

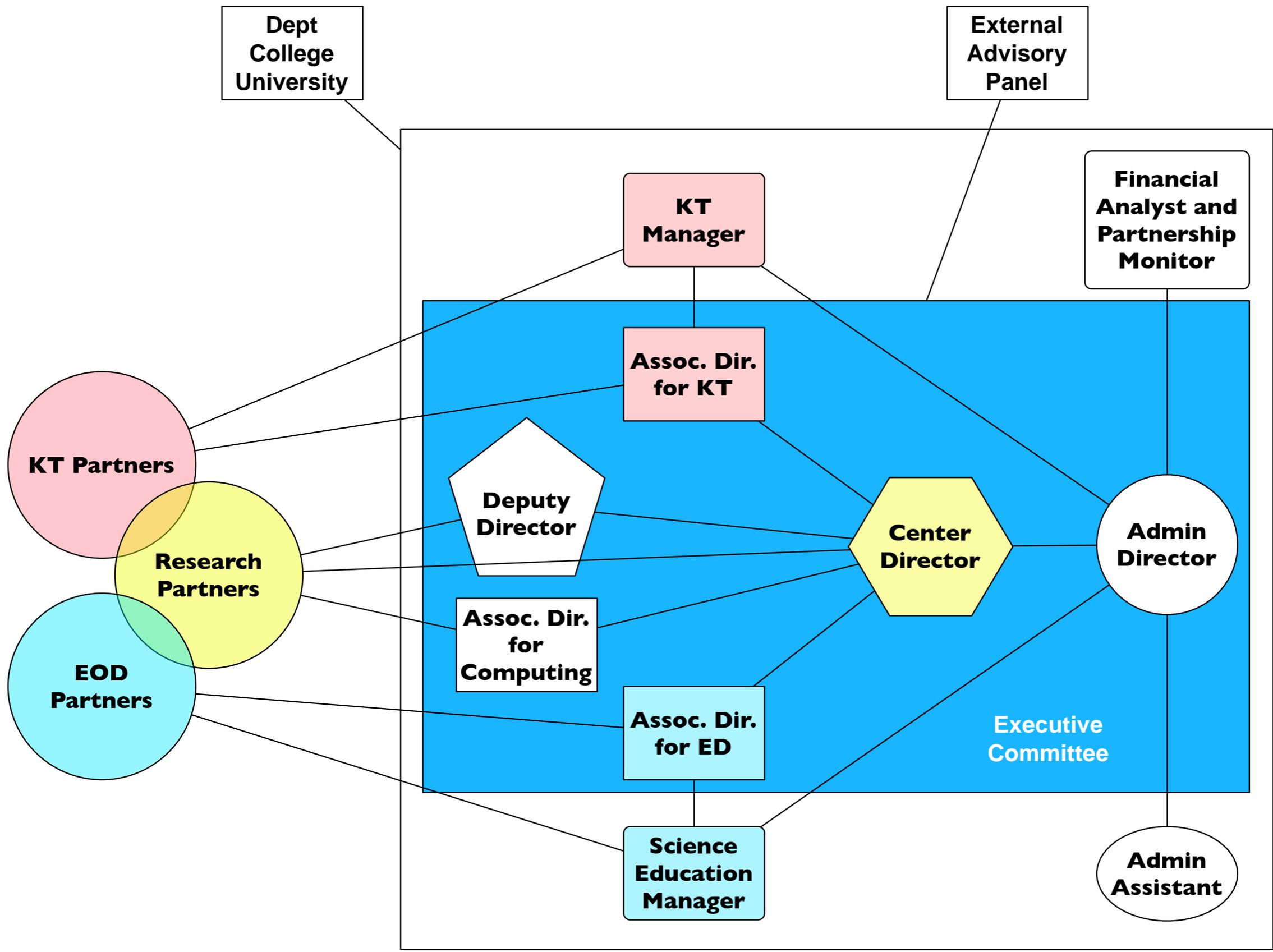
Management



Management Goals

- **Create and nurture a new community of researchers and educators with a strong focus on the Research, Education, Diversity and Knowledge Transfer goals of the Center.**
- **Foster collaborative relationships between the Center and other institutions.**
- **Create synergistic relationships with non-NSF funding sources and national and international partners.**

Management Structure



Executive Committee

- ◆ **Orchestrates CMMAP's overall scientific direction;**
- ◆ **Recruits new partners and collaborators as appropriate;**
- ◆ **Enforces standards of ethics and research quality; develops diversity;**
- ◆ **Monitors progress relative to established milestones; and**
- ◆ **Promotes broad dissemination of results.**

The EC teleconferences frequently. Other CMMAP personnel participate in the teleconferences as appropriate.

Management Objectives

| Objective | Actions Required | Supports Goal # |
|--|---|-----------------|
| 1. Organize CMMAP's activities so that the diverse tasks being worked on in widely separated locations feed coherently and efficiently towards the Center's Goals. | Hold “all hands” meetings twice per year, with half of the meetings hosted away from CSU. | A |
| | Define “Research Themes” that foster collaboration that will lead to progress on CMMAP’s research Objectives. | |
| 2. Create productive interactions among the researchers and educators involved in CMMAP, so that the researchers and educators function together as a team. | Create ED and KT Committees, with participation by CMMAP scientists. | A |
| | Engage CMMAP scientists as content providers for the ED “translators.” | |
| 3. Attract and retain highly qualified staff for key CMMAP positions. | Create position descriptions, initiate formal search process, and recruit qualified applicants. | A |
| 4. Communicate CMMAP’s activities and accomplishments to the outside world. | Create and maintain CMMAP web page. | B |
| | Publish review articles that provide overviews on topics highly relevant to CMMAP. | |
| 5. Manage the CMMAP budget from year to year so as to maximize productivity across the whole range of the Center's activities. | Adjust funding levels as appropriate to achieve objectives. | A and C |
| | Add or delete funded program elements to optimize progress towards the Center’s goals. | |
| 6. Attract STC funding, including but not limited to cost-share. | Monitor and adjust cost-share agreements as required. | B and C |
| | Seek private donations. | |
| 7. Attract non-STC but CMMAP-synergistic funding that enhances the impact of CMMAP. | Submit proposals for CMMAP-related research as opportunities arise. | B and C |

Partnership Objectives

| Objective | Actions Required | Supports Goal # |
|---|---|-----------------|
| 1. Identify potential partners who can make strong contributions towards achieving CMMAP's Research, Education, and Diversity, and Knowledge Transfer goals | Conduct interpersonal networking | A |
| | Pay attention to opportunities associated with agency funding calls | |
| 2. Design partnerships that are beneficial to all parties involved | Associate each participant at a partner institution with one or more CMMAP Objectives | A and B |
| 3. Encourage partners to cost-share. | Solicit cost-share contributions from new partners | A |
| 4. Encourage partners to host CMMAP meetings. | Recruit hosts and suggest venues | B |
| 5. Create ways for students at all university partners to fully engage in CMMAP's activities. | Organize visits by CMMAP-supported student visits to CMMAP partners | A and C |



Colorado State University

Knowledge to Go Places

<http://www.cmmap.org/>

UCLA

SCRIPPS INSTITUTE OF OCEANOGRAPHY

Hampton U
"Our Home by the Sea"



the City College of New York

Australian Government Bureau of Meteorology



CCSR UNIV. TOKYO



UCSD

UCAR



Office of Science U.S. Department of Energy



UNIVERSITY OF MARYLAND



THE UNIVERSITY OF UTAH

Pacific Northwest National Laboratory
Operated by Battelle for the U.S. Department of Energy



UNIVERSITY OF WASHINGTON



AOML



Poudre School District

Partner Institutions

Bureau of Meteorology Research Center, Australia
Catamount Institute
Center for Climate System Research, University of Tokyo
Colorado State University
City College of New York
Colorado College
Frontier Research Center for Global Change, Japan
Hampton University
Meteorological Service of Canada
National Center for Atmospheric Research
State University of New York at Stony Brook
University of California at Los Angeles
University of California at San Diego
University of Colorado
University of Maryland
University of Utah
University of Washington

Collaborating Institutions

Atlantic Oceanographic & Meteorological Laboratory

Apple Computer

European Centre for Medium Range Weather Forecasting

Geophysical Fluid Dynamics Laboratory

Goddard Space Flight Center

International Business Machines

Langley Research Center

Lawrence Berkeley Laboratory

Lawrence Livermore National Laboratory

National Centers for Environmental Prediction

Pacific Northwest National Laboratory

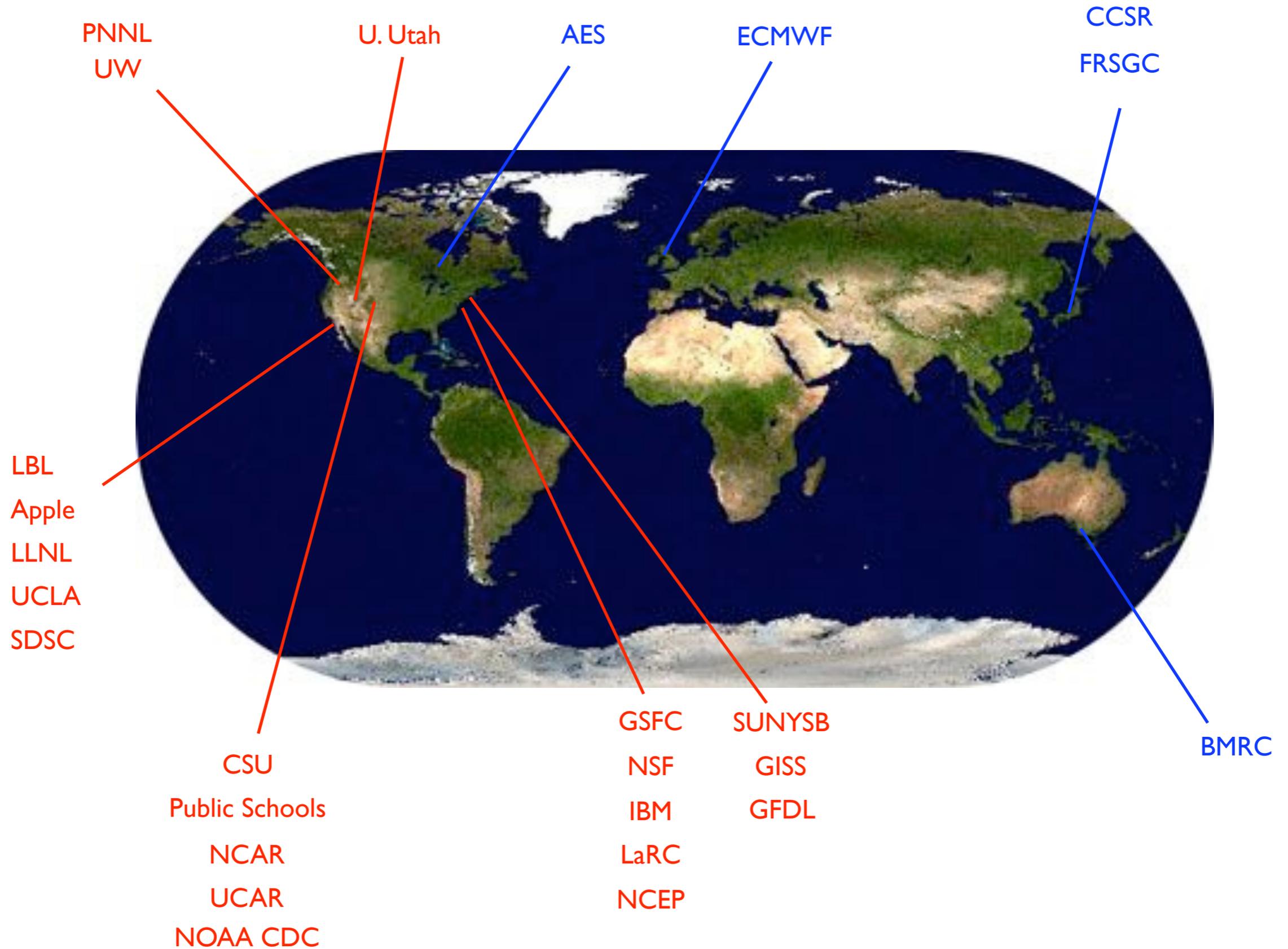
Poudre School District

Scripps Institution of Oceanography

Thompson School District

University Corporation for Atmospheric Research

We are kind of spread out.



CSU Departments

- **Atmospheric Science**
- **Physics (LSOP)**
- **Sociology**
- **Psychology**
- **Human Development & Family Studies**
- **Graduate School (CO-AMP)**
- **Colorado Institute of Public Policy**

Institutional Support

CSU Cost Share

- **CMMAP Building**
- **CMMAP Faculty Line**
- **College of Natural Sciences and VPR in support of Little Shop of Physics and Psychology effort**

Partner Cost Share

Catamount Institute

City College of NY

Colorado College

Hampton University

NCAR

University of California Los Angeles

University of California San Diego

University of Colorado

University of Maryland

University of Utah

University of Washington

Bureau of Meteorology Research Centre, Australia

Frontier Research System for Global Change, Japan

Center for Climate System Research, Japan

The Met Office, Canada

SCHEMATIC SITE PLAN



PERSPECTIVE MODEL



LOWER LEVEL FLOOR PLAN



UPPER LEVEL FLOOR PLAN



Budget Management

- **\$2.96M Year 1, \$4M Years 2-5**
- **14 subcontracts totaling \$1M Year 1, 15 subcontracts totaling \$1.6M Years 2-5**
- **Atmospheric Science Department portion \$1.4M/year**
- **Other CSU Departments \$0.5M Years 1-5**
- **CMMAP budget exists within twenty five research funds, three state funds (cost share), and one gift fund**
- **55 people on the CSU payroll, most of them not full time**

Budget Management

- **Shadow accounting system**
- **Tight tracking of expenditures and documentation in our files**
- **Cost share tracking and certification**
- **Relationship with the Office of Sponsored Programs**
- **Excellent audit history**
- **21+ years experience managing research project finances**

Budget Management

| | budget | exp to date | balance | encumbered | balance | |
|-------------|---------|-------------|----------|------------|-----------|--------------|
| Admin | 503673 | 452322.76 | 51350.24 | 48822.75 | 2527.49 | Master |
| Objective 1 | 170640 | 124055.63 | 46584.37 | 1166.92 | 45417.45 | |
| Objective 2 | 68502 | 20440.79 | 48061.21 | 40935.87 | 7125.34 | |
| Objective 3 | 79831 | 30581.63 | 49249.37 | 33630.48 | 15618.89 | Education |
| Objective 4 | 48733 | 13408.46 | 35324.54 | 15492.04 | 19832.5 | |
| Objective 5 | 43418 | 4025.59 | 39392.41 | 27552.66 | 11839.75 | |
| Objective 6 | 226518 | 150948.57 | 75569.43 | 105621.57 | -30052.14 | |
| Objective 7 | 37189 | 5768.87 | 31420.13 | 21250.88 | 10169.25 | |
| Totals | 674831 | 349229.54 | 325601.5 | 245650.42 | 79951.04 | |
| Objective 1 | 79775 | 102636.13 | -22861.1 | 18703.7 | -41564.83 | |
| Objective 2 | 147763 | 81489.27 | 66273.73 | 49959.79 | 16313.94 | |
| Objective 3 | 284380 | 120685.84 | 163694.2 | 171567.89 | -7873.73 | |
| Objective 4 | 178297 | 78531.31 | 99765.69 | 75037.24 | 24728.45 | Research |
| Objective 5 | 72402 | 12083.07 | 60318.93 | 54058.04 | 6260.89 | |
| Objective 6 | 227421 | 126307.95 | 101113.1 | 117289.99 | -16176.94 | |
| Objective 7 | 163650 | 54941.9 | 108708.1 | 97296.41 | 11411.69 | |
| Objective 8 | 167088 | 33916.02 | 133172 | 122831.86 | 10340.12 | |
| Totals | 1320776 | 610591.49 | 710184.5 | 706744.92 | 3439.59 | |
| Objective 1 | 71974 | 10267.18 | 61706.82 | 32144.99 | 29561.83 | |
| Objective 2 | 24762 | 12639.38 | 12122.62 | 2745.12 | 9377.5 | |
| Objective 3 | 39977 | 8138.93 | 31838.07 | 2745.12 | 29092.95 | Know. Transf |
| Objective 4 | 29436 | 5653.28 | 23782.72 | 2745.12 | 21037.6 | |
| Objective 5 | 15796 | 5653.28 | 10142.72 | 2745.12 | 7397.6 | |
| Totals | 181945 | 42352.05 | 139593 | 43125.47 | 96467.48 | |
| Objective 1 | 150123 | 53272.28 | 96850.72 | 24882.48 | 71968.24 | |
| Objective 2 | 31802 | 6665.44 | 25136.56 | 11881.44 | 13255.12 | |
| Objective 3 | 36271 | 22452.18 | 13818.82 | 661.73 | 13157.09 | Diversity |
| Objective 4 | 60579 | 20115.33 | 40463.67 | 11412.14 | 29051.53 | |
| Totals | 278775 | 102505.23 | 176269.8 | 48837.79 | 127431.98 | |
| Total | 2960000 | 1557001.1 | 1402999 | 1093181.4 | 309817.58 | Overall |

Graduate Student Funding

- **At CSU, CMMAP supports 12 graduate students. To date:**
 - **\$186,400 has been spent on graduate student stipends,**
 - **\$27,709 has been spent on tuition.**
- **Through subawards, CMMAP Partners support 4 graduate students this year. At least two more are planned for Year 2.**

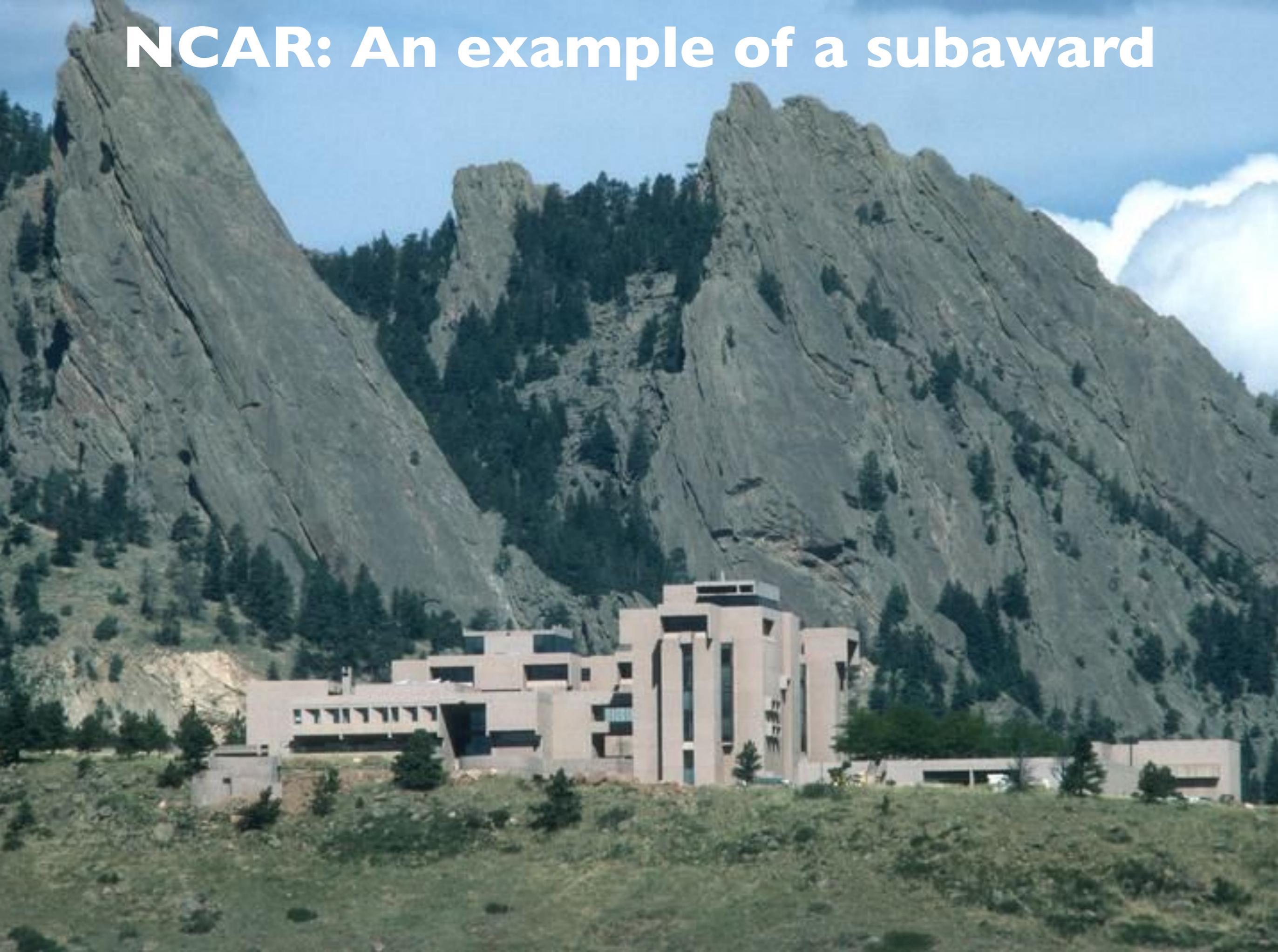
Budget Challenges

- **NSF does not allow inflation over our 5 year budget.**

This means that CSU and the subaward institutions will have to cut their levels of effort as time passes.

- **First year budget cut of 26%**
 - **Cut major hardware purchase**
 - **Delayed hiring of KT and ED managers**
 - **Reduced many subawards**
 - **Delayed work on journal**
 -

NCAR: An example of a subaward



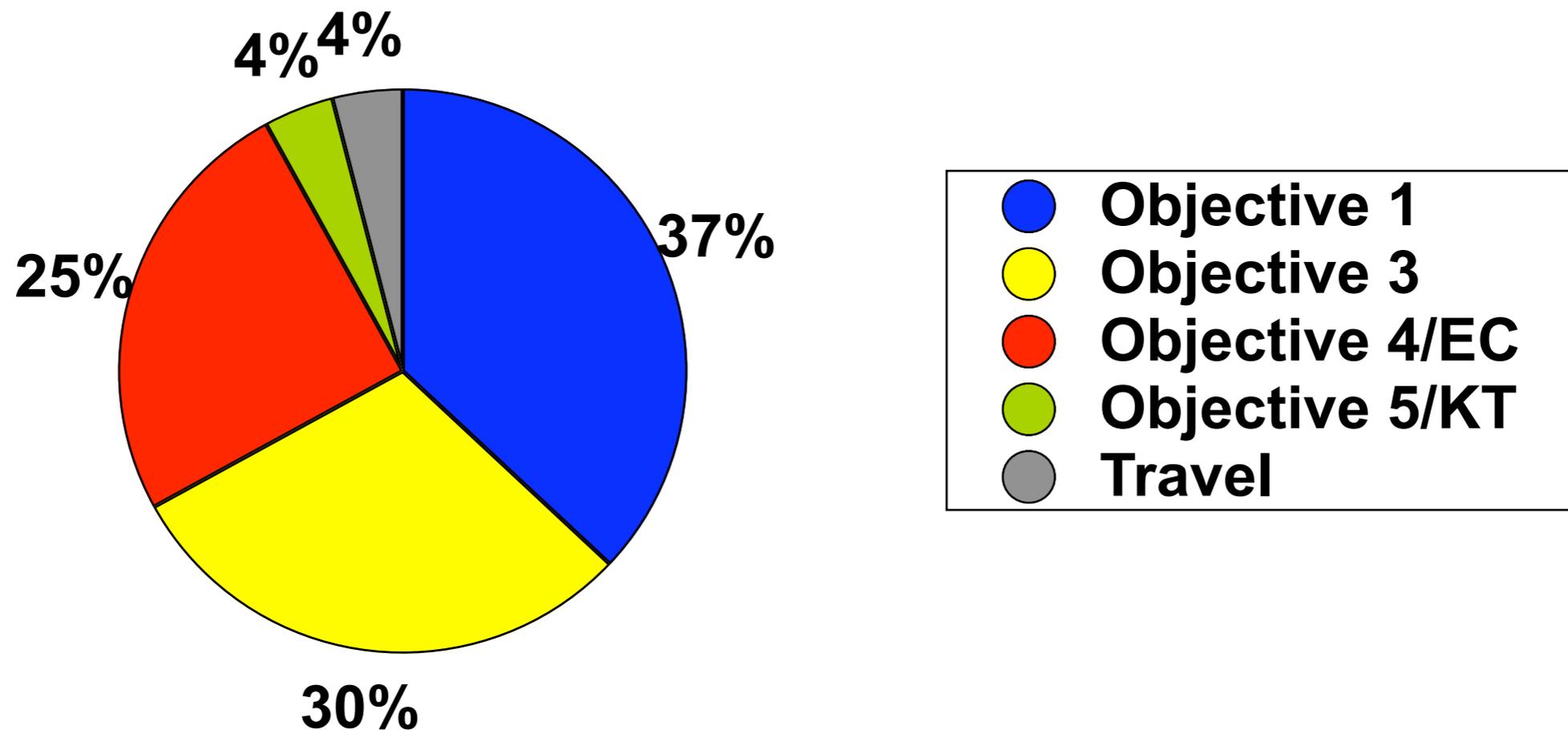
NCAR CMMAP Subcontract

Participants:

- **Moncrief/Hsu: Objective 1/MJO**
- **Grabowski/Morrison: Objective 3**
- **Heymsfield/Bansemer/Schmitt: Objective 3**
- **Moeng/Patton: Objective 4/EC**
- **Collins: Objective 5/KT**

NCAR CMMAP Subcontract:

Projected expenditures for the 1st year



Total CMMAP award: \$187,500

NCAR's Commitment

- **Morrison & Grabowski have developed a new microphysics scheme for CMMAP models.**
- **Moncrief is co-leading the MJO focus theme.**
- **Moeng is co-leading the deep-shallow cloud theme and serves on EC.**
- **Collins is leading the KT objective I team.**

How NCAR Benefits from its involvement in CMMAP

Provide scientists working on cloud-scale, turbulence, radiation, microphysics... an integrative center to work towards the cloud-in-climate problem.

Provide a much larger pool of people to work with, beyond NCAR.

Organization of Team Meetings



Working Groups based on Research Objectives?

| Objective | Team Leader | Relevant Research Theme(s) |
|---|---------------------|--|
| 1. Extensions, evaluations and applications of the prototype MMF | Khairoutdinov | All |
| 2. Development of a second-generation MMF | Arakawa/Randall | Future Tools |
| 3. Develop and test improved microphysics parameterizations for MMFs and GCRMs | Krueger/Kreidenweis | All |
| 4. Develop improved parameterizations of boundary-layer clouds and turbulence for use in MMFs and GCRMs | Bretherton/Moeng | All |
| 5. Test sensitivity of CSRMs to more detailed radiation calculations | Barker | All |
| 6. Innovative analysis, evaluation and interpretation of MMF results using emerging datasets | Rossow | All |
| 7. Accelerating improvement of conventional parameterizations | Stevens | MJO Low-cloud feedback Conv and Turb |
| 8. Optimal use of computational and data storage resources | Helly | All |



List of Working Groups from August 06 meeting:

| # | Objective(s) | Leader(s) | When |
|----|--|--------------------------------------|--------------|
| 1 | Extensions, evaluations, and applications of the prototype MMF(s) | Khairoutdinov | Tuesday PM |
| 2 | Development of a second-generation MMF, and a global cloud-resolving model | Randall and Arakawa | Wednesday AM |
| 3 | Development and testing of improved parameterizations of microphysics and radiation for use in CSRMS, MMFs, and GCRMs | Krueger, Kreidenweis, and Barker | Wednesday AM |
| 4 | Development and testing of improved parameterizations of boundary-layer clouds and turbulence for use in CSRMS, MMFs, and GCRMs -- <i>Will meet together with WG 6</i> | Bretherton and Moeng | Thursday AM |
| 5 | Innovative analysis, evaluation, and interpretation of MMF results using emerging datasets | Rossow | Wednesday AM |
| 6 | Accelerated improvement of conventional parameterizations -- <i>Will meet together with WG 4</i> | Stevens | Thursday AM |
| 7 | Optimal use of computational and data storage resources | Helly | Thursday AM |
| 8 | K-12 Education and outreach to the public and policymakers | Jones, Denning, Foster, and Kathlene | Tuesday PM |
| 9 | Undergraduate and graduate education, and teaching future teachers | Denning and Drossman | Wednesday AM |
| 10 | Increasing the diversity of climate scientists | Pandya, El Hakim, Denning, Canetto | Thursday AM |
| 11 | Knowledge-transfer to climate modeling centers | Collins | Thursday AM |
| 12 | Knowledge transfer to numerical weather prediction centers | Jakob | Tuesday PM |
| 13 | New open-access journal | Schubert | Tuesday PM |
| 14 | Book on the history of global modeling | Donner | Wednesday AM |

Feedback from August 06 meeting

- ◆ **Too many Working Groups**
- ◆ **Need more Working Group time**
- ◆ **Need some focus towards applications of models**

Research Themes

- ◆ **Future tools, aka Q3D**
- ◆ **MJO**
- ◆ **Deep and shallow convection, and turbulence, aka “Deep and shallow”**
- ◆ **Low-cloud feedbacks**

Each theme benefits from model development, and needs large computing resources.

Each theme involves individual efforts, and also coordinated multi-investigator analyses of large calculations.

GOALS

Create a new class of models...

Identify the strengths and weaknesses of the models...

Apply the models...

OBJECTIVES

| | |
|--|------------------|
| First-generation Multiscale Model | \$79,775 |
| Second-generation Multiscale Model | \$147,763 |
| Precipitation physics | \$284,380 |
| Turbulence | \$178,297 |
| Radiation | \$72,402 |
| Model evaluation using observations | \$227,421 |
| Conventional models | \$163,650 |
| Computing | \$167,008 |

Total

\$1,320,776

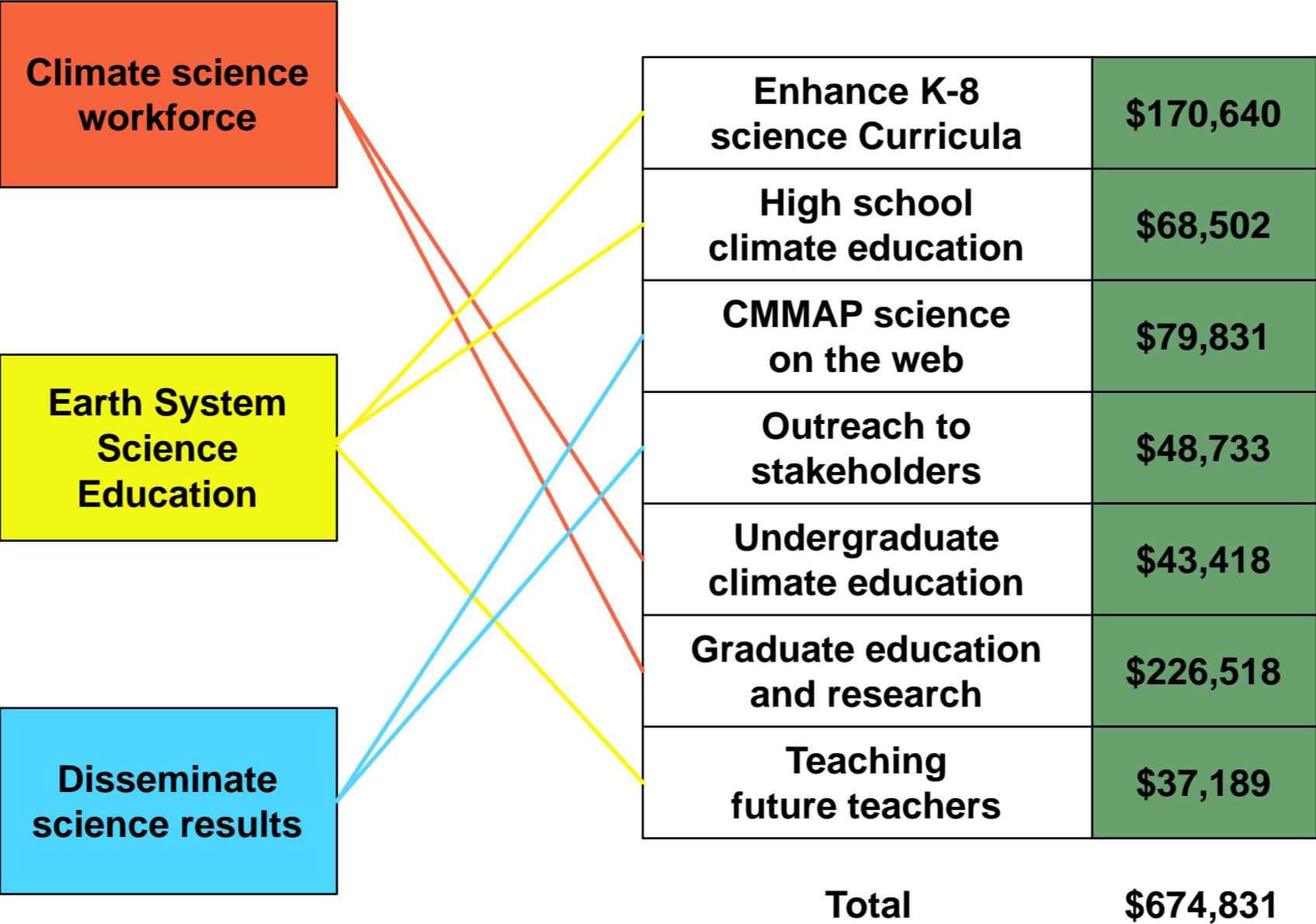
Education and Diversity



Education Goals and Objectives

GOALS

OBJECTIVES



Diversity Goals and Objectives

GOALS

Diverse graduate students

Understand the barriers

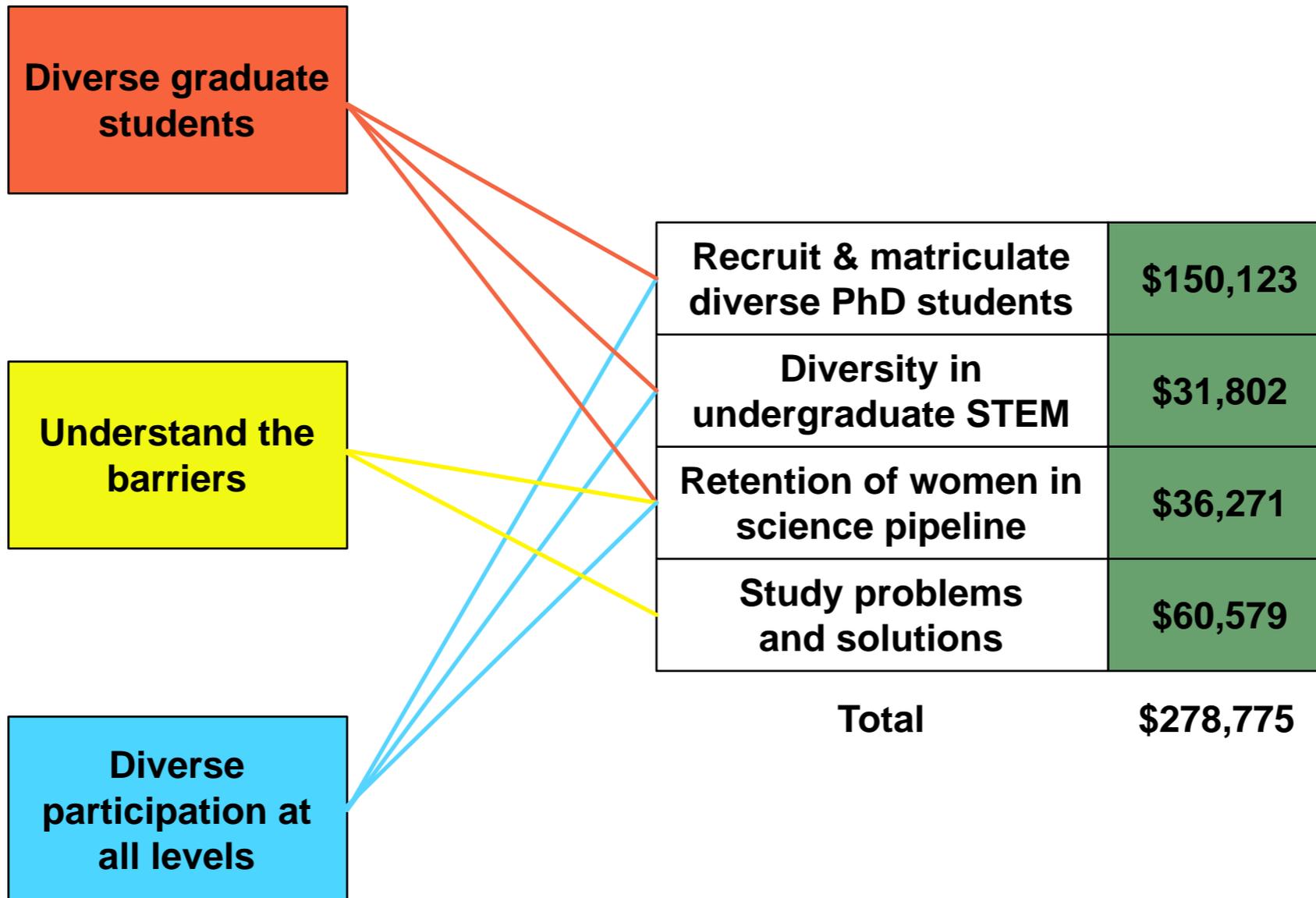
Diverse participation at all levels

OBJECTIVES

| | |
|--|-----------|
| Recruit & matriculate diverse PhD students | \$150,123 |
| Diversity in undergraduate STEM | \$31,802 |
| Retention of women in science pipeline | \$36,271 |
| Study problems and solutions | \$60,579 |

Total

\$278,775

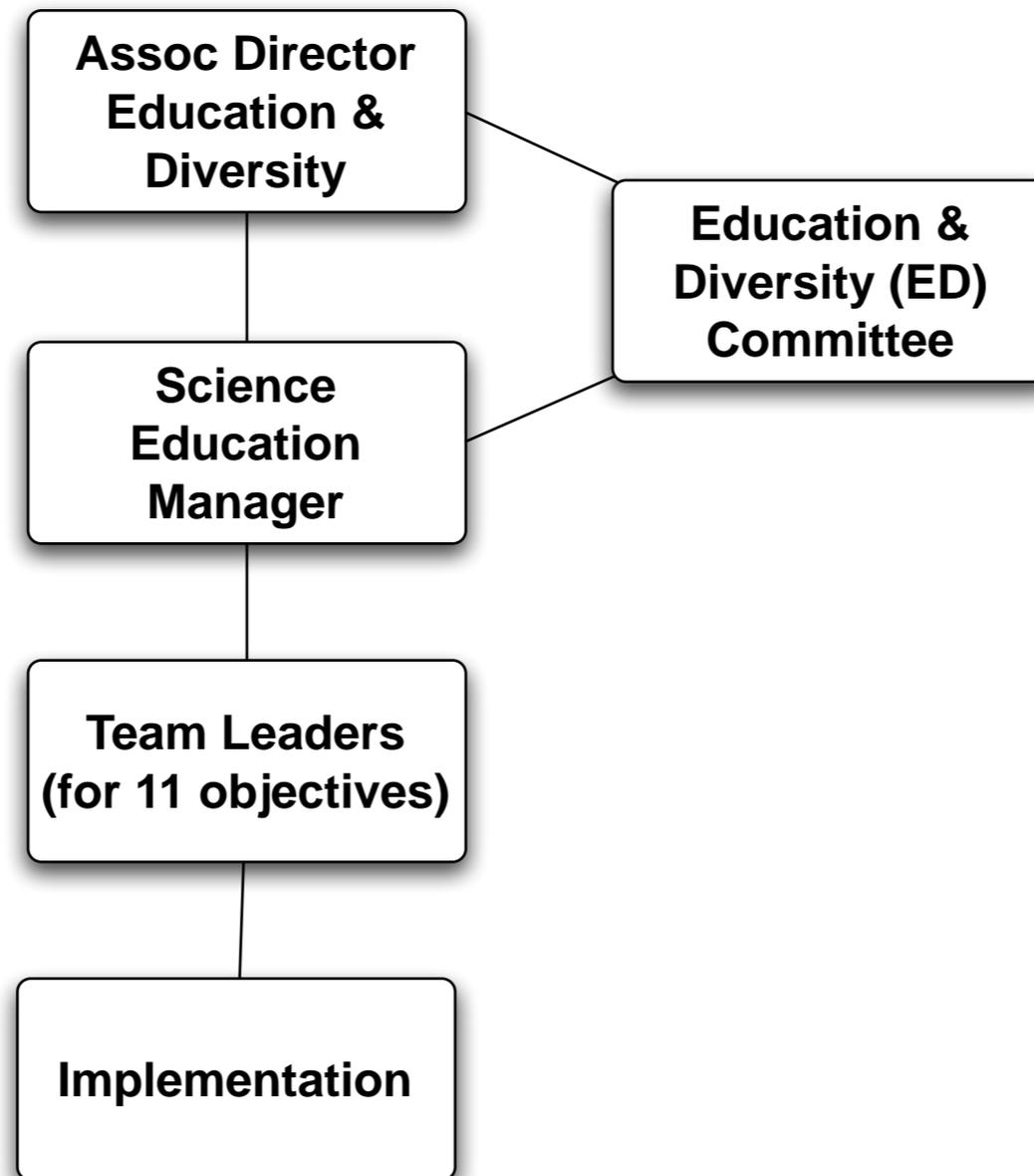


Christine Aguilar, Science Education Manager

- ◆ **Former public school teacher**
- ◆ **Master's in Educational Leadership**
- ◆ **Five years' experience managing a large federally-funded educational program**
- ◆ **Deep connections to local community and school districts**



ED Management Structure



ED Committee

- ◆ **Oversees planning and implementation of Education & Diversity activities**
- ◆ **Engages CMMAP's scientific & intellectual talent in meeting education & diversity goals**
- ◆ **Includes representatives from all educational levels, research scientists, and diversity specialists**
- ◆ **Rotating membership allows participation by broad CMMAP community**
- ◆ **Meets monthly by telecon**
- ◆ **Plans and hosts ED components of CMMAP all-hands meetings**



Climate Content for Educators

- ◆ **Some science educators lack strong climate background**
- ◆ **Eight teachers, school district representatives, and CMMAP personnel attend a weekly 2-hour climate class**
- ◆ **We are using this experience as a model for our summer climate course for science teachers**



ED-Wide Team Meetings

- ◆ **Meetings of about 30 CMMAP ED people held ~ monthly to facilitate communication, understanding, and collaboration across the Center**
- ◆ **Meetings held at CSU, in Boulder, and in Colorado Springs to encourage participation**



Knowledge Transfer



Introductions

Knowledge Transfer Manager: Rodger Ames

Hired March 1, 2007

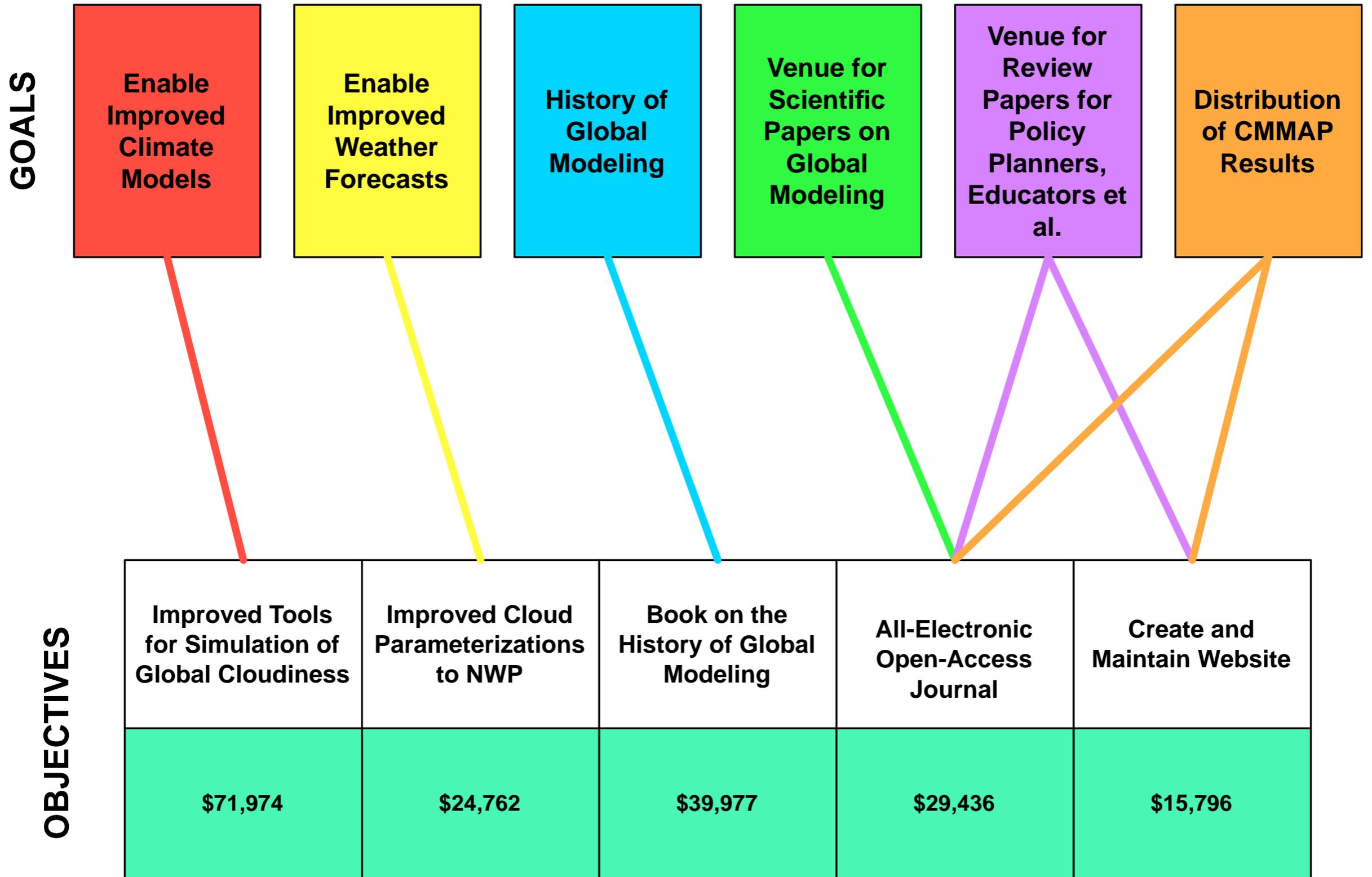
Background:

- BS, Chemistry, University of California Santa Cruz, 1986
- MS, Atmospheric Science, Colorado State University, 1996
- Research Associate, Cooperative Institute for Research in the Atmosphere, Fort Collins, CO, from 1996 to 2007

Experience:

Atmospheric and aerosol science, data analysis, research and publication related to policy development, web publishing and database development

Knowledge Transfer



KT Management

Associate Director for KT

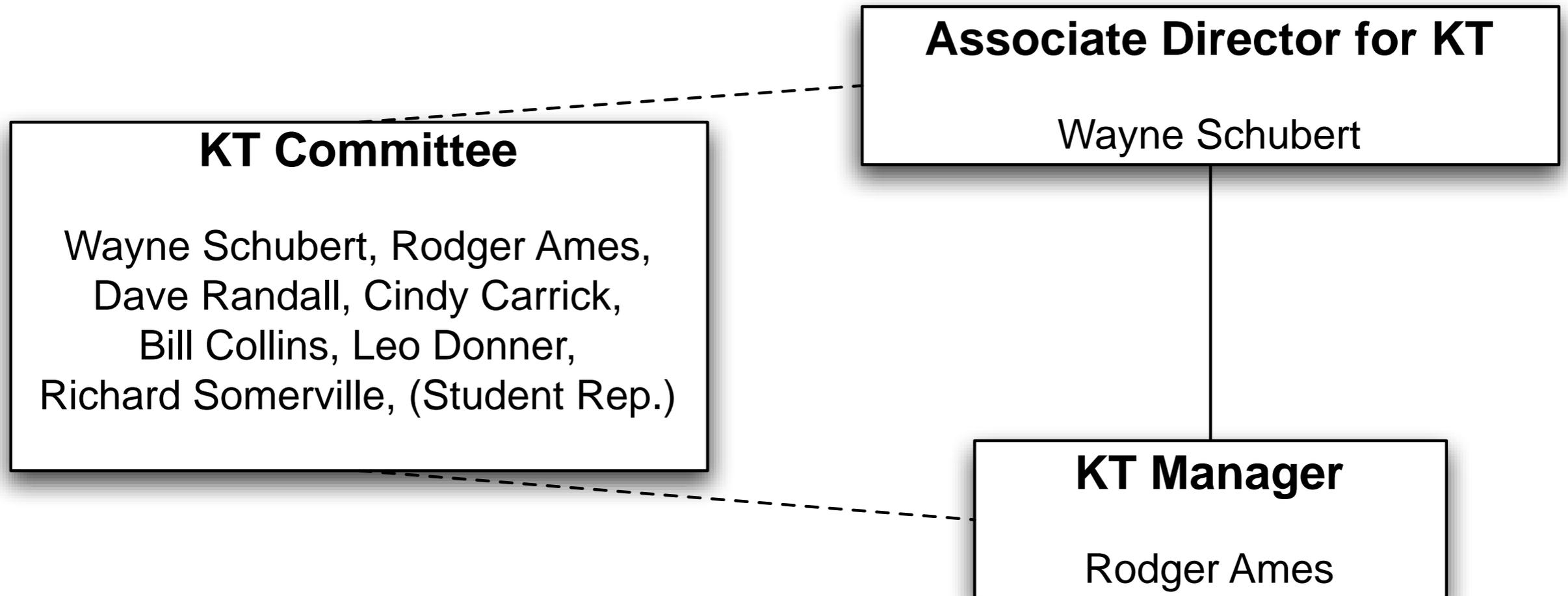
Wayne Schubert

KT Committee

Wayne Schubert, Rodger Ames,
Dave Randall, Cindy Carrick,
Bill Collins, Leo Donner,
Richard Somerville, (Student Rep.)

KT Manager

Rodger Ames



KT Communication

The KT Director and the KT Manager work with the broader KT Committee via monthly KT Telecoms and biannual Team Meetings to foster communication and progress toward successful completion of the KT Objectives.

Reporting

- **Annual reports to NSF**
- **Subaward institution reports to CSU
CMMAP**
- **Internal CSU investigator reports to
CMMAP**

Reporting: Subawards

- **Per their contracts, subaward institutions must report progress to CSU CMMAP twice per year. These reporting deadlines coincide nicely with our bi-annual team meetings.**
- **Reports are carefully reviewed by the Executive Committee.**
- **Comments are forwarded to the subaward PI.**

Reporting: Internal CSU PIs

Individual PIs are required to report progress to CMMAP twice per year. These reporting deadlines coincide nicely with our bi-annual team meetings.

Reporting: Annual to NSF

- **Our report is due to NSF April 1st each year.**
- **Input for the annual report is due to CSU CMMAP on March 1st each year**
- **NSF dictates the format for this report, and requires us to report by goals and/or objectives.**
- **Our reporting responsibilities are hierarchical in that the Objective Team Leaders are responsible for soliciting and collecting input, compiling it and submitting it via our**

Reporting: Annual to NSF

To successfully survive the complexity of this annual reporting process, we have developed a web-based reporting system. It also serves as part of the NSF-required database:

“Part of this reporting will take the form of a database which will be owned by the institution and eventually made available to an evaluation contractor. This database will capture specific information to demonstrate progress towards achieving the goals of the program.”

- excerpt of email from Alina Martinez of Abt Associates

Reporting: Annual to NSF

- **Each individual team member must log in to report a few specific things.**
- **Objective Team Leaders report for their objective(s) only.**
- **Our KT and ED Science Managers report on many various activities across the objectives they handle.**
- **Our Director, Associate Directors and Administrative Director report on activities not covered above.**

Reporting: Annual to NSF

Let's take a look:

<http://cmmap.colostate.edu>

Reporting Plans

- **Subaward and Internal CSU Investigator reporting will be done via our web-based system and become a permanent part of the database.**
- **We are working to make our reporting system as user-friendly as possible without interfering with the function.**

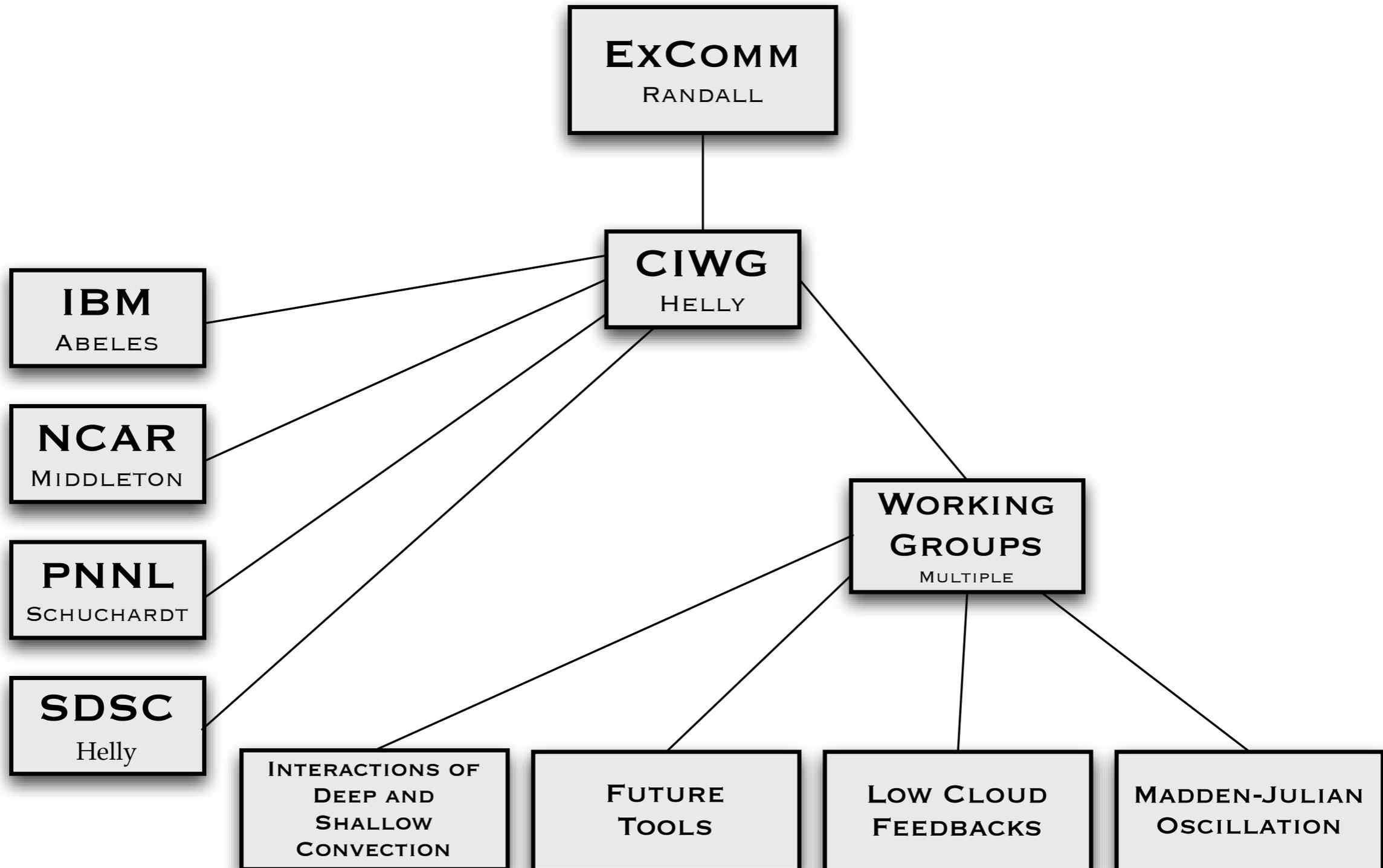
Cyberinfrastructure Management



Objectives

- **Make efficient use of computing and data resources**
 - **acquire resources**
 - **coordinate resource utilization**
 - **collaborate to leverage joint efforts**

Cyberinfrastructure Organization



CIWG Management Resources

Cyberinfrastructure Working Group (CIWG) of the Center for Mesoscale Modeling of Atmospheric Processes (CMMAP) | Laboratory for Earth and Environmental Sci...

http://magma.sdsc.edu:8080/?q=node/23

Wizz RSS 2.1.9 Feed Search Help etc. Options etc. Watch List Weather

Cyberinfrastructure Working G...

Laboratory for Earth and Environmental Science / San Diego Supercomputer Center
The sun will burn out in 5 billion years

Content | my account | Forums | Recent posts | General Purpose | News aggregator | Administrator | log out
[edit primary links](#)

Latest Articles [more](#)

Cyberinfrastructure Working Group (CIWG) of the Center for Mesoscale Modeling of Atmospheric Processes (CMMAP)

- Active Issues from 2007 Annual Meeting
- Allocation Schedule
- Computing Resource Matrix
- Data Sources
- Membership
- Pending Proposals
- Proposal Submission Process
- Purpose
- Reference Activities
- Standards and Conventions
- Top 500 Supercomputer Centers

Home

Cyberinfrastructure Working Group (CIWG) of the Center for Mesoscale Modeling of Atmospheric Processes (CMMAP)

[view](#) [edit](#)

This information is for managing and maintaining the CIWG activities and coordinating with collaborators.

- Active Issues from 2007 Annual Meeting
- Allocation Schedule
- Computing Resource Matrix
- Data Sources
- Membership
- Pending Proposals
- Proposal Submission Process
- Purpose
- Reference Activities
- Standards and Conventions
- Top 500 Supercomputer Centers

[Active Issues from 2007 Annual Meeting >](#)

[add child page](#) | [printer-friendly version](#) | [add new comment](#)

Done Tor Disabled

more

Allocation Schedule

view edit

| Activities | | | | | | | 2005 2006 2007 | | | | | | | | | | | |
|------------|-------------------------------------|------------|------|-----------|---------------|---|-------------------------------------|----|----|----|----|----|----|----|----|----|--|--|
| # | Infc Title | Given Work | Flag | # Predec. | Planned Start | A | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | |
| 0 | Cyberinfrastructure Working Group | | 🚩 | | 8/15/06 | | Cyberinfrastructure Working Group | | | | | | | | | | | |
| 13 | NAS@NASA Ames, Moffett Field | | | | 1/1/07 | | NAS@NASA Ames, Moffett Field | | | | | | | | | | | |
| 14 | Altix Requests | 1d? | | | 1/1/07 | | Altix Requests | | | | | | | | | | | |
| 1 | NCAR | | 🚩 | | 8/15/06 | | NCAR | | | | | | | | | | | |
| 2 | Climate Simulation Lab (DOE) | 1d? | 🚩 | | 8/15/06 | | Climate Simulation Lab (DOE) | | | | | | | | | | | |
| 3 | Scientific Computing Division (NSF) | | | | 4/2/07 | | Scientific Computing Division (NSF) | | | | | | | | | | | |
| 5 | April Submission | 1d? | | | 4/2/07 | | April Submission | | | | | | | | | | | |
| 4 | October Submission | 1d? | | | 10/1/07 | | October Submission | | | | | | | | | | | |
| 6 | NCCS@Oak Ridge National Laboratory | | 🚩 | | 10/15/06 | | NCCS@Oak Ridge National Laboratory | | | | | | | | | | | |
| 7 | INCITE Proposal Submitted | | 🚩 | | 10/15/06 | | INCITE Proposal Submitted | | | | | | | | | | | |
| 15 | NERSC@Brookhaven National Lab | | | | 10/18/07 | | NERSC@Brookhaven National Lab | | | | | | | | | | | |
| 16 | ERCAP Request | 1d? | | | 10/18/07 | | ERCAP Request | | | | | | | | | | | |
| 8 | San Diego Supercomputer Center | | 🚩 | | 8/15/06 | | San Diego Supercomputer Center | | | | | | | | | | | |
| 12 | Data Allocation Requests | 1d? | 🚩 | | 8/15/06 | | Data Allocation Requests | | | | | | | | | | | |
| 9 | Development Allocation | | 🚩 | | 8/15/06 | | Development Allocation 1288.12 days | | | | | | | | | | | |
| 11 | LRAC: Large Resource Allocation | 1d? | | | 1/19/07 | | LRAC: Large Resource Allocation | | | | | | | | | | | |
| 10 | MRAC: Medium Resource Allocation | 1d? | 🚩 | | 10/13/06 | | MRAC: Medium Resource Allocation | | | | | | | | | | | |

< [Active Issues from 2007 Annual Meeting](#) up [Computing Resource Matrix](#) >

| Attachment | Size |
|--|-----------|
| ScheduleGrab20061101.png | 129.73 KB |

> [add child page](#) | [printer-friendly version](#) | [add new comment](#)

Cyberinfrastructure Working Group (CIWG) of the Center for Mesoscale Modeling of Atmospheric Processes (CMMAP)

- Active Issues from 2007 Annual Meeting
- Allocation Schedule
- Computing Resource Matrix
- Data Sources
- Membership
- Pending Proposals
- Proposal Submission Process
- Purpose
- Reference Activities
- Standards and Conventions
- Top 500 Supercomputer Centers

Events

| May 2007 | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

Active forum topics

- General Invitation to

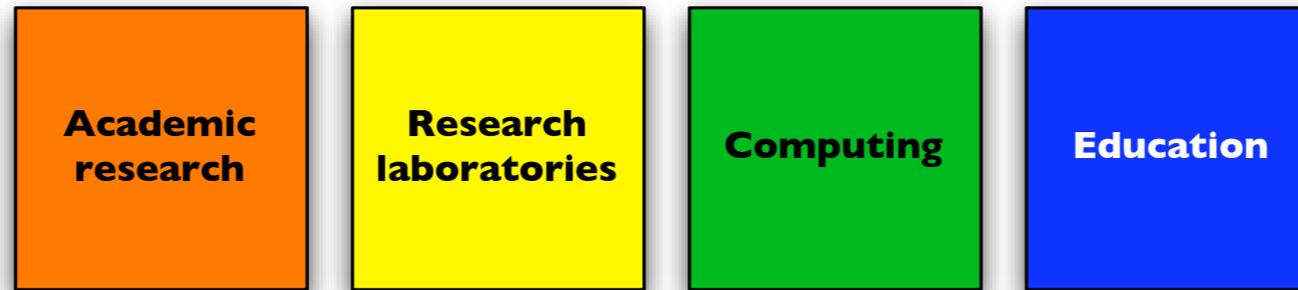
Student Recruitment at UCSD

- Helly and Somerville collaborating with Climate Research Division faculty to recruit PhD student
- full 4 year funding Preliminary meeting between Somerville, student and Helly held
- Follow-on meeting scheduled for 18 June with faculty in SIO Climate Research Division

Summary

- CMMAP cyberinfrastructure is shared, not owned
- Collaboration and leveraging are key to acquisition and efficient use of resources
- Training the next generation of scientists in a state-of-the-art computing environment is essential

External Advisory Panel



Prof. Kerry Emanuel of the Massachusetts Institute of Technology has agreed to be the first Chair of the EAP.

The other members are:

**Alan Betts
Sandrine Bony
John Drake
Walter Oechel
Olivier Pauluis**

The first meeting of the EAP will be held in September 2007.

Ethics Plan

“CMMAP personnel must recognize that their personal conduct reflects on the integrity of the Center, and should take care that their actions have no detrimental effect on the institution.”

A list of ethical expectations for all CMMAP team members has been posted on our website.

Ethics Plan

In addition, at our February Team Meeting, we invited an applied ethicist to give a talk and engage the team in dialogue about ethics within CMMAP.

The question of “Why isn’t it enough just to do good science?” was raised.

Ethics Plan

We discussed problems with codes of ethics:

Respect: We treat others as we would like to be treated and ourselves.
We do not tolerate abusive or disrespectful behavior.
Ruthlessness, callousness and indifference are not allowed here.

Integrity: We do not mislead customers and prospects openly, honestly and fairly.
If we say we will do something, we will do it;
if we cannot or will not do something, then we will not.

**Enron Code of Ethics,
Pg. 4 of 64**

Ethics Plan

We discussed problems with ethics training:

Southern Illinois University professors fail ethics test, sue State Inspector General.

The test-takers finished the exam too quickly. Failed their state-mandated ethics training compliance.

Chicago Tribune, 2/9/07

Ethics Plan

- CMMAP has begun and will continue to nurture a culture of ethics.
- CMMAP has and will continue to invite the entire team to participate in this effort.

Ethics Plan

- We intend to conduct ethics-oriented case studies at our CMMAAP team meetings.
- Our website continues to be developed, and will include interesting and pertinent case studies, a list of resources, and blogs surrounding ethical considerations.

Ethics Plan

- CSU's Research Integrity and Compliance Review Office has recently begun to offer ethics training for CSU students and CSU employees.
- Later this year, RICRO will begin to offer and/or facilitate development of customized training workshops.

Ethics Plans

- In addition, several of our CMMAP team, including the Director and Administrative Director, have been certified by the Office of Regulatory Compliance (now RICRO), specifically for the Education and Diversity components involving human subjects.
- Finally, the Executive Committee will continue to monitor ongoing and proposed activities to detect and deal with emerging issues.

Intellectual Property Agreement

CMMAP's research is highly academic in character and is not expected to produce any patentable items. Our plan is to share data, software, and scientific results with the maximum possible openness, but with appropriate respect for the right of CMMAP scientists to priority in the publication of their own work.

Intellectual Property Agreement

CMMAP's scientific results will be promptly published in the peer-reviewed literature. CMMAP's modeling techniques, including source codes, will be made freely available to the academic community immediately after publication by the scientists involved in their development. For these reasons, issues associated with intellectual property rights are expected to be very minimal.

Intellectual Property Agreement

In general, each collaborator will retain all right, title and interest in intellectual property created solely by its employees; collaborators jointly own all right, title and interest in intellectual property that is created jointly by employees of multiple collaborators.

Intellectual Property Agreement

CMMAP does not presume to subvert or take precedence over the roles and responsibilities of the individual technology transfer offices at collaborating institutions. Rather, CMMAP provides coordination across those entities.

CMMAP's Executive Committee monitors activities to detect possible emerging issues, and will take action to deal with these.

Intellectual Property Agreement

To formalize these ideas, CSU and the CMMAP subaward institutions have **jointly signed an IPA**. It has not been changed since signing.

Other CMMAP partners and collaborators are not asked to sign the IPA. However, in the event that matters of a proprietary nature are discussed at a CMMAP meeting, the participants in the discussion will be asked to sign a **non-disclosure agreement**.

Team building, team management



CMMAP's tightly defined research focus on building, testing, and applying Multiscale Models provides a natural mechanism for communication and collaboration.

Questions?

