding comes from the “top level” of NSF. An STC dedicated to cloud parameterization will not be funded by ATM. If we are successful in obtaining an STC, we will have made the pie bigger for our field.



# The nature of STCs 2

*(Words from the Y2K solicitation)*

While each Center is unique in some respects, each must:

- Be based in an academic institution;
- Be directed by a science or engineering faculty member;
- Include 30% cost sharing and other institutional commitments;
- Provide a variety of education and research opportunities for U.S. students and faculty (e.g., undergraduate and graduate students, postdoctoral researchers, K-12 teachers);
- Have significant intellectual exchange and resource linkages among various types of institutions and organizations to facilitate knowledge transfer (e.g., schools; colleges and universities; national laboratories; industry; governments);
- Include industrial, national or international laboratory internships, or other career broadening experiences; and
- Have annual budgets ranging from \$1.5M to \$4.0M of NSF support.



## Budget, etc., from 2000 round

“Proposed STC annual budgets may range from \$1.5M to \$4.0M per year of NSF support.”

“The amount of funds available for this competition is approximately \$30 million in FY 2002 pending availability of funds and NSF expects to make about eight to ten awards.”

*Average award ~\$3M per year.*

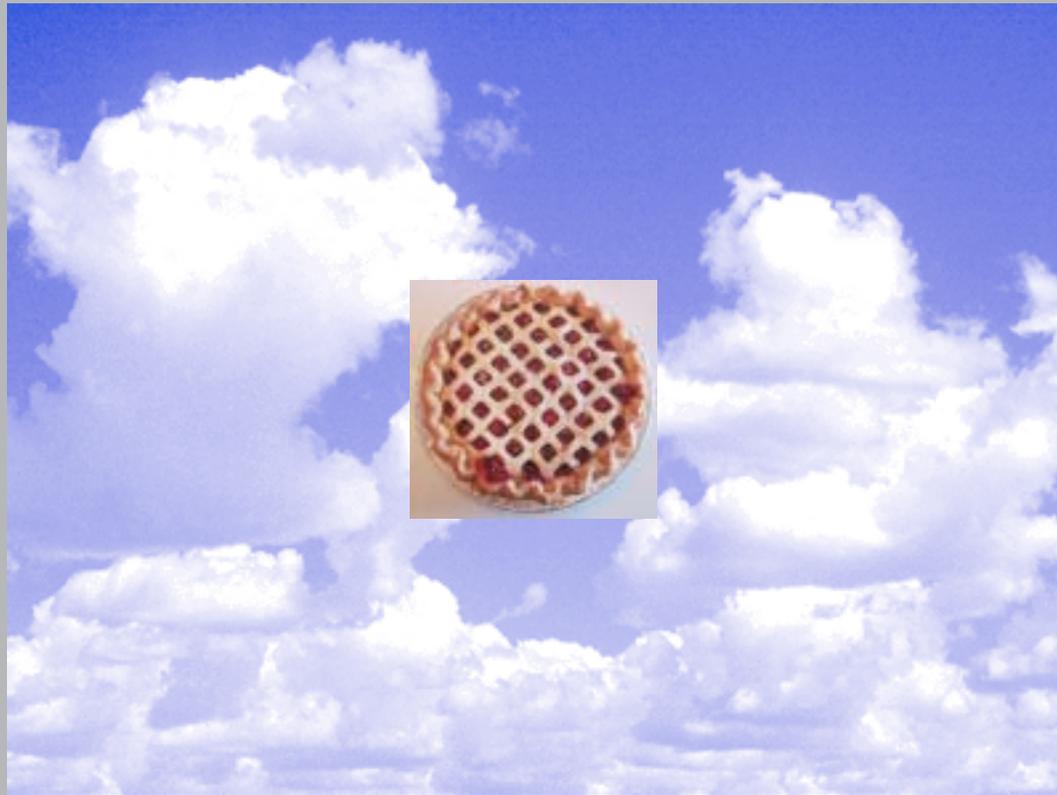
Type of award anticipated: Cooperative Agreement with an initial commitment of five years and a potential maximum duration of ten years.



## The STC process is very competitive

We will submit an excellent proposal, but there will be other excellent proposals.

The chances of success are hard to quantify, but are probably not greater than 10 or 20%.



## What happened in 2000, 1

- Notice of Intent Deadline: 5:00 PM, local time, June 15, 2000

The notice must not exceed 500 words, and must give a brief summary of the vision for the Center and the structure of its research, education, and knowledge transfer. The notice must include the name of the Principal Investigator and a list of all participating institutions (not included in the 500 word limit).



## What happened in 2000, 2

- Preproposal Deadline: 5:00 PM, local time, August 11, 2000

Preproposals must be submitted with the proposed Center Director as the Principal Investigator and must include only the following: (1) Cover Sheet; (2) Information about Principal Investigators/Project Directors; (3) Project Summary (one page); (4) Table of Contents; (5) Narrative Description of the Focus, Research Plans and Relevance; (6) Description of Proposed Activities in Science or Engineering Education, Human Resource Development, and Collaborations; (7) Outline of Arrangements for Center Administration and Management (*items 5, 6, and 7 are limited to nine pages including tables and illustrations*); (8) Lists of Project Personnel and Institutions (two pages); (9) Synopsis of Institutional and Other Resource Commitments and Potential Funding to the Proposed Center (one page); (10) Budget (NSF Form 1030) and Budget Justification (one page); (11) References Cited (two pages); (12) Biographical Sketches (two pages per person); and (13) Letters of Commitment.

NSF will notify applicants of the results of the preproposal competition on or before December 15, 2000.



## What happened in 2000, 3

- Full Proposal Deadline: 5:00 PM, local time, April 2, 2001  
NSF will notify all proposers as to whether they will be declined or site-visited by August 2001.  
NSF expects to announce the final results of the STC competition around March 2002.
- Anticipated date of award: August 2002.  
Elapsed time from Notice of Intent to Award: Slightly more than two years.



# Next STC Competition Expected to Start: Early 2003

*(Unofficial)*

Based on the timetable that played out in 2000, this would suggest:

*Proposals due in fall 2003.*

*Award in early 2005.*

Watch this web site:

<http://www.nsf.gov/od/oia/programs/stc/cid.htm>



# Management Structure

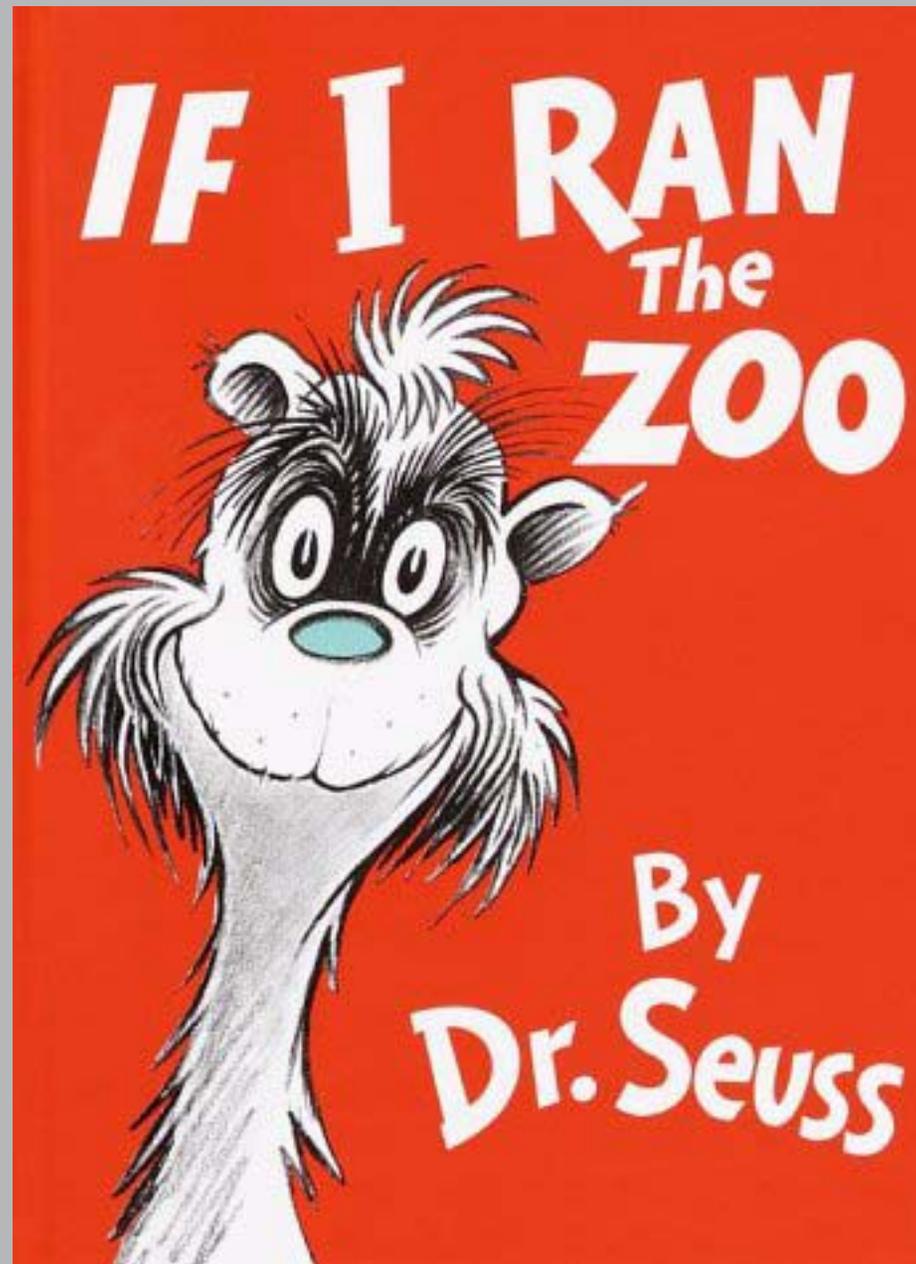
The STC Director must be supported by a management team comprised of, for example:

- a deputy or co-Director (who will share some of the leadership responsibilities),
- leaders of research thrusts,
- an education coordinator,
- a knowledge transfer (industrial liaison) coordinator, and
- an administrative and financial manager.

In addition, the Center will maintain and convene annually an external advisory group.



So, I've started management training...



## Education and Knowledge Transfer

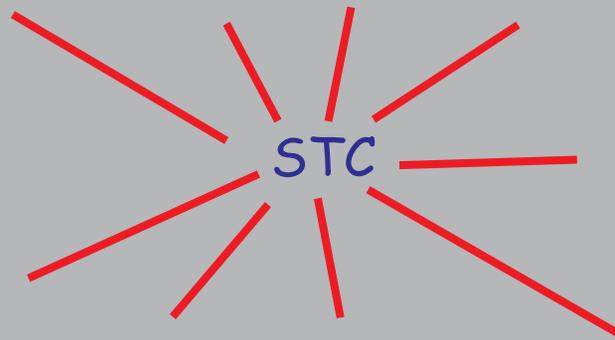
(6) Give an overview of the goals and proposed activities in education and human resource development. Discuss how they integrate strategically with the research and organizational/partnering opportunities of the Center and will achieve the participation of highly qualified U.S. students, including underrepresented groups. Describe knowledge transfer plans and their intended impact across various types of institutions and organizations from industry to colleges, the K-12 education system, and public sector. Describe the role of international collaborations and shared experimental facilities, as appropriate.

There is no one here today to address the Education end of the STC, but I am well aware of the importance of this component and take it very seriously.



# Partnerships 1: Possible players

- ARM/PNNL/Oak Ridge/LLNL
- UCLA
- NCAR
- GFDL
- NCEP
- GSFC/DAO/CloudSat/GPM
- CCSR, University of Tokyo
- San Diego Supercomputer Center
- IBM



## Partnerships 2

(13) Committed Funding by Source (one-page limit). Reproduce Table 1 indicating the annual level of total committed support for five years from each source (i.e., NSF, the academic institution, industry, state and local governments, other federal agencies, and other sources). On this table, split each column, as needed, to indicate whether the support is in cash, or in-kind (space, faculty and staff positions, time of industrial personnel spent in the STC, capital equipment, and other in-kind pledges). NSF expects STCs to develop and implement plans to continue the effective and productive collaborations with other stakeholders in the integrated partnerships when NSF funding ceases.

**Table 1**

| <b><i>Committed Funding</i></b>    | <b><i>Year 1</i></b>  |                          | <b><i>Year 2</i></b>  |                          | <b><i>Year 3</i></b>  |                          | <b><i>Year 4</i></b>  |                          | <b><i>Year 5</i></b>  |                          |
|------------------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|
|                                    | <b><i>Cash \$</i></b> | <b><i>In-Kind \$</i></b> |
| <b><i>NSF</i></b>                  |                       |                          |                       |                          |                       |                          |                       |                          |                       |                          |
| <b><i>Industry</i></b>             |                       |                          |                       |                          |                       |                          |                       |                          |                       |                          |
| <b><i>Academic Institution</i></b> |                       |                          |                       |                          |                       |                          |                       |                          |                       |                          |
| <b><i>Other Govt.</i></b>          |                       |                          |                       |                          |                       |                          |                       |                          |                       |                          |
| <b><i>Other</i></b>                |                       |                          |                       |                          |                       |                          |                       |                          |                       |                          |
| <b><i>Total</i></b>                |                       |                          |                       |                          |                       |                          |                       |                          |                       |                          |



# Accountability

The appropriate NSF research directorates will have primary responsibility in the oversight of individual STCs. The progress and plans of each funded STC will be reviewed by NSF annually, prior to receiving continued NSF support. In the fourth year of operation the STC may submit a renewal proposal for continued support which will undergo merit review.

Centers successful in passing the fourth-year review will be renewed for another five years, commencing at the beginning of the sixth year, and including a two-year phaseout period. Centers that pass the fourth-year review will continue to be reviewed by NSF at least every 18 months.



## What has been done up to this point

- CSU has provided some “seed money” to develop an STC proposal
- I visited NSF last February, and met with two staff from the Office of Integrative Programs, which is the part of NSF that manages the STC program.
- I've talked with Ramanathan about his STC, and received encouragement and suggestions from him.
- I've also had several discussions with Jay Fein re the planned STC, and he has given me some good advice.
- I have had discussions with lots of people, including many of you and also a lot of other people who are not here today.
- I have organized this Workshop, with a lot of help from Cindy Carrick.



## What happens next

- NSF makes its announcement

*Again, the guess is late this year.*

- We submit a letter of intent

*Input will be needed from the participants*

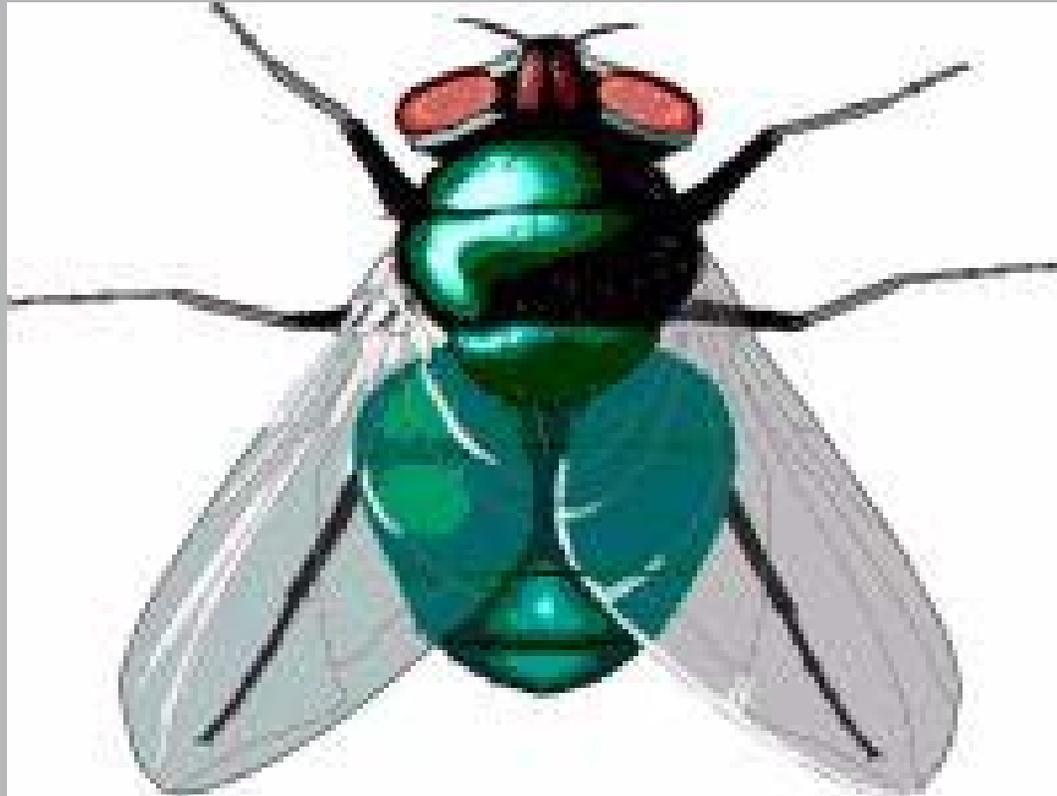
- We draft and submit a Preproposal

*Input will be needed from the participants*

- We have a second, longer Workshop to prepare for the Proposal

*More about this later*





I feel bad about the weather this time,  
and I'm determined to make it up to you...



# Next workshop

*Late April or May, 2003*



# Participation by CCSR



# Three days



# Contributed talks



# Proposal drafting exercise



*Thanks for coming.*

